MONTANA-DAKOTA
UTILITIES CO.
A Division of MDU Resources Group, Inc.

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

ORIGINAL

July 8, 2008

RECEIVED
JUL 09 2008
PUBLIC SERVICE COMMISSION

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

Re: Case No. 11,006 (Therm Billing)
Monthly Report – May 2008

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc., herewith submits the following information, pursuant to the Ordering paragraphs one and two of the Order issued in the above-referenced docket, dated October 20, 1987:

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 June 2008.

2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of May 2008. There is a report for each of the 16 thermal zones for the month.

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 May.

Please acknowledge receipt by stamping or initialing the duplicate copy of this letter attached hereto and returning the same in the enclosed self-addressed, stamped envelope. Should the Commission or its Staff have any comments or questions with respect to these reports, please call me.

Sincerely,

Tamie Aberle
Pricing & Tariff Manager

6 **PU-08-2** Filed: 7/9/2008 Pages: 22
May 2008 Therm Billing Report

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
JUNE 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billng Factor
12	314	APPLE VALLEY	271	1.1106
12	327	BISMARCK	28	1.0952
12	343	CARRINGTON	273	1.1106
12	344	CLEVELAND	272	1.1028
12	364	CAVALIER	273	1.1340
12	365	DAWSON	271	1.1028
12	374	FT TOTTEN	273	1.1184
12	375	DEVILS LAKE	273	1.1184
12	379	BARLOW	273	1.1106
12	387	ELDRIDGE	272	1.1106
12	411	GLEN ULLIN	31	.9794
12	417	GRAFTON	273	1.1418
12	449	JAMESTOWN	272	1.1184
12	463	LANGDON	273	1.1106
12	475	LINTON	802	.9977
12	478	LINCOLN	28	1.0952
12	494	MEDINA	271	1.1028
12	498	MANDAN	28	1.0952
12	524	NEW SALEM	28	1.0720
12	532	NEW ROCKFORD	273	1.1106
12	539	PARK RIVER	273	1.1340
12	574	SANBORN	272	1.1184
12	593	STEELE	271	1.1028
12	598	SHEYENNE	273	1.1184
12	610	TAPPEN	271	1.1028
12	625	VALLEY CITY	272	1.1261
12	629	WALHALLA	273	1.1340
12	647	WILTON	262	1.0881
12	717	SPIRITWOOD	272	1.1184
12	732	MSR SITE	273	1.1106
12	733	PAR SITE	273	1.1106
15	303	ALEXANDER	25	1.0673
15	308	ARNEGARD	25	1.0673
15	318	BEACH	32	.9527
15	319	BELFIELD	32	.9598

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
JUNE 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billng Factor
15	323	BERTHOLD	261	1.0833
15	330	BOWMAN	34	1.0705
15	337	BURLINGTON	262	1.1116
15	368	DES LACS	261	1.0911
15	369	DICKINSON	31	.9724
15	384	EPPING	261	1.0833
15	407	GLADSTONE	31	.9724
15	413	GOLVA	32	.9388
15	416	GARRISON	262	1.0959
15	429	HEBRON	31	.9794
15	459	KILLDEER	33	1.0824
15	469	LEFOR	31	.9724
15	474	LIGNITE	263	1.0807
15	500	MARMARTH	34	1.0784
15	505	MINOT	262	1.1116
15	510	MOTT	31	.9724
15	512	MAX	262	1.0881
15	522	NEW ENGLAND	31	.9653
15	540	PALERMO	261	1.0833
15	558	RAY	261	1.0833
15	561	REGENT	31	.9724
15	563	RHAME	34	1.0627
15	564	RICHARDTON	31	.9653
15	568	ROSS	261	1.0755
15	572	RUTHVILLE	262	1.1116
15	583	SENTINEL BUTTE	32	.9527
15	588	SOUTH HEART	31	.9653
15	590	SPRINGBROOK	261	1.0833
15	591	STANLEY	261	1.0833
15	605	SURREY	262	1.1116
15	611	TAYLOR	31	.9653
15	616	TIOGA	261	1.0755
15	619	TURTLE LAKE	262	1.0959
15	620	TRENTON	24	1.1349
15	624	UNDERWOOD	262	1.0959

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
JUNE 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billng Factor
15	632	WATFORD CITY	25	1.0673
15	636	WHEELOCK	261	1.0755
15	637	WHITE EARTH	261	1.0833
15	642	WILLISTON	24	1.1349
15	646	WASHBURN	262	1.1037
15	664	RIVERDALE	262	1.0959
15	691	FAIRVIEW	24	1.1349
15	712	MINOT AFB	262	1.1116
15	743	BAKER FIELD	35	.8953

* * * E N D O F R E P O R T * * *

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 251

Name: SIDNEY BORDER

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.7233	1173.2	1194.0		0.870	3.772	69.494	22.488	3.060	0.108	0.190	0.009	0.007	0.000	0.000				1404.06	
2	0.6902	1154.1	1174.5		0.029	3.114	73.918	20.981	1.837	0.042	0.070	0.004	0.005	0.001	0.000				1413.69	
3	0.6864	1146.9	1167.2		0.034	3.188	74.211	20.997	1.527	0.019	0.023	0.001	0.001	0.000	0.000				1408.82	
4	0.6914	1156.1	1176.6		0.037	3.085	73.587	21.387	1.830	0.027	0.040	0.002	0.003	0.001	0.000				1415.05	
5	0.7231	1169.4	1190.1		0.928	3.901	69.615	22.148	3.079	0.110	0.199	0.010	0.009	0.001	0.000				1399.61	
6	0.7292	1172.9	1193.6		1.080	4.027	68.768	22.507	3.240	0.127	0.229	0.012	0.009	0.001	0.000				1397.82	
7	0.7297	1173.5	1194.3		1.081	4.035	68.755	22.423	3.324	0.128	0.231	0.012	0.010	0.001	0.000				1398.06	
8	0.6846	1142.6	1162.8		0.069	3.233	74.423	20.896	1.326	0.020	0.030	0.002	0.002	0.000	0.000				1405.34	
9	0.6859	1146.7	1167.0		0.028	3.160	74.157	21.262	1.342	0.019	0.028	0.002	0.002	0.001	0.000				1409.12	
10	0.6995	1155.6	1176.1		0.327	3.437	72.522	21.538	2.013	0.056	0.096	0.005	0.004	0.000	0.000				1406.37	
11	0.7290	1172.3	1193.0		1.077	4.054	68.909	22.217	3.373	0.126	0.222	0.012	0.010	0.001	0.000				1397.24	
12	0.7289	1172.2	1192.9		1.078	4.046	68.844	22.382	3.281	0.126	0.223	0.011	0.009	0.001	0.000				1397.26	
13	0.7291	1172.4	1193.2		1.081	4.048	68.828	22.361	3.314	0.125	0.221	0.012	0.009	0.001	0.000				1397.31	
14	0.7289	1172.0	1192.8		1.075	4.058	68.949	22.159	3.386	0.126	0.224	0.012	0.009	0.001	0.000				1397.09	
15	0.7206	1168.1	1188.8		0.842	3.870	69.956	21.994	3.039	0.102	0.180	0.009	0.007	0.000	0.000				1400.57	
16	0.7311	1175.7	1196.5		1.072	4.051	68.611	22.393	3.498	0.127	0.226	0.012	0.010	0.001	0.000				1399.27	
17	0.7306	1175.6	1196.4		1.068	4.015	68.660	22.438	3.449	0.125	0.223	0.012	0.010	0.001	0.000				1399.65	
18	0.7310	1176.1	1197.0		1.068	4.013	68.602	22.479	3.471	0.124	0.221	0.012	0.010	0.001	0.000				1399.99	
19	0.7307	1175.3	1196.1		1.068	4.035	68.639	22.451	3.431	0.127	0.226	0.012	0.010	0.001	0.000				1399.29	
20	0.7300	1174.2	1194.9		1.069	4.036	68.765	22.339	3.420	0.126	0.223	0.012	0.010	0.001	0.000				1398.62	
21	0.7302	1174.5	1195.3		1.069	4.035	68.696	22.431	3.400	0.125	0.223	0.012	0.009	0.001	0.000				1398.86	
22	0.7301	1173.9	1194.7		1.092	4.028	68.750	22.352	3.405	0.126	0.225	0.012	0.010	0.001	0.000				1398.22	
23	0.7293	1173.1	1193.9		1.089	4.010	68.839	22.354	3.332	0.126	0.227	0.012	0.010	0.001	0.000				1398.00	
24	0.7295	1173.5	1194.3		1.084	4.011	68.803	22.383	3.346	0.126	0.225	0.012	0.010	0.001	0.000				1398.30	
25	0.7290	1172.8	1193.6		1.084	4.007	68.881	22.332	3.326	0.125	0.223	0.012	0.010	0.001	0.000				1397.93	
26	0.7294	1173.4	1194.1		1.072	4.031	68.796	22.393	3.336	0.126	0.224	0.012	0.010	0.001	0.000				1398.18	
27	0.7302	1174.3	1195.1		1.068	4.051	68.676	22.473	3.342	0.131	0.235	0.013	0.010	0.001	0.000				1398.55	
28	0.7299	1174.0	1194.8		1.072	4.038	68.772	22.351	3.374	0.131	0.237	0.013	0.011	0.001	0.000				1398.48	
29	0.7304	1175.2	1196.1		1.078	3.995	68.791	22.266	3.482	0.130	0.235	0.012	0.010	0.001	0.000				1399.51	
30	0.7334	1179.7	1200.6		1.082	3.995	68.775	21.775	3.898	0.157	0.286	0.017	0.014	0.001	0.000				1401.95	
31	0.7328	1179.1	1200.0		1.077	3.988	68.775	21.874	3.838	0.149	0.269	0.015	0.013	0.001	0.000				1401.75	
Avg	0.7215	1169.0	1190.0		0.866	3.851	69.831	22.091	3.042	0.108	0.191	0.010	0.008	0.001	0.000				1401.10	

Zone 211

Williston Basin Interstate Pipeline Co.
GQ Source Analysis

GQ Source Number:	0602330		
GQ Source Name:	WILLISTON BORDER	**Specific Gravity:**	0.7266
Effective Date:	5/10/2008 9:00:00 AM	**BTU Base:**	Dry
Effective End Date:	1/18/2038 9:14:07 PM	**Dry Heat Value:**	1193.18
Pressure Base:	14.730	**Wet Heat Value:**	1172.41
Viscosity:		**As Deliv. Heat Value:**	1193.18

		Mol %	Imported GPM	Calculated GPM
C1	Methane	69.098		
C2	Ethane	22.027		5.873
C3	Propane	3.577	0.983	0.983
IC4	Iso-Butane	0.123	0.040	0.040
NC4	N-Butane	0.215	0.068	0.067
IC5	Iso-Pentane	0.012	0.004	0.004
NC5	N-Pentane	0.010	0.004	0.004
C6+	Hexanes Plus	0.000	0.000	0.000
CO2	Carbon Dioxide	0.945		
N2	Nitrogen	3.993		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
	Totals	100.000	1.099	6.972

Sample Date: 4/30/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 24 #164
Analysis Remarks:

Williston Basin Interstate Pipeline Co.
GQ Source Analysis

GQ Source Number:	0602230		
GQ Source Name:	WATFORD CITY BORDER	**Specific Gravity:**	0.7277
Effective Date:	5/10/2008 9:00:00 AM	**BTU Base:**	Dry
Effective End Date:	1/18/2038 9:14:07 PM	**Dry Heat Value:**	1129.74
Pressure Base:	14.730	**Wet Heat Value:**	1110.08
Viscosity:		**As Deliv. Heat Value:**	1129.74

		Mol %	Imported GPM	Calculated GPM
C1	Methane	68.587		
C2	Ethane	18.276		4.873
C3	Propane	3.613	0.993	0.992
IC4	Iso-Butane	0.185	0.060	0.060
NC4	N-Butane	0.333	0.105	0.105
IC5	Iso-Pentane	0.027	0.010	0.010
NC5	N-Pentane	0.027	0.010	0.010
C6+	Hexanes Plus	0.006	0.003	0.002
CO2	Carbon Dioxide	0.753		
N2	Nitrogen	8.193		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
	Totals	100.000	1.181	6.053

Sample Date: 4/30/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 25

Analysis Remarks:

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 163

Name: NORTH TIOGA MINOT

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6986	1139.7	1159.9		0.616	3.881	73.603	19.164	2.458	0.087	0.160	0.010	0.009	0.013					1387.74	
2	0.6952	1135.7	1155.8		0.592	3.844	74.035	18.965	2.357	0.069	0.118		0.006	0.010					1386.18	
3	0.6952	1135.7	1155.8		0.592	3.844	74.035	18.965	2.357	0.069	0.118		0.006	0.010					1386.18	
4	0.7002	1142.2	1162.4		0.617	3.876	73.335	19.405	2.478	0.089	0.165	0.010	0.009	0.016					1389.21	
5	0.6932	1135.6	1155.7		0.511	3.788	74.430	18.733	2.267	0.080	0.152	0.010	0.009	0.021					1388.03	
6	0.6914	1129.4	1149.4		0.526	3.973	74.615	18.491	2.140	0.079	0.145	0.009	0.008	0.015					1382.29	
7	0.6923	1130.0	1150.0		0.576	3.946	74.406	18.731	2.100	0.079	0.138	0.007	0.006	0.011					1382.14	
8	0.6959	1134.4	1154.4		0.627	3.937	73.879	19.080	2.221	0.083	0.147	0.009	0.007	0.010					1383.92	
9	0.6913	1131.9	1152.0		0.586	3.714	74.847	18.370	2.197	0.094	0.162	0.011	0.010	0.009					1385.54	
10	0.6857	1128.3	1148.3		0.527	3.499	75.832	17.792	2.063	0.097	0.158	0.012	0.011	0.009					1386.72	
11	0.6844	1126.6	1146.6		0.515	3.494	76.119	17.496	2.093	0.095	0.156	0.012	0.011	0.010					1386.00	
12	0.6854	1126.1	1146.0		0.514	3.634	75.751	17.820	2.027	0.084	0.141	0.010	0.009	0.010					1384.21	
13	0.6932	1131.9	1151.9		0.591	3.892	74.255	18.915	2.102	0.079	0.140	0.008	0.007	0.011					1383.55	
14	0.6932	1132.1	1152.2		0.585	3.886	74.296	18.837	2.150	0.078	0.141	0.008	0.007	0.011					1383.87	
15	0.6927	1132.3	1152.3		0.570	3.848	74.483	18.643	2.197	0.080	0.147	0.010	0.009	0.013					1384.56	
16	0.6882	1128.5	1148.5		0.500	3.762	75.139	18.324	2.035	0.073	0.135	0.008	0.008	0.015					1384.48	
17	0.6886	1127.9	1147.8		0.500	3.846	75.016	18.373	2.035	0.071	0.129	0.008	0.007	0.015					1383.22	
18	0.6893	1128.5	1148.4		0.512	3.854	74.932	18.397	2.073	0.072	0.131	0.008	0.007	0.015					1383.27	
19	0.6907	1132.1	1152.1		0.512	3.762	74.752	18.579	2.170	0.069	0.123	0.007	0.006	0.019					1386.33	
20	0.6919	1133.7	1153.8		0.529	3.754	74.518	18.795	2.184	0.068	0.120	0.007	0.006	0.020					1387.09	
21	0.6700	1114.3	1134.0		0.279	3.258	78.085	16.697	1.509	0.051	0.081	0.007	0.006	0.028					1385.42	
22	0.6523	1098.9	1118.4		0.137	2.742	81.295	14.523	1.111	0.061	0.085	0.009	0.009	0.027					1384.74	
23	0.6776	1117.7	1137.5		0.424	3.545	77.193	16.685	1.870	0.094	0.151	0.012	0.012	0.014					1381.79	
24	0.6774	1120.4	1140.2		0.444	3.329	77.144	17.031	1.804	0.083	0.133	0.010	0.009	0.013					1385.39	
25	0.6778	1120.6	1140.4		0.449	3.343	77.148	16.955	1.837	0.089	0.144	0.011	0.011	0.012					1385.24	
26	0.6816	1124.2	1144.1		0.497	3.412	76.436	17.489	1.908	0.087	0.141	0.010	0.009	0.011					1385.81	
27	0.6810	1123.6	1143.5		0.486	3.412	76.536	17.411	1.904	0.084	0.136	0.010	0.009	0.012					1385.63	
28	0.6802	1122.6	1142.4		0.483	3.401	76.734	17.219	1.890	0.091	0.147	0.011	0.011	0.013					1385.19	
29	0.6737	1115.6	1135.3		0.414	3.316	77.795	16.515	1.709	0.084	0.134	0.011	0.010	0.012					1383.25	
30	0.6782	1121.0	1140.9		0.447	3.366	77.054	17.011	1.863	0.086	0.140	0.011	0.010	0.013					1385.28	
31	0.6748	1118.6	1138.4		0.402	3.251	77.815	16.392	1.839	0.097	0.154	0.016	0.017	0.018					1385.89	
Avg	0.6858	1127.0	1147.1		0.502	3.626	75.662	17.929	2.031	0.081	0.138	0.010	0.009	0.014					1385.10	

Zone 261

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 091

Name: MINOT

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.7015	1144.3	1164.5		0.593	3.906	73.443	18.921	2.831	0.091	0.173	0.009	0.009	0.023	0.000				1390.41	
2	0.7020	1143.1	1163.4		0.646	3.946	73.039	19.552	2.521	0.092	0.171	0.008	0.007	0.018	0.000				1388.53	
3	0.7044	1148.4	1168.8		0.638	3.860	72.882	19.470	2.854	0.091	0.169	0.009	0.007	0.019	0.000				1392.58	
4	0.7003	1142.9	1163.2		0.607	3.855	73.358	19.378	2.503	0.091	0.171	0.008	0.007	0.020	0.000				1390.01	
5	0.7019	1144.4	1164.6		0.648	3.858	73.090	19.585	2.519	0.093	0.169	0.009	0.007	0.022	0.000				1390.14	
6	0.6968	1138.0	1158.2		0.530	3.941	73.955	18.830	2.431	0.092	0.177	0.010	0.008	0.026	0.000				1387.53	
7	0.6918	1129.2	1149.2		0.557	3.971	74.544	18.571	2.095	0.081	0.149	0.007	0.006	0.020	0.000				1381.72	
8	0.6922	1130.2	1150.2		0.574	3.927	74.450	18.707	2.089	0.080	0.145	0.007	0.005	0.017	0.000				1382.51	
9	0.6984	1137.9	1158.1		0.659	3.912	73.523	19.326	2.297	0.089	0.165	0.008	0.007	0.015	0.000				1385.72	
10	0.6879	1130.7	1150.7		0.558	3.518	75.537	17.932	2.149	0.101	0.169	0.011	0.010	0.015	0.000				1387.37	
11	0.6890	1131.0	1151.0		0.562	3.594	75.371	17.963	2.202	0.102	0.171	0.011	0.010	0.014	0.000				1386.64	
12	0.6850	1126.4	1146.4		0.510	3.570	76.055	17.436	2.130	0.099	0.163	0.011	0.010	0.016	0.000				1385.14	
13	0.6923	1130.8	1150.8		0.565	3.915	74.566	18.489	2.189	0.089	0.156	0.008	0.007	0.016	0.000				1383.08	
14	0.6958	1133.9	1154.0		0.610	3.990	73.896	19.016	2.213	0.087	0.158	0.008	0.006	0.017	0.000				1383.35	
15	0.6955	1133.5	1153.5		0.602	3.992	73.990	18.902	2.240	0.086	0.157	0.008	0.006	0.017	0.000				1383.23	
16	0.6942	1134.1	1154.2		0.589	3.849	74.322	18.701	2.247	0.087	0.168	0.010	0.009	0.019	0.000				1385.30	
17	0.6952	1134.0	1154.1		0.581	3.962	74.130	18.740	2.303	0.087	0.160	0.009	0.009	0.019	0.000				1384.15	
18	0.6916	1130.9	1151.0		0.508	3.929	74.612	18.517	2.168	0.081	0.150	0.008	0.006	0.021	0.000				1383.93	
19	0.6928	1130.7	1150.8		0.518	4.032	74.484	18.443	2.238	0.087	0.162	0.008	0.007	0.021	0.000				1382.57	
20	0.6925	1132.1	1152.2		0.522	3.914	74.496	18.590	2.218	0.080	0.146	0.007	0.005	0.023	0.000				1384.55	
21	0.6931	1133.4	1153.5		0.536	3.874	74.364	18.757	2.224	0.075	0.134	0.006	0.004	0.027	0.000				1385.52	
22	0.6924	1130.6	1150.6		0.497	4.038	74.411	18.601	2.232	0.069	0.118	0.004	0.002	0.028	0.000				1382.77	
23	0.6634	1106.7	1126.3		0.177	3.252	79.379	15.499	1.500	0.060	0.085	0.005	0.005	0.037	0.000				1382.87	
24	0.6722	1114.9	1134.7		0.347	3.316	78.156	16.150	1.752	0.092	0.143	0.011	0.010	0.024	0.000				1384.07	
25	0.6951	1143.1	1163.3		0.443	3.595	75.274	17.382	2.626	0.184	0.378	0.045	0.048	0.025	0.000				1395.38	
26	0.6832	1124.3	1144.2		0.464	3.606	76.370	17.149	2.085	0.108	0.182	0.013	0.013	0.010	0.000				1384.27	
27	0.6854	1127.3	1147.3		0.510	3.554	75.921	17.647	2.073	0.097	0.161	0.011	0.010	0.018	0.000				1385.84	
28	0.6831	1126.8	1146.8		0.499	3.387	76.331	17.493	1.986	0.097	0.166	0.013	0.012	0.016	0.000				1387.51	
29	0.6858	1129.8	1149.8		0.503	3.457	75.938	17.661	2.108	0.107	0.187	0.014	0.013	0.013	0.000				1388.38	
30	0.6813	1123.8	1143.7		0.491	3.411	76.662	17.177	1.955	0.099	0.164	0.012	0.011	0.018	0.000				1385.68	
31	0.6756	1118.2	1138.0		0.407	3.350	77.616	16.481	1.856	0.095	0.153	0.011	0.011	0.020	0.000				1384.50	
Avg	0.6907	1132.0	1151.8		0.531	3.751	74.973	18.228	2.220	0.092	0.165	0.010	0.009	0.020	0.000				1385.98	

Zone 262

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	2501030		
GQ Source Name:	LIGNITE PLANT	**Specific Gravity:**	0.6639
Effective Date:	5/10/2008 9:00:00 AM	**BTU Base:**	Dry
Effective End Date:	1/18/2038 9:14:07 PM	**Dry Heat Value:**	1136.05
Pressure Base:	14.730	**Wet Heat Value:**	1116.28
Viscosity:		**As Deliv. Heat Value:**	1136.05

		Mol %	Imported GPM	Calculated GPM
C1	Methane	78.297		
C2	Ethane	17.725	0.000	4.726
C3	Propane	1.023	0.281	0.281
IC4	Iso-Butane	0.001	0.000	0.000
NC4	N-Butane	0.000	0.000	0.000
IC5	Iso-Pentane	0.000	0.000	0.000
NC5	N-Pentane	0.000	0.000	0.000
C6+	Hexanes Plus	0.045	0.021	0.018
CO2	Carbon Dioxide	0.096		
N2	Nitrogen	2.814		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
	Totals	100.000	0.302	5.026

Sample Date: 4/30/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 263
Analysis Remarks:

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 043

Name: BISMARCK PLANT CLEVELAND PLANT

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6982	1142.4	1162.7		0.532	3.801	73.863	18.903	2.601	0.084	0.161	0.011	0.010	0.033	0.000				1391.43	
2	0.7007	1141.9	1162.1		0.630	3.921	73.541	18.895	2.700	0.091	0.174	0.010	0.010	0.028	0.000				1388.28	
3	0.7021	1143.3	1163.6		0.668	3.911	73.154	19.354	2.624	0.087	0.162	0.009	0.007	0.023	0.000				1388.63	
4	0.7017	1145.3	1165.5		0.613	3.833	73.353	19.167	2.727	0.090	0.171	0.011	0.010	0.025	0.000				1391.41	
5	0.6998	1141.6	1161.8		0.638	3.841	73.505	19.233	2.482	0.089	0.168	0.009	0.008	0.028	0.000				1388.85	
6	0.6978	1137.7	1157.8		0.576	3.987	73.804	18.893	2.427	0.090	0.174	0.010	0.009	0.030	0.000				1386.07	
7	0.6942	1133.6	1153.6		0.545	3.950	74.383	18.516	2.290	0.089	0.174	0.011	0.010	0.031	0.000				1384.56	
8	0.6922	1129.4	1149.4		0.590	3.945	74.522	18.575	2.109	0.079	0.143	0.007	0.006	0.022	0.000				1381.55	
9	0.6942	1132.6	1152.6		0.627	3.885	74.217	18.854	2.152	0.080	0.148	0.008	0.007	0.021	0.000				1383.39	
10	0.6934	1133.7	1153.8		0.628	3.736	74.542	18.573	2.220	0.093	0.168	0.011	0.010	0.019	0.000				1385.62	
11	0.6863	1128.2	1148.2		0.552	3.515	75.867	17.658	2.095	0.100	0.171	0.012	0.011	0.019	0.000				1386.03	
12	0.6872	1128.4	1148.4		0.553	3.585	75.816	17.503	2.223	0.102	0.175	0.012	0.011	0.020	0.000				1385.36	
13	0.6855	1125.3	1145.3		0.522	3.665	75.956	17.451	2.109	0.095	0.160	0.011	0.010	0.021	0.000				1383.27	
14	0.6946	1132.3	1152.3		0.613	3.963	74.178	18.773	2.196	0.084	0.156	0.009	0.008	0.021	0.000				1382.62	
15	0.6947	1132.3	1152.4		0.609	3.971	74.210	18.692	2.232	0.086	0.160	0.009	0.008	0.022	0.000				1382.61	
16	0.6945	1132.4	1152.4		0.601	3.959	74.333	18.525	2.283	0.088	0.168	0.010	0.009	0.024	0.000				1382.91	
17	0.6939	1131.9	1151.9		0.571	3.985	74.417	18.431	2.304	0.087	0.162	0.009	0.009	0.025	0.000				1382.81	
18	0.6894	1127.6	1147.5		0.505	3.924	75.030	18.187	2.079	0.079	0.151	0.009	0.008	0.028	0.000				1382.06	
19	0.6920	1128.8	1148.8		0.538	4.042	74.650	18.275	2.217	0.083	0.153	0.009	0.008	0.026	0.000				1381.00	
20	0.6915	1131.4	1151.4		0.533	3.844	74.755	18.404	2.204	0.075	0.139	0.008	0.007	0.032	0.000				1384.64	
21	0.6929	1132.1	1152.2		0.549	3.907	74.477	18.585	2.229	0.073	0.133	0.007	0.006	0.033	0.000				1384.16	
22	0.6908	1128.5	1148.5		0.493	4.017	74.771	18.282	2.202	0.069	0.120	0.007	0.006	0.035	0.000				1381.84	
23	0.6602	1103.1	1122.7		0.177	3.166	80.020	15.029	1.397	0.062	0.089	0.008	0.008	0.043	0.000				1381.72	
24	0.6808	1123.2	1143.0		0.429	3.491	77.099	16.476	2.100	0.121	0.216	0.020	0.020	0.028	0.000				1385.41	
25	0.6929	1140.6	1160.8		0.464	3.507	75.686	17.163	2.509	0.171	0.359	0.044	0.048	0.048	0.000				1394.48	
26	0.6841	1124.9	1144.9		0.479	3.619	76.362	17.058	2.126	0.110	0.192	0.015	0.015	0.025	0.000				1384.20	
27	0.6855	1127.6	1147.6		0.522	3.523	76.031	17.511	2.086	0.100	0.175	0.014	0.014	0.024	0.000				1386.07	
28	0.6810	1124.3	1144.2		0.505	3.337	76.680	17.280	1.913	0.090	0.151	0.011	0.010	0.023	0.000				1386.45	
29	0.6828	1125.5	1145.4		0.503	3.427	76.527	17.191	2.015	0.103	0.181	0.014	0.014	0.025	0.000				1386.22	
30	0.6846	1126.4	1146.4		0.487	3.566	76.411	16.936	2.212	0.117	0.212	0.018	0.017	0.024	0.000				1385.48	
31	0.6781	1118.6	1138.4		0.456	3.475	77.357	16.399	2.014	0.096	0.153	0.013	0.013	0.024	0.000				1382.51	
Avg	0.6901	1131.0	1150.6		0.539	3.750	75.166	18.014	2.223	0.092	0.167	0.012	0.011	0.027	0.000				1385.13	

Zone 271

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 063

Name: CLEVELAND PLANT MAPLETON

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6983	1142.6	1162.8		0.533	3.801	73.852	18.910	2.605	0.084	0.162	0.011	0.010	0.033	0.000				1391.49	
2	0.7007	1141.9	1162.1		0.630	3.920	73.541	18.895	2.700	0.091	0.174	0.010	0.010	0.028	0.000				1388.29	
3	0.7021	1143.3	1163.6		0.668	3.911	73.154	19.354	2.624	0.087	0.162	0.009	0.007	0.023	0.000				1388.63	
4	0.7017	1145.3	1165.5		0.613	3.833	73.353	19.167	2.727	0.090	0.171	0.011	0.010	0.025	0.000				1391.41	
5	0.6998	1141.6	1161.8		0.638	3.841	73.506	19.233	2.482	0.089	0.168	0.009	0.008	0.028	0.000				1388.85	
6	0.6978	1137.7	1157.8		0.576	3.987	73.804	18.893	2.427	0.090	0.174	0.010	0.009	0.030	0.000				1386.06	
7	0.6942	1133.6	1153.6		0.545	3.950	74.383	18.516	2.291	0.089	0.174	0.011	0.010	0.031	0.000				1384.56	
8	0.6922	1129.4	1149.4		0.590	3.945	74.522	18.575	2.109	0.079	0.143	0.007	0.006	0.022	0.000				1381.55	
9	0.6942	1132.6	1152.6		0.627	3.885	74.217	18.854	2.152	0.080	0.148	0.008	0.007	0.021	0.000				1383.39	
10	0.6934	1133.7	1153.8		0.628	3.736	74.542	18.573	2.220	0.093	0.168	0.011	0.010	0.019	0.000				1385.63	
11	0.6863	1128.2	1148.2		0.552	3.515	75.867	17.658	2.095	0.100	0.171	0.012	0.011	0.019	0.000				1386.03	
12	0.6872	1128.4	1148.4		0.553	3.585	75.815	17.503	2.223	0.102	0.175	0.012	0.011	0.020	0.000				1385.37	
13	0.6855	1125.3	1145.3		0.522	3.665	75.956	17.451	2.110	0.095	0.160	0.011	0.010	0.021	0.000				1383.27	
14	0.6946	1132.3	1152.3		0.613	3.963	74.178	18.773	2.196	0.084	0.156	0.009	0.008	0.021	0.000				1382.62	
15	0.6947	1132.3	1152.4		0.610	3.971	74.210	18.692	2.232	0.086	0.160	0.009	0.008	0.022	0.000				1382.61	
16	0.6945	1132.4	1152.4		0.601	3.959	74.333	18.525	2.283	0.088	0.168	0.010	0.009	0.024	0.000				1382.91	
17	0.6939	1131.9	1151.9		0.571	3.985	74.416	18.432	2.304	0.087	0.162	0.009	0.009	0.025	0.000				1382.82	
18	0.6894	1127.6	1147.5		0.505	3.924	75.030	18.187	2.079	0.079	0.151	0.009	0.008	0.028	0.000				1382.06	
19	0.6920	1128.8	1148.8		0.538	4.042	74.650	18.275	2.217	0.083	0.153	0.009	0.008	0.026	0.000				1381.00	
20	0.6915	1131.4	1151.4		0.533	3.844	74.755	18.404	2.204	0.075	0.139	0.008	0.007	0.032	0.000				1384.64	
21	0.6929	1132.2	1152.2		0.549	3.907	74.473	18.586	2.231	0.073	0.133	0.007	0.006	0.033	0.000				1384.18	
22	0.6908	1128.5	1148.5		0.493	4.017	74.772	18.282	2.202	0.069	0.120	0.007	0.006	0.035	0.000				1381.84	
23	0.6602	1103.1	1122.7		0.177	3.166	80.020	15.029	1.397	0.062	0.089	0.008	0.008	0.043	0.000				1381.72	
24	0.6808	1123.1	1143.0		0.429	3.492	77.099	16.475	2.100	0.121	0.216	0.020	0.020	0.028	0.000				1385.39	
25	0.6929	1140.6	1160.8		0.464	3.507	75.686	17.163	2.509	0.171	0.359	0.044	0.048	0.048	0.000				1394.49	
26	0.6841	1124.9	1144.9		0.479	3.619	76.361	17.058	2.126	0.110	0.192	0.015	0.015	0.025	0.000				1384.21	
27	0.6855	1127.6	1147.6		0.522	3.523	76.030	17.510	2.086	0.100	0.175	0.014	0.014	0.024	0.000				1386.08	
28	0.6810	1124.3	1144.2		0.505	3.337	76.680	17.281	1.913	0.090	0.151	0.011	0.010	0.023	0.000				1386.45	
29	0.6828	1125.5	1145.4		0.503	3.426	76.530	17.189	2.015	0.103	0.181	0.014	0.014	0.025	0.000				1386.23	
30	0.6801	1120.7	1140.5		0.473	3.514	77.028	16.613	2.054	0.101	0.167	0.014	0.013	0.023	0.000				1383.00	
31	0.6840	1127.1	1147.1		0.474	3.485	76.406	17.123	2.172	0.106	0.182	0.014	0.014	0.026	0.000				1387.01	
Avg	0.6903	1131.0	1150.9		0.539	3.750	75.135	18.038	2.228	0.092	0.168	0.012	0.011	0.027	0.000				1385.28	

Zone 272

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 061

Name: CLEVELAND PLANT GRAFTON

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6983	1142.6	1162.8		0.533	3.801	73.852	18.910	2.605	0.084	0.162	0.011	0.010	0.033	0.000				1391.49	
2	0.7007	1141.9	1162.1		0.630	3.920	73.541	18.895	2.700	0.091	0.174	0.010	0.010	0.028	0.000				1388.29	
3	0.7021	1143.3	1163.6		0.668	3.911	73.154	19.354	2.624	0.087	0.162	0.009	0.007	0.023	0.000				1388.63	
4	0.7017	1145.3	1165.5		0.613	3.833	73.353	19.167	2.727	0.090	0.171	0.011	0.010	0.025	0.000				1391.41	
5	0.6998	1141.6	1161.8		0.638	3.841	73.506	19.232	2.482	0.089	0.168	0.009	0.008	0.028	0.000				1388.86	
6	0.6978	1137.7	1157.9		0.576	3.986	73.805	18.894	2.426	0.090	0.174	0.010	0.009	0.030	0.000				1386.08	
7	0.6942	1133.6	1153.6		0.545	3.950	74.383	18.516	2.291	0.089	0.174	0.011	0.010	0.031	0.000				1384.56	
8	0.6922	1129.4	1149.4		0.590	3.945	74.522	18.575	2.109	0.079	0.143	0.007	0.006	0.022	0.000				1381.55	
9	0.6942	1132.6	1152.6		0.627	3.885	74.217	18.854	2.152	0.080	0.148	0.008	0.007	0.021	0.000				1383.39	
10	0.6934	1133.7	1153.8		0.628	3.736	74.542	18.573	2.220	0.093	0.168	0.011	0.010	0.019	0.000				1385.63	
11	0.6863	1128.2	1148.2		0.552	3.515	75.867	17.658	2.095	0.100	0.171	0.012	0.011	0.019	0.000				1386.03	
12	0.6872	1128.4	1148.4		0.553	3.585	75.815	17.503	2.223	0.102	0.175	0.012	0.011	0.020	0.000				1385.37	
13	0.6855	1125.3	1145.3		0.522	3.665	75.956	17.451	2.110	0.095	0.160	0.011	0.010	0.021	0.000				1383.27	
14	0.6946	1132.3	1152.3		0.613	3.963	74.178	18.773	2.196	0.084	0.156	0.009	0.008	0.021	0.000				1382.62	
15	0.6947	1132.3	1152.4		0.610	3.971	74.210	18.692	2.232	0.086	0.160	0.009	0.008	0.022	0.000				1382.61	
16	0.6945	1132.4	1152.4		0.601	3.959	74.333	18.525	2.283	0.088	0.168	0.010	0.009	0.024	0.000				1382.91	
17	0.6939	1131.9	1151.9		0.571	3.985	74.417	18.430	2.304	0.087	0.162	0.009	0.009	0.025	0.000				1382.81	
18	0.6894	1127.6	1147.5		0.505	3.924	75.030	18.187	2.079	0.079	0.151	0.009	0.008	0.028	0.000				1382.06	
19	0.6920	1128.8	1148.8		0.538	4.042	74.650	18.275	2.217	0.083	0.153	0.009	0.008	0.026	0.000				1381.00	
20	0.6915	1131.4	1151.4		0.533	3.844	74.755	18.404	2.204	0.075	0.139	0.008	0.007	0.032	0.000				1384.64	
21	0.6929	1132.2	1152.2		0.549	3.907	74.473	18.586	2.231	0.073	0.133	0.007	0.006	0.033	0.000				1384.18	
22	0.6909	1128.6	1148.6		0.495	4.016	74.764	18.284	2.205	0.069	0.121	0.007	0.006	0.035	0.000				1381.85	
23	0.6605	1103.4	1122.9		0.179	3.175	79.969	15.062	1.405	0.062	0.089	0.008	0.008	0.043	0.000				1381.72	
24	0.6808	1123.2	1143.1		0.428	3.492	77.097	16.475	2.102	0.122	0.217	0.020	0.020	0.028	0.000				1385.42	
25	0.6929	1140.6	1160.8		0.464	3.507	75.686	17.163	2.509	0.171	0.359	0.044	0.048	0.048	0.000				1394.48	
26	0.6841	1124.9	1144.8		0.479	3.620	76.364	17.055	2.125	0.110	0.192	0.015	0.015	0.025	0.000				1384.17	
27	0.6855	1127.6	1147.6		0.522	3.523	76.030	17.511	2.086	0.100	0.175	0.014	0.014	0.024	0.000				1386.07	
28	0.6810	1124.3	1144.2		0.505	3.337	76.680	17.281	1.913	0.090	0.151	0.011	0.010	0.023	0.000				1386.45	
29	0.6828	1125.5	1145.4		0.503	3.426	76.530	17.189	2.015	0.103	0.181	0.014	0.014	0.025	0.000				1386.23	
30	0.6851	1125.8	1145.8		0.497	3.629	76.244	17.095	2.160	0.115	0.207	0.016	0.015	0.023	0.000				1384.32	
31	0.6781	1118.6	1138.4		0.456	3.475	77.357	16.399	2.014	0.096	0.153	0.013	0.013	0.024	0.000				1382.51	
Avg	0.6901	1131.0	1150.7		0.539	3.750	75.163	18.016	2.224	0.092	0.167	0.012	0.011	0.027	0.000				1385.14	

Zone 273

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 041

Name: BISMARCK PLANT DICKINSON PLANT

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6781	1113.7	1133.4		0.542	3.645	77.549	15.811	2.172	0.083	0.144	0.012	0.011	0.030	0.000				1376.16	
2	0.6817	1115.5	1135.3		0.620	3.758	77.018	15.998	2.312	0.089	0.155	0.012	0.010	0.028	0.000				1374.90	
3	0.6872	1122.8	1142.6		0.661	3.773	75.943	16.980	2.362	0.087	0.151	0.011	0.009	0.023	0.000				1378.21	
4	0.7022	1146.2	1166.5		0.613	3.823	73.296	19.200	2.752	0.092	0.176	0.011	0.011	0.026	0.000				1392.03	
5	0.7006	1142.8	1163.1		0.640	3.843	73.401	19.281	2.524	0.092	0.174	0.010	0.008	0.028	0.000				1389.49	
6	0.6986	1138.9	1159.1		0.580	3.979	73.700	18.962	2.455	0.092	0.179	0.010	0.010	0.031	0.000				1386.78	
7	0.6594	1083.7	1102.9		0.560	3.687	80.894	12.896	1.687	0.085	0.135	0.015	0.011	0.030	0.000				1357.96	
8	0.6178	1023.9	1042.1		0.586	3.378	88.541	6.385	0.899	0.078	0.081	0.017	0.011	0.023	0.000				1325.78	
9	0.6327	1043.7	1062.2		0.565	3.611	85.624	8.879	1.115	0.072	0.091	0.014	0.010	0.020	0.000				1335.34	
10	0.6334	1047.0	1065.5		0.569	3.471	85.603	8.960	1.171	0.079	0.100	0.016	0.011	0.020	0.000				1338.77	
11	0.6659	1098.1	1117.5		0.546	3.446	79.624	14.356	1.747	0.094	0.144	0.014	0.011	0.019	0.000				1369.36	
12	0.6872	1128.6	1148.5		0.553	3.577	75.827	17.493	2.227	0.103	0.175	0.013	0.012	0.020	0.000				1385.52	
13	0.6648	1094.6	1114.0		0.542	3.555	79.822	14.066	1.744	0.090	0.138	0.013	0.011	0.021	0.000				1366.27	
14	0.6834	1116.7	1136.4		0.619	3.853	76.271	16.991	2.000	0.083	0.144	0.010	0.008	0.021	0.000				1374.60	
15	0.6949	1132.6	1152.7		0.610	3.970	74.183	18.710	2.239	0.086	0.162	0.009	0.008	0.023	0.000				1382.79	
16	0.6948	1133.1	1153.2		0.601	3.950	74.285	18.564	2.296	0.089	0.171	0.011	0.010	0.024	0.000				1383.42	
17	0.6945	1132.9	1152.9		0.573	3.977	74.327	18.506	2.320	0.088	0.165	0.010	0.009	0.025	0.000				1383.44	
18	0.6900	1128.5	1148.5		0.505	3.917	74.975	18.210	2.106	0.081	0.158	0.010	0.009	0.029	0.000				1382.67	
19	0.6923	1129.2	1149.2		0.538	4.041	74.616	18.299	2.225	0.083	0.154	0.009	0.008	0.026	0.000				1381.22	
20	0.6916	1131.6	1151.7		0.533	3.841	74.736	18.415	2.212	0.075	0.139	0.008	0.007	0.033	0.000				1384.83	
21	0.6931	1132.3	1152.4		0.550	3.909	74.453	18.600	2.234	0.073	0.133	0.007	0.006	0.034	0.000				1384.23	
22	0.6909	1128.7	1148.7		0.494	4.016	74.746	18.306	2.204	0.068	0.118	0.006	0.005	0.036	0.000				1381.93	
23	0.6607	1103.8	1123.3		0.178	3.175	79.937	15.081	1.416	0.062	0.091	0.008	0.008	0.044	0.000				1381.94	
24	0.6817	1124.2	1144.1		0.434	3.506	76.953	16.574	2.117	0.123	0.222	0.021	0.021	0.029	0.000				1385.73	
25	0.6944	1142.9	1163.2		0.466	3.503	75.529	17.217	2.576	0.181	0.382	0.047	0.051	0.048	0.000				1395.82	
26	0.6843	1125.2	1145.1		0.480	3.627	76.318	17.088	2.131	0.110	0.192	0.015	0.015	0.025	0.000				1384.22	
27	0.6858	1128.1	1148.0		0.523	3.528	75.982	17.536	2.096	0.101	0.178	0.015	0.015	0.025	0.000				1386.26	
28	0.6816	1124.9	1144.8		0.510	3.346	76.592	17.336	1.928	0.090	0.153	0.011	0.011	0.023	0.000				1386.61	
29	0.6832	1126.2	1146.1		0.504	3.425	76.472	17.223	2.031	0.105	0.185	0.015	0.015	0.026	0.000				1386.62	
30	0.6805	1121.4	1141.2		0.476	3.502	76.979	16.654	2.071	0.100	0.166	0.014	0.014	0.024	0.000				1383.46	
31	0.6783	1119.2	1139.0		0.457	3.454	77.350	16.399	2.043	0.095	0.151	0.013	0.013	0.024	0.000				1383.05	
Avg	0.6795	1116.0	1135.3		0.536	3.680	77.147	16.290	2.045	0.091	0.158	0.013	0.012	0.027	0.000				1377.08	

Zone 2B

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 271

Name: DICKINSON BORDER

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6080	1011.5	1029.4		0.590	3.205	90.289	5.009	0.738	0.072	0.068	0.000	0.000	0.029	0.000				1320.16	
2	0.6079	1012.1	1030.0		0.605	3.131	90.437	4.877	0.744	0.086	0.082	0.005	0.000	0.033	0.000				1321.10	
3	0.6046	1003.2	1021.0		0.588	3.394	90.903	4.275	0.659	0.073	0.073	0.005	0.000	0.030	0.000				1313.02	
4	0.6038	1003.0	1020.8		0.538	3.411	90.898	4.387	0.616	0.065	0.061	0.000	0.000	0.025	0.000				1313.60	
5	0.6065	1008.8	1026.7		0.516	3.336	90.426	4.901	0.657	0.071	0.064	0.000	0.000	0.029	0.000				1318.33	
6	0.6121	1016.8	1034.8		0.594	3.254	89.539	5.631	0.806	0.075	0.070	0.000	0.000	0.029	0.000				1322.73	
7	0.6085	1009.7	1027.6		0.547	3.427	90.067	5.079	0.722	0.067	0.065	0.000	0.000	0.026	0.000				1317.30	
8	0.6041	1003.6	1021.4		0.547	3.385	90.903	4.364	0.644	0.068	0.063	0.000	0.000	0.027	0.000				1314.09	
9	0.6020	1002.0	1019.7		0.545	3.285	91.325	4.061	0.630	0.069	0.059	0.000	0.000	0.026	0.000				1314.30	
10	0.6038	1003.8	1021.6		0.586	3.278	91.032	4.301	0.643	0.070	0.062	0.000	0.000	0.027	0.000				1314.76	
11	0.6042	1003.8	1021.6		0.641	3.238	90.948	4.407	0.620	0.066	0.055	0.000	0.000	0.025	0.000				1314.24	
12	0.6061	1008.2	1026.0		0.669	3.108	90.655	4.755	0.658	0.070	0.057	0.000	0.000	0.026	0.000				1317.91	
13	0.6077	1011.9	1029.8		0.809	2.814	90.668	4.796	0.724	0.087	0.073	0.000	0.000	0.029	0.000				1321.04	
14	0.6115	1014.7	1032.6		0.611	3.311	89.633	5.491	0.769	0.083	0.074	0.000	0.000	0.028	0.000				1320.50	
15	0.6091	1005.9	1023.7		0.455	3.854	89.656	5.256	0.647	0.056	0.053	0.000	0.000	0.022	0.000				1311.70	
16	0.6103	1011.9	1029.8		0.489	3.551	89.544	5.600	0.671	0.064	0.057	0.000	0.000	0.024	0.000				1318.18	
17	0.6186	1019.1	1037.1		0.581	3.752	88.174	6.419	0.918	0.065	0.069	0.000	0.000	0.022	0.000				1318.65	
18	0.6178	1020.9	1039.0		0.575	3.577	88.403	6.341	0.931	0.074	0.075	0.000	0.000	0.024	0.000				1321.85	
19	0.6167	1019.6	1037.6		0.562	3.570	88.614	6.159	0.922	0.073	0.075	0.000	0.000	0.024	0.000				1321.34	
20	0.6217	1034.9	1053.2		0.588	3.065	87.825	7.329	0.997	0.088	0.081	0.003	0.000	0.026	0.000				1335.80	
21	0.6187	1035.5	1053.8		0.884	2.298	89.192	6.259	1.049	0.131	0.116	0.028	0.001	0.043	0.000				1339.74	
22	0.6424	1073.0	1092.0		0.877	2.249	84.923	10.031	1.570	0.142	0.138	0.023	0.001	0.045	0.000				1362.47	
23	0.6479	1080.8	1100.0		0.784	2.435	83.619	11.207	1.660	0.125	0.131	0.006	0.000	0.033	0.000				1366.52	
24	0.6168	1027.2	1045.3		0.624	3.028	88.831	6.368	0.940	0.092	0.087	0.000	0.000	0.031	0.000				1330.99	
25	0.6145	1022.2	1040.3		0.674	3.035	89.286	5.907	0.900	0.086	0.080	0.000	0.000	0.031	0.000				1327.09	
26	0.6134	1021.4	1039.5		0.708	2.926	89.605	5.654	0.891	0.093	0.084	0.006	0.000	0.033	0.000				1327.26	
27	0.6107	1016.9	1034.9		0.676	2.998	90.030	5.262	0.824	0.090	0.080	0.005	0.000	0.034	0.000				1324.28	
28	0.6108	1013.1	1031.1		0.633	3.300	89.789	5.338	0.764	0.076	0.070	0.000	0.000	0.029	0.000				1319.31	
29	0.6144	1020.0	1038.0		0.613	3.255	89.139	5.958	0.851	0.079	0.075	0.000	0.000	0.030	0.000				1324.30	
30	0.6165	1023.9	1042.0		0.626	3.191	88.897	6.120	0.959	0.089	0.086	0.001	0.000	0.031	0.000				1327.12	
31	0.6127	1019.9	1037.9		0.541	3.207	89.470	5.730	0.853	0.087	0.079	0.000	0.000	0.033	0.000				1326.02	
Avg	0.6130	1019.0	1036.7		0.622	3.189	89.443	5.719	0.838	0.082	0.076	0.003	0.000	0.029	0.000				1324.05	

Zone 31

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 051

Name: CABIN CREEK DICKINSON PLANT

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6074	1009.7	1027.6		0.585	3.271	90.510	4.689	0.741	0.079	0.075	0.019	0.012	0.018	0.000				1318.46	
2	0.6055	1006.9	1024.8		0.615	3.208	91.062	4.126	0.743	0.090	0.090	0.025	0.015	0.026	0.000				1316.99	
3	0.6036	998.6	1016.3		0.554	3.639	90.995	4.034	0.601	0.066	0.065	0.017	0.011	0.017	0.000				1308.07	
4	0.6039	998.5	1016.2		0.554	3.670	90.904	4.118	0.587	0.063	0.061	0.016	0.010	0.016	0.000				1307.66	
5	0.6079	1009.6	1027.5		0.522	3.420	90.234	4.943	0.696	0.071	0.066	0.018	0.011	0.018	0.000				1317.81	
6	0.6110	1014.2	1032.2		0.581	3.340	89.819	5.243	0.817	0.078	0.076	0.018	0.011	0.018	0.000				1320.48	
7	0.6068	1006.0	1023.9		0.529	3.523	90.400	4.696	0.680	0.066	0.064	0.016	0.009	0.016	0.000				1314.35	
8	0.6007	998.8	1016.5		0.534	3.377	91.675	3.599	0.629	0.072	0.067	0.018	0.011	0.019	0.000				1311.55	
9	0.6031	1003.6	1021.4		0.527	3.327	91.191	4.117	0.657	0.074	0.065	0.017	0.010	0.016	0.000				1315.17	
10	0.5979	994.4	1012.0		0.532	3.389	92.217	3.054	0.633	0.071	0.063	0.016	0.009	0.017	0.000				1308.77	
11	0.6046	1005.4	1023.2		0.624	3.210	90.938	4.433	0.626	0.070	0.058	0.016	0.009	0.016	0.000				1315.88	
12	0.6066	1008.8	1026.6		0.793	2.932	90.941	4.389	0.735	0.088	0.075	0.018	0.010	0.019	0.000				1318.16	
13	0.6073	1008.1	1026.0		0.681	3.211	90.709	4.390	0.787	0.092	0.082	0.018	0.010	0.019	0.000				1316.53	
14	0.6069	1001.7	1019.4		0.504	3.841	90.248	4.596	0.648	0.066	0.062	0.014	0.008	0.014	0.000				1308.53	
15	0.6073	1004.2	1022.0		0.553	3.645	90.324	4.614	0.687	0.072	0.066	0.016	0.009	0.015	0.000				1311.41	
16	0.6127	1008.6	1026.4		0.543	3.904	89.210	5.405	0.778	0.063	0.065	0.013	0.008	0.011	0.000				1311.33	
17	0.6177	1016.4	1034.4		0.638	3.749	88.564	5.891	0.969	0.074	0.080	0.014	0.009	0.012	0.000				1316.13	
18	0.6165	1017.9	1035.9		0.569	3.651	88.734	5.926	0.923	0.077	0.079	0.016	0.010	0.015	0.000				1319.35	
19	0.6175	1023.7	1041.8		0.639	3.283	88.841	5.980	1.020	0.096	0.090	0.021	0.012	0.017	0.000				1325.76	
20	0.6110	1016.0	1034.0		0.754	2.966	90.313	4.807	0.877	0.109	0.102	0.028	0.017	0.028	0.000				1322.70	
21	0.6203	1034.4	1052.7		0.952	2.407	89.566	5.203	1.474	0.152	0.142	0.039	0.024	0.039	0.000				1336.58	
22	0.6220	1036.5	1054.9		0.923	2.479	89.468	4.914	1.845	0.146	0.153	0.028	0.017	0.029	0.000				1337.39	
23	0.6194	1030.2	1048.4		0.719	2.941	89.069	5.583	1.401	0.114	0.116	0.022	0.014	0.020	0.000				1332.01	
24	0.6152	1022.1	1040.2		0.662	3.131	89.293	5.727	0.953	0.091	0.089	0.021	0.013	0.021	0.000				1326.14	
25	0.6100	1014.7	1032.7		0.646	3.115	90.300	4.789	0.919	0.092	0.086	0.021	0.011	0.021	0.000				1322.20	
26	0.6085	1014.4	1032.4		0.680	2.936	90.702	4.541	0.890	0.100	0.090	0.023	0.013	0.025	0.000				1323.47	
27	0.6093	1010.8	1028.7		0.665	3.259	90.293	4.772	0.793	0.085	0.079	0.021	0.012	0.020	0.000				1317.86	
28	0.6124	1014.9	1032.9		0.629	3.358	89.569	5.446	0.789	0.081	0.077	0.019	0.012	0.019	0.000				1319.84	
29	0.6150	1020.0	1038.0		0.620	3.302	89.165	5.816	0.876	0.085	0.082	0.020	0.013	0.020	0.000				1323.67	
30	0.6160	1022.1	1040.2		0.660	3.202	89.226	5.648	1.011	0.098	0.095	0.023	0.014	0.024	0.000				1325.41	
31	0.6225	1029.9	1048.1		0.807	3.120	88.166	6.544	1.090	0.104	0.103	0.026	0.014	0.025	0.000				1328.43	
Avg	0.6105	1013.0	1030.9		0.639	3.284	90.085	4.904	0.867	0.087	0.083	0.020	0.012	0.020	0.000				1319.29	

Zone 32

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

May 2008

Number: 111

Name: LITTLE KNIFE PLANT

Pressure Base: 14.730

Temperature Base:

Contract Day: 1 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	Cri'therm
1	0.6387	1101.1	1120.6		0.000	1.539	83.167	14.718	0.552	0.011	0.013	0.000	0.000	0.000	0.000				1402.25	
2	0.6546	1121.0	1140.9		0.000	1.831	79.946	17.557	0.639	0.012	0.015	0.000	0.000	0.000	0.000				1410.08	
3	0.6609	1128.5	1148.5		0.000	1.960	78.673	18.683	0.657	0.012	0.015	0.000	0.000	0.000	0.000				1412.82	
4	0.6601	1127.3	1147.3		0.000	1.960	78.826	18.538	0.649	0.012	0.015	0.000	0.000	0.000	0.000				1412.14	
5	0.6631	1131.8	1151.9		0.000	1.971	78.323	18.916	0.758	0.014	0.018	0.000	0.000	0.000	0.000				1414.51	
6	0.6721	1135.3	1155.4		0.000	2.596	77.218	19.211	0.663	0.093	0.105	0.056	0.058	0.000	0.000				1409.39	
7	0.6723	1129.4	1149.4		0.000	2.971	77.438	18.671	0.447	0.138	0.153	0.090	0.092	0.000	0.000				1401.88	
8	0.6722	1134.5	1154.6		0.000	2.661	77.247	19.032	0.745	0.095	0.108	0.055	0.056	0.000	0.000				1408.20	
9	0.6688	1138.0	1158.2		0.000	2.129	77.047	20.120	0.680	0.011	0.013	0.000	0.000	0.000	0.000				1416.24	
10	0.6714	1141.6	1161.8		0.000	2.162	76.517	20.597	0.702	0.010	0.013	0.000	0.000	0.000	0.000				1417.87	
11	0.6726	1143.0	1163.2		0.000	2.186	76.281	20.804	0.704	0.011	0.013	0.000	0.000	0.000	0.000				1418.34	
12	0.6699	1138.0	1158.1		0.000	2.238	76.693	20.466	0.582	0.009	0.012	0.000	0.000	0.000	0.000				1414.97	
13	0.6630	1131.6	1151.6		0.000	1.979	78.049	19.456	0.498	0.008	0.010	0.000	0.000	0.000	0.000				1414.34	
14	0.6575	1124.9	1144.8		0.000	1.871	79.180	18.443	0.486	0.008	0.010	0.000	0.000	0.001	0.000				1411.78	
15	0.6574	1124.1	1144.0		0.000	1.908	79.228	18.326	0.520	0.008	0.010	0.000	0.000	0.000	0.000				1410.93	
16	0.6582	1125.2	1145.1		0.000	1.913	79.079	18.463	0.525	0.009	0.010	0.000	0.000	0.000	0.000				1411.48	
17	0.6586	1126.1	1146.0		0.000	1.900	79.001	18.553	0.528	0.008	0.010	0.000	0.000	0.000	0.000				1412.12	
18	0.6580	1124.5	1144.5		0.000	1.933	79.111	18.419	0.519	0.008	0.010	0.000	0.000	0.000	0.000				1410.90	
19	0.6469	1110.5	1130.2		0.000	1.743	81.363	16.398	0.478	0.008	0.009	0.000	0.000	0.000	0.000				1405.20	
20	0.6559	1121.9	1141.7		0.000	1.896	79.531	18.058	0.496	0.008	0.010	0.000	0.000	0.000	0.000				1409.81	
21	0.6572	1123.6	1143.5		0.000	1.920	79.221	18.362	0.479	0.008	0.010	0.000	0.000	0.000	0.000				1410.53	
22	0.6575	1124.1	1144.0		0.000	1.909	79.202	18.374	0.496	0.008	0.010	0.000	0.000	0.000	0.000				1410.93	
23	0.6546	1119.7	1139.5		0.000	1.914	79.778	17.790	0.499	0.008	0.010	0.000	0.000	0.000	0.000				1408.40	
24	0.6590	1126.0	1146.0		0.000	1.942	78.865	18.682	0.492	0.008	0.010	0.000	0.000	0.000	0.000				1411.63	
25	0.6583	1124.8	1144.7		0.000	1.942	79.017	18.539	0.483	0.008	0.010	0.000	0.000	0.000	0.000				1410.94	
26	0.6582	1124.6	1144.5		0.000	1.954	79.026	18.508	0.494	0.008	0.010	0.000	0.000	0.000	0.000				1410.70	
27	0.6571	1123.1	1142.9		0.000	1.942	79.267	18.270	0.503	0.008	0.010	0.000	0.000	0.000	0.000				1409.95	
28	0.6532	1118.1	1137.9		0.000	1.875	80.093	17.499	0.515	0.008	0.010	0.000	0.000	0.000	0.000				1407.92	
29	0.6574	1124.0	1143.9		0.000	1.914	79.216	18.344	0.508	0.008	0.010	0.000	0.000	0.000	0.000				1410.80	
30	0.6575	1123.2	1143.1		0.000	1.965	79.192	18.309	0.515	0.008	0.010	0.000	0.000	0.000	0.000				1409.79	
31	0.6573	1123.7	1143.6		0.000	1.923	79.226	18.339	0.494	0.008	0.010	0.000	0.000	0.000	0.000				1410.51	
Avg	0.6600	1126.0	1146.2		0.000	2.018	78.839	18.530	0.558	0.019	0.022	0.006	0.007	0.000	0.000				1410.88	

Zone 33

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	1202160		
GQ Source Name:	BOWMAN BORDER	**Specific Gravity:**	0.7943
Effective Date:	5/10/2008 9:00:00 AM	**BTU Base:**	Dry
Effective End Date:	1/18/2038 9:14:07 PM	**Dry Heat Value:**	1166.97
Pressure Base:	14.730	**Wet Heat Value:**	1146.66
Viscosity:		**As Deliv. Heat Value:**	1166.97

		Mol %	Imported GPM	Calculated GPM
C1	Methane	55.804		
C2	Ethane	27.607		7.361
C3	Propane	4.036	1.110	1.109
IC4	Iso-Butane	0.073	0.024	0.024
NC4	N-Butane	0.196	0.062	0.062
IC5	Iso-Pentane	0.008	0.003	0.003
NC5	N-Pentane	0.019	0.007	0.007
C6+	Hexanes Plus	0.000	0.000	0.000
CO2	Carbon Dioxide	2.203		
N2	Nitrogen	10.053		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
	Totals	100.000	1.205	8.565

Sample Date: 4/30/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 34

Analysis Remarks:

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	1201140		
GQ Source Name:	EAGLE 8B ND	**Specific Gravity:**	0.5730
Effective Date:	7/17/2007 9:00:00 AM	**BTU Base:**	Dry
Effective End Date:	1/18/2038 9:14:07 PM	**Dry Heat Value:**	976.12
Pressure Base:	14.730	**Wet Heat Value:**	959.13
Viscosity:		**As Deliv. Heat Value:**	976.12

		Mol %	Imported GPM	Calculated GPM
C1	Methane	95.696		
C2	Ethane	0.290	0.000	0.078
C3	Propane	0.009	0.003	0.002
IC4	Iso-Butane	0.007	0.003	0.002
NC4	N-Butane	0.000	0.000	
IC5	Iso-Pentane	0.000	0.000	
NC5	N-Pentane	0.000	0.000	
C6+	Hexanes Plus	0.000	0.000	0.000
CO2	Carbon Dioxide	0.083		
N2	Nitrogen	3.915		
O2	Oxygen	0.000		
HE	Helium	0.000		
H2	Hydrogen	0.000		
H2S	Hydrogen Sulfide	0.000		
	Totals	100.000	0.006	0.082

Sample Date: 6/11/2007 9:00:00 AM
Sample Type: Spot
Sample Tech: MG
Sample Remarks: Zone 35

Analysis Remarks:

NORTH DAKOTA HEATING VALUE ZONES		
ZONES	***MEASURING DEVICE***	***LOCATION***
211	Chromatograph	Sidney Area
24	Monthly Sampler	Williston Area
25	Monthly Sampler	Watford City Area
261	Chromatograph	Williston – Tioga – Minot Line
262	Chromatograph	Minot Area
263	Monthly Sampler	Tioga – Portal
264	Monthly Sampler	Williston – Ray
271	Chromatograph	Bismarck – Cleveland
272	Chromatograph	Cleveland – Mapleton
273	Chromatograph	Cleveland – Grafton
28	Chromatograph	Bismarck
31	Chromatograph	Dickinson
32	Chromatograph	Cabin Creek – Dickinson
33	Chromatograph	Killdeer
34	Monthly Sampler	Bowman Area
35	Monthly Sampler	Baker Field – North Dakota

MONTANA DAKOTA UTILITIES CO
NORTH DAKOTA
HEATING VALUE DATA
12 MONTH ACCUMULATIVE AT 14.73 psia, 60 f. DRY

STATE	ZONE	ZONE BOUNDARY	12 MONTH AVERAGE	MAY 08	APR 08	MAR 08	FEB 08	JAN 08	DEC 07	NOV 07	OCT 07	SEPT 07	AUG 07	JULY 07	JUNE 07	ZONE
MT/ND	211	Sidney Area	1147	1190	1180	1095	1028	1075	1124	1160	1170	1183	1189	1188	1185	21
ND	24	Williston Area	1184	1193	1167	1160	1173	1181	1192	1195	1194	1190	1193	1186	1186	24
ND	25	Watford City Area	1121	1130	1120	1119	1125	1126	1118	1118	1119	1119	1120	1118	1118	25
ND	261	Williston - Tioga - Minot Line	1151	1147	1155	1140	1126	1136	1142	1147	1158	1152	1164	1168	1173	261
ND	262	Minot Area	1152	1152	1156	1141	1127	1136	1143	1149	1159	1153	1167	1170	1175	262
ND	263	Tioga - Portal	1128	1136	1127	1125	1130	1129	1132	1128	1129	1131	1130	1117	1117	263
ND	264	Williston - Ray	1180	1193	1167	0	0	0	0	0	0	0	0	0	0	264
ND	271	Bismarck - Cleveland	1123	1151	1138	1086	1053	1059	1063	1105	1158	1153	1166	1169	1174	271
ND	272	Cleveland - Mapleton	1123	1151	1137	1086	1052	1059	1062	1107	1158	1152	1167	1169	1175	272
ND	273	Cleveland - Grafton	1123	1151	1137	1086	1052	1059	1062	1107	1158	1152	1167	1170	1175	273
ND	28	Bismarck	1088	1135	1035	1023	1022	1017	1015	1030	1124	1151	1167	1169	1171	28
ND	31	Dickinson	1022	1037	1023	1022	1021	1016	1014	1023	1023	1017	1006	1033	1033	31
ND/MT	32	Cabin Creek - Dickinson	1018	1031	1019	1020	1019	1014	1012	1021	1020	1013	991	1023	1028	32
ND	33	Killdeer	1116	1146	1126	1122	1118	1114	1111	1118	1113	1109	1106	1104	1101	33
ND	34	Bowman Area	1173	1167	1158	1161	1165	1174	1182	1189	1175	1175	1172	1190	1172	34
ND	35	Baker Field - North Dakota	976	976	976	976	976	976	976	976	976	976	976	974	974	35

THERMAL ZONE VARIANCE DOCUMENTATION May 2008		
ZONE	***BTU VARIANCE***	***REASON***
24	26	Receipt from Sidney Plant
264	26	Receipt from Sidney Plant
28	100	Receipt from Cabin Creek and Minot Area
33	20	Receipt from Little Knife Plant