



UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

ORIGINAL

March 6, 2008

RECEIVED

MAR 7 2008

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

PUBLIC SERVICE COMMISSION

Re: Case No. 11,006 (Therm Billing)
Monthly Report – January 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 February 2008.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of January 2008. There is a report for each of the 15 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 January.

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

2 **PU-08-2** Filed: 3/7/2008 Pages: 22
January 2008 Report

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
FEB 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.0218
12	327	BISMARCK	28	.9813
12	343	CARRINGTON	273	1.0218
12	344	CLEVELAND	272	1.0146
12	364	CAVALIER	273	1.0433
12	365	DAWSON	271	1.0146
12	374	FT TOTTEN	273	1.0290
12	375	DEVILS LAKE	273	1.0290
12	379	BARLOW	273	1.0218
12	387	ELDRIDGE	272	1.0218
12	411	GLEN ULLIN	31	.9596
12	417	GRAFTON	273	1.0505
12	449	JAMESTOWN	272	1.0290
12	463	LANGDON	273	1.0218
12	475	LINTON	802	.9726
12	478	LINCOLN	28	.9813
12	494	MEDINA	271	1.0146
12	498	MANDAN	28	.9813
12	524	NEW SALEM	28	.9606
12	532	NEW ROCKFORD	273	1.0218
12	539	PARK RIVER	273	1.0433
12	574	SANBORN	272	1.0290
12	593	STEELE	271	1.0146
12	598	SHEYENNE	273	1.0290
12	610	TAPPEN	271	1.0146
12	625	VALLEY CITY	272	1.0361
12	629	WALHALLA	273	1.0433
12	647	WILTON	262	1.0730
12	717	SPIRITWOOD	272	1.0290
12	732	MSR SITE	273	1.0218
12	733	PAR SITE	273	1.0218
15	303	ALEXANDER	25	1.0635
15	308	ARNEGARD	25	1.0635
15	318	BEACH	32	.9370
15	319	BELFIELD	32	.9439

MONTANA-DAKOTA UTILITIES CO.
 Therm Billing Factor
 FEB 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	323	BERTHOLD	261	1.0730
15	330	BOWMAN	34	1.0769
15	337	BURLINGTON	262	1.0961
15	368	DES LACS	261	1.0807
15	369	DICKINSON	31	.9527
15	384	EPPING	261	1.0730
15	407	GLADSTONE	31	.9527
15	413	GOLVA	32	.9233
15	416	GARRISON	262	1.0807
15	429	HEBRON	31	.9596
15	459	KILLDEER	33	1.0522
15	469	LEFOR	31	.9527
15	474	LIGNITE	263	1.0740
15	500	MARMARTH	34	1.0849
15	505	MINOT	262	1.0961
15	510	MOTT	31	.9527
15	512	MAX	262	1.0730
15	522	NEW ENGLAND	31	.9458
15	540	PALERMO	261	1.0730
15	558	RAY	261	1.0730
15	561	REGENT	31	.9527
15	563	RHAME	34	1.0690
15	564	RICHARDTON	31	.9458
15	568	ROSS	261	1.0652
15	572	RUTHVILLE	262	1.0961
15	583	SENTINEL BUTTE	32	.9370
15	588	SOUTH HEART	31	.9458
15	590	SPRINGBROOK	261	1.0730
15	591	STANLEY	261	1.0730
15	605	SURREY	262	1.0961
15	611	TAYLOR	31	.9458
15	616	TIOGA	261	1.0652
15	619	TURTLE LAKE	262	1.0807
15	620	TRENTON	24	1.1235
15	624	UNDERWOOD	262	1.0807

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
FEB 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	632	WATFORD CITY	25	1.0635
15	636	WHEELLOCK	261	1.0652
15	637	WHITE EARTH	261	1.0730
15	642	WILLISTON	24	1.1235
15	646	WASHBURN	262	1.0884
15	664	RIVERDALE	262	1.0807
15	691	FAIRVIEW	24	1.1235
15	712	MINOT AFB	262	1.0961
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

January 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	0.6190	1016.0	1034.0		0.095	4.737	86.666	8.053	0.435	0.007	0.006	0.000	0.000	0.000	0.000				1314.08	
2	0.6497	1076.9	1096.0		0.059	3.964	80.812	14.386	0.759	0.010	0.009	0.000	0.000	0.000	0.000				1359.18	
3	0.6739	1123.5	1143.4		0.045	3.421	76.205	19.288	1.004	0.017	0.018	0.001	0.001	0.000	0.000				1392.72	
4	0.7013	1156.4	1176.9		0.385	3.471	72.348	21.448	2.209	0.052	0.080	0.004	0.003	0.000	0.000				1405.55	
5	0.6856	1145.3	1165.6		0.028	3.225	74.171	21.193	1.338	0.021	0.022	0.001	0.001	0.001	0.000				1407.62	
6	0.6867	1147.0	1167.3		0.023	3.222	73.908	21.515	1.289	0.020	0.021	0.001	0.001	0.001	0.000				1408.73	
7	0.6863	1144.6	1164.9		0.060	3.280	73.965	21.403	1.251	0.018	0.021	0.001	0.001	0.000	0.000				1406.12	
8	0.6698	1104.0	1123.6		0.233	3.938	77.649	16.675	1.434	0.028	0.041	0.001	0.001	0.000	0.000				1372.55	
9	0.6309	1039.1	1057.5		0.081	4.467	84.372	10.522	0.543	0.008	0.007	0.000	0.000	0.000	0.000				1330.98	
10	0.6627	1101.9	1121.4		0.048	3.686	78.346	16.979	0.913	0.014	0.014	0.000	0.000	0.000	0.000				1377.32	
11	0.6445	1065.4	1084.3		0.068	4.160	81.818	13.210	0.718	0.012	0.012	0.000	0.000	0.000	0.000				1350.56	
12	0.6640	1104.6	1124.2		0.044	3.639	78.029	17.408	0.860	0.010	0.009	0.000	0.000	0.000	0.000				1379.39	
13	0.6624	1099.7	1119.1		0.052	3.786	78.464	16.683	0.988	0.012	0.013	0.000	0.000	0.000	0.000				1374.77	
14	0.6407	1057.5	1076.2		0.081	4.269	82.499	12.487	0.649	0.008	0.007	0.000	0.000	0.000	0.000				1344.25	
15	0.6508	1078.3	1097.4		0.063	3.974	80.606	14.573	0.759	0.012	0.012	0.000	0.000	0.000	0.000				1359.83	
16	0.6883	1150.0	1170.4		0.025	3.187	73.604	21.820	1.336	0.013	0.014	0.001	0.001	0.000	0.000				1410.78	
17	0.6443	1064.5	1083.3		0.069	4.195	81.929	12.997	0.789	0.010	0.010	0.000	0.000	0.000	0.000				1348.38	
18	0.6232	1024.1	1042.2		0.090	4.646	85.841	8.950	0.459	0.007	0.007	0.000	0.000	0.000	0.000				1319.95	
19	0.6370	1050.9	1069.6		0.077	4.326	83.228	11.727	0.619	0.012	0.010	0.000	0.000	0.000	0.000				1339.95	
20	0.6239	1025.9	1044.1		0.095	4.592	85.663	9.223	0.415	0.006	0.005	0.000	0.000	0.001	0.000				1321.14	
21	0.6332	1044.3	1062.8		0.081	4.366	83.937	11.036	0.567	0.007	0.006	0.000	0.000	0.000	0.000				1335.37	
22	0.6106	999.6	1017.3		0.102	4.930	88.312	6.265	0.378	0.006	0.005	0.000	0.000	0.000	0.000				1301.76	
23	0.6163	1011.2	1029.1		0.097	4.766	87.206	7.514	0.405	0.007	0.006	0.000	0.000	0.001	0.000				1310.27	
24	0.5897	959.5	976.5		0.125	5.373	92.274	2.116	0.105	0.004	0.002	0.000	0.000	0.001	0.000				1271.57	
25	0.6133	1005.2	1023.0		0.101	4.842	87.806	6.838	0.399	0.007	0.007	0.000	0.000	0.001	0.000				1306.09	
26	0.6110	999.9	1017.6		0.105	4.943	88.317	6.164	0.455	0.008	0.006	0.000	0.000	0.001	0.000				1301.84	
27	0.6162	1010.2	1028.1		0.098	4.814	87.251	7.385	0.435	0.009	0.008	0.000	0.000	0.001	0.000				1309.56	
28	0.5926	964.7	981.8		0.122	5.335	91.701	2.698	0.137	0.004	0.002	0.000	0.000	0.001	0.000				1275.34	
29	0.6213	1021.2	1039.2		0.092	4.638	86.206	8.625	0.429	0.006	0.005	0.000	0.000	0.000	0.000				1318.34	
30	0.5976	974.7	992.0		0.115	5.203	90.744	3.748	0.183	0.004	0.002	0.000	0.000	0.001	0.000				1283.22	
31	0.5995	978.4	995.7		0.112	5.164	90.381	4.135	0.198	0.005	0.003	0.000	0.000	0.001	0.000				1285.93	
Avg	0.6402	1056.0	1075.0		0.093	4.276	82.718	12.163	0.724	0.012	0.013	0.000	0.000	0.000	0.000				1342.68	

Zone 211

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	0602330	Specific Gravity:	0.7173
GQ Source Name:	WILLISTON BORDER	BTU Base:	Dry
Effective Date:	1/10/2008 9:00:00 AM	Dry Heat Value:	1181.13
Effective End Date:	1/18/2038 9:14:00 PM	Wet Heat Value:	1160.57
Pressure Base:	14.730	As Deliv. Heat Value:	1181.13
Viscosity:			

1181-

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	70.615		
C2	Ethane	20.801	0.000	5.546
C3	Propane	3.434	0.944	0.943
IC4	Iso-Butane	0.101	0.033	0.033
NC4	N-Butane	0.174	0.055	0.055
IC5	Iso-Pentane	0.011	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	0.805		
N2	Nitrogen	4.049		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		100.000	1.040	6.585

Sample Date: 12/31/2007 12:00:00 AM
Sample Type:
Sample Tech: composite
Sample Remarks: *Zone 24*

Analysis Remarks:

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	0602230	Specific Gravity:	0.7308
GQ Source Name:	WATFORD CITY BORDER	BTU Base:	Dry
Effective Date:	1/10/2008 9:00:00 AM	Dry Heat Value:	<u>1126.47</u>
Effective End Date:	1/18/2038 9:14:00 PM	Wet Heat Value:	1106.87
Pressure Base:	14.730	As Deliv. Heat Value:	1126.47
Viscosity:			

1126-

	<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1 Methane	68.207		
C2 Ethane	17.872		4.777
C3 Propane	3.840	1.056	1.057
IC4 Iso-Butane	0.206	0.067	0.067
NC4 N-Butane	0.372	0.117	0.117
IC5 Iso-Pentane	0.029	0.011	0.011
NC5 N-Pentane	0.028	0.010	0.010
C6+ Hexanes Plus	0.005	0.002	0.002
CO2 Carbon Dioxide	0.736		
N2 Nitrogen	8.705		
O2 Oxygen	0.000		
HE Helium			
H2 Hydrogen			
H2S Hydrogen Sulfide			
Totals	100.000	1.263	6.041

Sample Date: 12/31/2007 12:00:00 AM
Sample Type:
Sample Tech: composite
Sample Remarks: *Zone 15*

Analysis Remarks:

GQ Source Daily Summary

January 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	0.6730	1102.2	1121.8		0.433	4.041	77.494	16.276	1.618	0.047	0.079	0.004	0.003	0.006					1367.39	
2	0.6766	1109.0	1128.6		0.436	3.964	76.872	16.876	1.710	0.047	0.080	0.004	0.003	0.007					1372.08	
3	0.6850	1124.4	1144.4		0.449	3.787	75.466	18.189	1.960	0.050	0.084	0.004	0.003	0.007					1382.72	
4	0.6804	1120.7	1140.6		0.388	3.677	76.120	17.922	1.766	0.042	0.069	0.003	0.002	0.010					1382.77	
5	0.6933	1136.0	1156.2		0.522	3.753	74.166	19.140	2.253	0.056	0.094	0.005	0.004	0.007					1388.54	
6	0.6910	1133.4	1153.5		0.486	3.750	74.477	18.990	2.141	0.053	0.089	0.005	0.004	0.006					1387.63	
7	0.6913	1133.7	1153.8		0.504	3.740	74.433	19.016	2.149	0.054	0.091	0.004	0.003	0.006					1387.63	
8	0.6935	1136.6	1156.7		0.519	3.749	74.025	19.380	2.161	0.056	0.094	0.005	0.004	0.007					1388.94	
9	0.6842	1120.2	1140.1		0.478	3.924	75.644	17.833	1.973	0.050	0.083	0.004	0.003	0.006					1378.35	
10	0.6836	1118.5	1138.3		0.475	3.981	75.724	17.726	1.945	0.051	0.085	0.004	0.003	0.006					1376.80	
11	0.6876	1126.4	1146.4		0.470	3.880	74.961	18.561	1.972	0.054	0.089	0.005	0.004	0.005					1382.54	
12	0.6841	1120.7	1140.6		0.461	3.913	75.588	17.982	1.903	0.052	0.086	0.004	0.003	0.006					1379.02	
13	0.6902	1130.7	1150.8		0.492	3.828	74.560	18.902	2.055	0.055	0.093	0.005	0.004	0.006					1385.18	
14	0.6897	1127.2	1147.1		0.508	3.978	74.650	18.646	2.051	0.056	0.095	0.005	0.004	0.007					1381.28	
15	0.6855	1122.8	1142.7		0.480	3.887	75.455	17.994	2.032	0.052	0.087	0.004	0.003	0.005					1380.18	
16	0.6839	1124.2	1144.1		0.420	3.749	75.486	18.390	1.815	0.048	0.080	0.004	0.003	0.005					1383.47	
17	0.6877	1131.0	1151.1		0.430	3.679	74.820	19.011	1.928	0.046	0.076	0.004	0.003	0.004					1387.99	
18	0.6761	1109.6	1129.2		0.433	3.889	76.893	16.999	1.657	0.045	0.074	0.003	0.002	0.004					1373.29	
19	0.6743	1107.8	1127.4		0.409	3.870	77.149	16.867	1.584	0.042	0.069	0.003	0.002	0.006					1372.92	
20	0.6776	1114.5	1134.2		0.411	3.767	76.526	17.555	1.619	0.043	0.069	0.003	0.002	0.005					1377.82	
21	0.6702	1101.0	1120.5		0.402	3.901	77.914	16.146	1.521	0.040	0.065	0.003	0.002	0.006					1368.69	
22	0.6702	1101.0	1120.5		0.402	3.901	77.914	16.146	1.521	0.040	0.065	0.003	0.002	0.006					1368.68	
23	0.6730	1103.4	1123.0		0.433	3.964	77.518	16.310	1.645	0.045	0.074	0.003	0.002	0.005					1368.92	
24	0.6691	1098.8	1118.3		0.401	3.935	78.118	15.921	1.506	0.040	0.067	0.003	0.002	0.007					1367.08	
25	0.6666	1093.0	1112.4		0.413	4.029	78.636	15.300	1.503	0.041	0.067	0.003	0.002	0.006					1362.49	
26	0.6737	1104.8	1124.4		0.419	3.969	77.471	16.254	1.756	0.044	0.073	0.004	0.003	0.008					1369.89	
27	0.6762	1108.2	1127.8		0.434	3.973	77.156	16.383	1.913	0.047	0.079	0.004	0.003	0.007					1371.54	
28	0.6787	1112.2	1131.9		0.456	3.935	76.636	16.936	1.902	0.047	0.079	0.004	0.003	0.003					1373.94	
29	0.6587	1082.1	1101.3		0.338	4.067	79.883	14.367	1.229	0.040	0.066	0.003	0.002	0.004					1356.94	
30	0.6996	1151.2	1171.6		0.327	3.695	75.648	15.307	4.647	0.031	0.330	0.002	0.002	0.011					1400.78	
31	0.6683	1096.0	1115.4		0.408	4.014	78.457	15.339	1.664	0.038	0.062	0.003	0.002	0.012					1364.44	
Avg	0.6804	1116.0	1135.9		0.440	3.877	76.318	17.312	1.906	0.047	0.087	0.004	0.003	0.006					1377.09	

Zone 261

GQ Source Daily Summary

January 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	0.6750	1106.2	1125.8		0.448	3.964	77.148	16.654	1.649	0.047	0.080	0.000	0.000	0.011	0.000					1370.29
2	0.6750	1106.5	1126.1		0.438	3.961	77.164	16.624	1.675	0.047	0.080	0.000	0.000	0.012	0.000					1370.66
3	0.6798	1115.1	1134.9		0.453	3.862	76.357	17.380	1.806	0.049	0.083	0.000	0.000	0.011	0.000					1376.47
4	0.6835	1125.6	1145.6		0.416	3.633	75.652	18.277	1.886	0.046	0.077	0.000	0.000	0.013	0.000					1385.60
5	0.6918	1134.4	1154.5		0.517	3.717	74.391	19.038	2.177	0.054	0.093	0.001	0.000	0.012	0.000					1388.10
6	0.6928	1136.6	1156.7		0.511	3.691	74.208	19.220	2.209	0.055	0.093	0.001	0.000	0.012	0.000					1389.71
7	0.6915	1134.5	1154.6		0.505	3.702	74.412	19.071	2.155	0.054	0.090	0.001	0.000	0.012	0.000					1388.50
8	0.6932	1136.9	1157.1		0.528	3.684	74.100	19.363	2.162	0.056	0.094	0.000	0.000	0.012	0.000					1389.69
9	0.6908	1132.5	1152.5		0.514	3.749	74.483	19.011	2.084	0.054	0.093	0.000	0.000	0.011	0.000					1386.68
10	0.6822	1116.4	1136.1		0.484	3.964	76.030	17.423	1.955	0.050	0.084	0.000	0.000	0.010	0.000					1375.57
11	0.6878	1126.4	1146.4		0.488	3.873	74.964	18.528	1.991	0.054	0.092	0.000	0.000	0.010	0.000					1382.29
12	0.6858	1123.8	1143.7		0.479	3.864	75.304	18.250	1.949	0.053	0.090	0.001	0.000	0.010	0.000					1381.02
13	0.6882	1128.3	1148.3		0.484	3.801	74.905	18.639	2.018	0.053	0.089	0.000	0.000	0.010	0.000					1384.22
14	0.6903	1129.6	1149.6		0.517	3.875	74.529	18.887	2.025	0.056	0.097	0.001	0.000	0.012	0.000					1383.62
15	0.6876	1125.5	1145.5		0.503	3.885	75.079	18.322	2.053	0.054	0.092	0.000	0.000	0.011	0.000					1381.40
16	0.6840	1122.9	1142.7		0.459	3.778	75.620	18.082	1.919	0.050	0.083	0.000	0.000	0.010	0.000					1381.73
17	0.6881	1132.4	1152.5		0.434	3.618	74.733	19.197	1.879	0.048	0.081	0.000	0.000	0.009	0.000					1389.37
18	0.6821	1121.0	1140.8		0.445	3.741	75.829	18.066	1.791	0.046	0.075	0.000	0.000	0.008	0.000					1381.26
19	0.6743	1107.4	1127.0		0.429	3.853	77.220	16.765	1.605	0.044	0.073	0.000	0.000	0.011	0.000					1372.50
20	0.6768	1112.9	1132.6		0.421	3.771	76.740	17.301	1.642	0.043	0.072	0.000	0.000	0.010	0.000					1376.67
21	0.6748	1110.0	1129.6		0.416	3.762	77.087	17.035	1.580	0.041	0.068	0.000	0.000	0.011	0.000					1375.15
22	0.6740	1109.4	1129.0		0.401	3.755	77.211	16.934	1.585	0.039	0.065	0.000	0.000	0.010	0.000					1375.14
23	0.6737	1105.8	1125.4		0.437	3.885	77.438	16.414	1.699	0.044	0.073	0.000	0.000	0.011	0.000					1371.08
24	0.6715	1103.8	1123.4		0.411	3.840	77.687	16.408	1.533	0.041	0.068	0.000	0.000	0.011	0.000					1370.84
25	0.6672	1094.6	1114.0		0.425	3.972	78.571	15.375	1.535	0.041	0.069	0.000	0.000	0.011	0.000					1363.82
26	0.6716	1102.6	1122.1		0.419	3.912	77.770	16.144	1.630	0.042	0.071	0.000	0.000	0.012	0.000					1369.21
27	0.6766	1109.3	1128.9		0.448	3.926	77.098	16.464	1.926	0.047	0.080	0.000	0.000	0.011	0.000					1372.47
28	0.6786	1112.6	1132.3		0.456	3.897	76.706	16.875	1.927	0.048	0.081	0.000	0.001	0.008	0.000					1374.56
29	0.6671	1096.3	1115.7		0.388	3.918	78.425	15.733	1.426	0.038	0.064	0.000	0.000	0.008	0.000					1365.99
30	0.6646	1093.9	1113.3		0.341	3.899	78.966	15.197	1.481	0.039	0.065	0.001	0.000	0.010	0.000					1365.53
31	0.6680	1097.9	1117.4		0.383	3.907	78.498	15.433	1.669	0.035	0.058	0.000	0.000	0.016	0.000					1367.14
Avg	0.6803	1116.0	1136.3		0.451	3.828	76.269	17.487	1.826	0.047	0.080	0.000	0.000	0.011	0.000					1377.62

Zone 262

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	2501030	Specific Gravity:	0.6608
GQ Source Name:	LIGNITE PLANT	BTU Base:	Dry
Effective Date:	1/10/2008 9:00:00 AM	Dry Heat Value:	<u>1128.91</u> <i>1129 -</i>
Effective End Date:	1/18/2038 9:14:00 PM	Wet Heat Value:	1109.26
Pressure Base:	14.730	As Deliv. Heat Value:	1128.91
Viscosity:			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	78.778		
C2	Ethane	17.244		4.609
C3	Propane	0.896	0.246	0.247
IC4	Iso-Butane	0.001	0.000	0.000
NC4	N-Butane	0.001	0.000	0.000
IC5	Iso-Pentane	0.000	0.000	
NC5	N-Pentane	0.000	0.000	
C6+	Hexanes Plus	0.038	0.018	0.016
CO2	Carbon Dioxide	0.110		
N2	Nitrogen	2.932		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		100.000	0.264	4.872

Sample Date: 12/31/2007 12:00:00 AM
Sample Type:
Sample Tech: composite
Sample Remarks: *Zone 263*
Analysis Remarks:

GQ Source Daily Summary

January 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	0.6253	1029.5	1047.8		0.575	3.760	86.919	7.586	1.002	0.051	0.072	0.010	0.009	0.016	0.000				1325.01	
2	0.6254	1029.2	1047.4		0.529	3.867	86.782	7.693	0.975	0.051	0.070	0.010	0.008	0.014	0.000				1324.40	
3	0.6433	1056.4	1075.1		0.503	3.932	83.314	10.883	1.219	0.048	0.073	0.008	0.006	0.014	0.000				1340.36	
4	0.6462	1061.6	1080.4		0.537	3.829	82.865	11.327	1.290	0.048	0.074	0.008	0.006	0.016	0.000				1344.02	
5	0.6478	1067.1	1085.9		0.528	3.668	82.558	11.786	1.310	0.047	0.070	0.008	0.006	0.018	0.000				1349.20	
6	0.6472	1064.5	1083.3		0.647	3.583	82.960	11.236	1.399	0.055	0.080	0.010	0.008	0.020	0.000				1346.57	
7	0.6565	1079.5	1098.6		0.589	3.628	81.141	12.916	1.556	0.054	0.082	0.009	0.007	0.018	0.000				1355.91	
8	0.6534	1074.8	1093.8		0.601	3.605	81.727	12.410	1.485	0.054	0.082	0.010	0.008	0.019	0.000				1353.22	
9	0.6528	1074.0	1093.0		0.612	3.585	81.829	12.342	1.457	0.056	0.083	0.010	0.008	0.018	0.000				1352.79	
10	0.6411	1054.7	1073.4		0.641	3.616	84.065	10.235	1.267	0.056	0.080	0.011	0.009	0.019	0.000				1340.56	
11	0.6284	1034.6	1052.9		0.668	3.610	86.473	8.028	1.048	0.056	0.075	0.013	0.010	0.021	0.000				1328.14	
12	0.6292	1035.8	1054.1		0.694	3.568	86.361	8.149	1.047	0.058	0.078	0.013	0.010	0.022	0.000				1328.90	
13	0.6219	1025.1	1043.3		0.728	3.480	87.773	6.933	0.905	0.058	0.076	0.015	0.011	0.023	0.000				1322.90	
14	0.6345	1044.4	1062.9		0.678	3.564	85.333	9.124	1.121	0.057	0.079	0.013	0.010	0.021	0.000				1334.35	
15	0.6308	1039.1	1057.5		0.732	3.455	86.148	8.409	1.063	0.060	0.083	0.015	0.011	0.023	0.000				1331.46	
16	0.6286	1035.3	1053.7		0.718	3.500	86.532	8.023	1.043	0.059	0.079	0.014	0.011	0.023	0.000				1328.98	
17	0.6251	1031.0	1049.3		0.731	3.415	87.209	7.488	0.972	0.059	0.077	0.015	0.011	0.023	0.000				1327.10	
18	0.6185	1022.3	1040.4		0.770	3.270	88.536	6.365	0.861	0.063	0.080	0.017	0.013	0.025	0.000				1322.84	
19	0.6215	1025.9	1044.0		0.702	3.437	87.839	6.929	0.908	0.059	0.077	0.015	0.011	0.023	0.000				1324.27	
20	0.6189	1019.6	1037.7		0.608	3.714	88.135	6.525	0.853	0.053	0.071	0.013	0.010	0.018	0.000				1318.97	
21	0.6275	1033.2	1051.5		0.551	3.787	86.395	8.137	0.974	0.051	0.071	0.011	0.009	0.016	0.000				1327.36	
22	0.6346	1044.8	1063.3		0.505	3.820	84.949	9.522	1.056	0.048	0.069	0.009	0.007	0.015	0.000				1334.66	
23	0.6355	1047.1	1065.6		0.536	3.709	84.855	9.679	1.070	0.049	0.069	0.010	0.008	0.016	0.000				1336.75	
24	0.6261	1032.0	1050.2		0.625	3.615	86.838	7.764	0.983	0.056	0.075	0.013	0.010	0.020	0.000				1327.24	
25	0.6274	1034.3	1052.6		0.596	3.635	86.521	8.119	0.962	0.054	0.073	0.012	0.009	0.019	0.000				1328.91	
26	0.6280	1034.2	1052.5		0.594	3.700	86.390	8.170	0.981	0.053	0.072	0.012	0.009	0.019	0.000				1328.21	
27	0.6337	1043.0	1061.4		0.558	3.766	85.250	9.183	1.085	0.051	0.071	0.010	0.008	0.018	0.000				1333.30	
28	0.6297	1036.3	1054.7		0.582	3.750	86.141	8.264	1.094	0.054	0.075	0.012	0.009	0.019	0.000				1329.04	
29	0.6121	1012.0	1029.9		0.798	3.244	89.830	5.137	0.787	0.066	0.080	0.018	0.014	0.025	0.000				1316.44	
30	0.6106	1009.7	1027.6		0.796	3.246	90.143	4.832	0.767	0.069	0.084	0.020	0.015	0.028	0.000				1315.08	
31	0.6224	1028.1	1046.3		0.735	3.331	87.787	7.009	0.935	0.065	0.083	0.017	0.013	0.025	0.000				1326.25	
Avg	0.6317	1041.0	1059.0		0.635	3.603	85.793	8.716	1.080	0.055	0.076	0.012	0.009	0.020	0.000				1332.36	

Zone 271

GQ Source Daily Summary

January 2008

Number: 063

Pressure Base: 14.730

Name: CLEVELAND PLANT MAPLETON

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	0.6293	1036.7	1055.1		0.573	3.687	86.048	8.530	1.031	0.042	0.062	0.008	0.006	0.013	0.000				1330.04	
2	0.6253	1028.9	1047.2		0.528	3.864	86.790	7.676	0.992	0.051	0.070	0.010	0.008	0.012	0.000				1324.26	
3	0.6348	1042.2	1060.7		0.519	3.959	84.918	9.359	1.098	0.049	0.072	0.008	0.006	0.011	0.000				1331.32	
4	0.6472	1062.3	1081.1		0.523	3.899	82.566	11.582	1.286	0.048	0.073	0.007	0.006	0.011	0.000				1343.86	
5	0.6497	1068.7	1087.6		0.526	3.742	82.141	12.101	1.346	0.047	0.071	0.007	0.006	0.012	0.000				1349.34	
6	0.6483	1066.5	1085.4		0.599	3.637	82.572	11.664	1.371	0.052	0.075	0.009	0.007	0.015	0.000				1347.96	
7	0.6521	1071.7	1090.7		0.611	3.652	81.924	12.172	1.478	0.054	0.081	0.009	0.007	0.014	0.000				1350.65	
8	0.6556	1077.7	1096.8		0.589	3.648	81.239	12.833	1.529	0.054	0.081	0.008	0.006	0.014	0.000				1354.63	
9	0.6531	1073.6	1092.6		0.610	3.633	81.761	12.328	1.497	0.056	0.084	0.009	0.007	0.014	0.000				1352.01	
10	0.6455	1061.6	1080.4		0.629	3.624	83.156	11.091	1.331	0.056	0.081	0.010	0.008	0.015	0.000				1344.71	
11	0.6327	1040.8	1059.3		0.647	3.659	85.579	8.832	1.117	0.055	0.075	0.011	0.009	0.016	0.000				1331.65	
12	0.6277	1033.0	1051.3		0.694	3.585	86.623	7.896	1.027	0.057	0.077	0.013	0.010	0.018	0.000				1326.99	
13	0.6258	1030.4	1048.7		0.714	3.536	86.980	7.613	0.980	0.058	0.077	0.014	0.010	0.019	0.000				1325.65	
14	0.6306	1037.6	1056.0		0.684	3.597	86.021	8.471	1.054	0.056	0.077	0.012	0.009	0.018	0.000				1329.77	
15	0.6306	1038.7	1057.1		0.720	3.475	86.109	8.455	1.060	0.059	0.079	0.013	0.010	0.020	0.000				1331.17	
16	0.6287	1034.8	1053.2		0.728	3.518	86.480	8.057	1.035	0.059	0.079	0.014	0.010	0.019	0.000				1328.25	
17	0.6278	1034.1	1052.4		0.716	3.501	86.637	7.932	1.036	0.058	0.077	0.014	0.010	0.019	0.000				1328.19	
18	0.6210	1025.2	1043.4		0.757	3.334	87.991	6.834	0.896	0.061	0.078	0.016	0.012	0.022	0.000				1324.04	
19	0.6180	1020.4	1038.5		0.747	3.367	88.542	6.300	0.855	0.062	0.078	0.016	0.012	0.022	0.000				1320.94	
20	0.6227	1025.6	1043.7		0.614	3.695	87.392	7.220	0.917	0.053	0.071	0.012	0.009	0.017	0.000				1322.60	
21	0.6263	1030.6	1048.8		0.552	3.824	86.592	7.923	0.957	0.050	0.070	0.010	0.008	0.014	0.000				1325.28	
22	0.6309	1038.4	1056.8		0.528	3.812	85.667	8.836	1.008	0.049	0.069	0.010	0.008	0.013	0.000				1330.52	
23	0.6355	1045.4	1063.9		0.496	3.868	84.720	9.711	1.065	0.046	0.067	0.008	0.007	0.011	0.000				1334.60	
24	0.6283	1035.9	1054.2		0.625	3.578	86.377	8.239	1.015	0.055	0.073	0.012	0.009	0.017	0.000				1329.94	
25	0.6302	1038.0	1056.3		0.591	3.685	85.898	8.649	1.013	0.054	0.074	0.011	0.009	0.016	0.000				1330.57	
26	0.6262	1031.5	1049.8		0.599	3.689	86.694	7.900	0.955	0.054	0.072	0.012	0.009	0.016	0.000				1326.55	
27	0.6317	1039.3	1057.7		0.559	3.791	85.559	8.905	1.032	0.050	0.070	0.010	0.008	0.015	0.000				1330.79	
28	0.6276	1032.4	1050.7		0.576	3.800	86.429	8.005	1.032	0.052	0.071	0.012	0.009	0.015	0.000				1326.20	
29	0.6240	1029.0	1047.2		0.709	3.461	87.412	7.221	1.007	0.062	0.081	0.015	0.012	0.019	0.000				1325.62	
30	0.6077	1004.8	1022.6		0.821	3.226	90.679	4.346	0.718	0.068	0.082	0.020	0.014	0.025	0.000				1311.84	
31	0.6208	1025.2	1043.4		0.749	3.332	88.083	6.698	0.935	0.066	0.083	0.017	0.013	0.023	0.000				1324.22	
Avg	0.6321	1041.0	1059.1		0.630	3.635	85.664	8.819	1.086	0.055	0.075	0.012	0.009	0.016	0.000				1332.07	

Zone 272

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

January 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	Cr'therm
1	0.6291	1036.2	1054.5		0.567	3.721	86.047	8.504	1.030	0.042	0.061	0.008	0.006	0.013	0.000				1329.50	
2	0.6252	1028.8	1047.0		0.528	3.866	86.802	7.662	0.991	0.051	0.070	0.010	0.008	0.012	0.000				1324.18	
3	0.6347	1042.2	1060.7		0.519	3.959	84.924	9.355	1.097	0.049	0.072	0.008	0.006	0.011	0.000				1331.33	
4	0.6472	1062.3	1081.1		0.523	3.898	82.573	11.575	1.285	0.048	0.073	0.007	0.006	0.011	0.000				1343.86	
5	0.6497	1068.7	1087.6		0.526	3.743	82.137	12.105	1.346	0.047	0.071	0.007	0.006	0.013	0.000				1349.35	
6	0.6483	1066.5	1085.4		0.599	3.637	82.576	11.658	1.371	0.052	0.075	0.009	0.007	0.015	0.000				1347.98	
7	0.6522	1071.9	1090.8		0.611	3.653	81.910	12.181	1.480	0.054	0.081	0.009	0.007	0.014	0.000				1350.75	
8	0.6555	1077.5	1096.6		0.589	3.649	81.266	12.807	1.526	0.054	0.080	0.008	0.006	0.014	0.000				1354.51	
9	0.6531	1073.7	1092.7		0.611	3.632	81.769	12.319	1.498	0.056	0.084	0.009	0.007	0.014	0.000				1352.07	
10	0.6456	1061.8	1080.6		0.629	3.623	83.142	11.104	1.333	0.056	0.081	0.010	0.008	0.015	0.000				1344.80	
11	0.6328	1041.0	1059.4		0.647	3.657	85.566	8.845	1.120	0.055	0.075	0.011	0.009	0.017	0.000				1331.77	
12	0.6277	1033.2	1051.5		0.693	3.585	86.598	7.918	1.030	0.057	0.077	0.013	0.010	0.019	0.000				1327.08	
13	0.6261	1030.9	1049.1		0.713	3.535	86.928	7.662	0.985	0.058	0.077	0.014	0.010	0.019	0.000				1325.94	
14	0.6307	1037.8	1056.2		0.685	3.593	86.038	8.456	1.054	0.056	0.077	0.013	0.009	0.018	0.000				1329.88	
15	0.6306	1038.8	1057.2		0.720	3.475	86.091	8.470	1.063	0.059	0.079	0.014	0.010	0.020	0.000				1331.24	
16	0.6287	1034.9	1053.3		0.729	3.515	86.465	8.070	1.038	0.059	0.080	0.014	0.010	0.019	0.000				1328.33	
17	0.6278	1034.1	1052.5		0.716	3.498	86.642	7.929	1.036	0.058	0.077	0.014	0.010	0.019	0.000				1328.26	
18	0.6211	1025.4	1043.6		0.757	3.333	87.973	6.853	0.895	0.062	0.078	0.016	0.012	0.021	0.000				1324.19	
19	0.6179	1020.2	1038.3		0.748	3.366	88.569	6.273	0.854	0.062	0.078	0.016	0.012	0.023	0.000				1320.86	
20	0.6228	1025.7	1043.8		0.614	3.695	87.381	7.229	0.919	0.053	0.071	0.012	0.009	0.017	0.000				1322.67	
21	0.6264	1030.8	1049.0		0.551	3.825	86.546	7.966	0.959	0.050	0.070	0.010	0.008	0.014	0.000				1325.39	
22	0.6308	1038.2	1056.6		0.528	3.813	85.690	8.815	1.006	0.049	0.069	0.010	0.008	0.013	0.000				1330.42	
23	0.6353	1045.3	1063.8		0.497	3.865	84.733	9.699	1.066	0.046	0.067	0.008	0.007	0.011	0.000				1334.55	
24	0.6285	1036.3	1054.6		0.624	3.577	86.361	8.254	1.018	0.055	0.073	0.012	0.009	0.017	0.000				1330.21	
25	0.6301	1037.8	1056.1		0.592	3.683	85.963	8.587	1.010	0.054	0.074	0.012	0.009	0.016	0.000				1330.47	
26	0.6263	1031.6	1049.9		0.600	3.687	86.684	7.909	0.957	0.054	0.073	0.012	0.009	0.017	0.000				1326.64	
27	0.6318	1039.4	1057.8		0.559	3.791	85.555	8.908	1.033	0.050	0.070	0.010	0.008	0.015	0.000				1330.79	
28	0.6275	1032.1	1050.4		0.577	3.799	86.461	7.977	1.028	0.052	0.071	0.012	0.009	0.015	0.000				1326.06	
29	0.6239	1028.8	1047.0		0.706	3.467	87.430	7.204	1.005	0.062	0.081	0.015	0.012	0.019	0.000				1325.51	
30	0.6077	1004.9	1022.7		0.821	3.226	90.677	4.348	0.718	0.068	0.082	0.020	0.014	0.026	0.000				1311.86	
31	0.6207	1025.1	1043.2		0.750	3.330	88.105	6.677	0.934	0.066	0.083	0.017	0.013	0.024	0.000				1324.13	
Avg	0.6321	1041.0	1059.1		0.630	3.635	85.665	8.817	1.087	0.055	0.075	0.012	0.009	0.016	0.000				1332.08	

Zone 273

Williston Basin Interstate Pipeline Co.

GQ Source Daily Summary

January 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	0.6080	1001.9	1019.6		0.601	3.782	90.213	4.508	0.739	0.050	0.067	0.012	0.010	0.017	0.000				1307.62	
2	0.6075	1000.9	1018.6		0.554	3.863	90.250	4.448	0.728	0.052	0.067	0.012	0.010	0.015	0.000				1306.90	
3	0.6045	995.1	1012.7		0.564	3.925	90.763	3.946	0.653	0.049	0.063	0.012	0.010	0.015	0.000				1302.48	
4	0.6026	991.7	1009.3		0.626	3.854	91.178	3.603	0.591	0.047	0.061	0.013	0.010	0.018	0.000				1300.15	
5	0.6023	992.4	1010.0		0.662	3.730	91.296	3.577	0.581	0.050	0.061	0.013	0.010	0.019	0.000				1301.37	
6	0.6024	994.5	1012.1		0.764	3.449	91.491	3.528	0.593	0.056	0.067	0.016	0.012	0.023	0.000				1304.09	
7	0.6045	997.8	1015.5		0.689	3.566	90.985	3.953	0.642	0.053	0.065	0.014	0.011	0.021	0.000				1306.06	
8	0.6060	1000.6	1018.3		0.705	3.512	90.769	4.159	0.679	0.056	0.070	0.015	0.012	0.022	0.000				1308.08	
9	0.6059	1000.6	1018.3		0.707	3.494	90.803	4.137	0.680	0.058	0.071	0.016	0.012	0.022	0.000				1308.28	
10	0.6045	997.7	1015.4		0.722	3.524	91.052	3.880	0.645	0.057	0.070	0.016	0.012	0.023	0.000				1305.91	
11	0.6043	997.9	1015.5		0.750	3.446	91.160	3.819	0.641	0.059	0.071	0.017	0.013	0.024	0.000				1306.40	
12	0.6039	996.7	1014.4		0.782	3.433	91.274	3.686	0.635	0.060	0.073	0.017	0.013	0.026	0.000				1305.31	
13	0.6029	995.4	1013.0		0.798	3.395	91.470	3.546	0.604	0.059	0.071	0.018	0.013	0.027	0.000				1304.66	
14	0.6033	996.2	1013.9		0.798	3.383	91.404	3.608	0.617	0.060	0.073	0.018	0.013	0.026	0.000				1305.30	
15	0.6033	997.0	1014.7		0.829	3.284	91.474	3.601	0.615	0.062	0.074	0.018	0.014	0.028	0.000				1306.37	
16	0.6030	996.3	1014.0		0.806	3.334	91.483	3.582	0.603	0.061	0.073	0.018	0.014	0.026	0.000				1305.77	
17	0.6035	997.6	1015.3		0.823	3.277	91.435	3.648	0.618	0.063	0.075	0.019	0.014	0.027	0.000				1306.91	
18	0.6055	1001.5	1019.2		0.838	3.202	91.129	3.952	0.671	0.066	0.080	0.019	0.014	0.028	0.000				1309.87	
19	0.6058	1000.6	1018.3		0.753	3.418	90.911	4.051	0.672	0.062	0.076	0.018	0.013	0.025	0.000				1308.33	
20	0.6056	998.3	1016.0		0.641	3.708	90.727	4.093	0.660	0.055	0.070	0.015	0.012	0.020	0.000				1305.57	
21	0.6074	1000.9	1018.6		0.602	3.780	90.345	4.397	0.705	0.054	0.072	0.014	0.011	0.018	0.000				1307.00	
22	0.6069	999.8	1017.5		0.557	3.875	90.336	4.385	0.688	0.052	0.068	0.013	0.011	0.016	0.000				1306.05	
23	0.6067	1000.7	1018.4		0.630	3.682	90.525	4.304	0.686	0.056	0.072	0.015	0.012	0.018	0.000				1307.54	
24	0.6068	1002.0	1019.7		0.696	3.514	90.647	4.256	0.695	0.061	0.076	0.017	0.013	0.023	0.000				1309.06	
25	0.6070	1002.4	1020.1		0.678	3.540	90.574	4.319	0.700	0.060	0.076	0.016	0.013	0.023	0.000				1309.33	
26	0.6060	1000.5	1018.2		0.683	3.549	90.756	4.154	0.672	0.060	0.074	0.017	0.013	0.023	0.000				1308.00	
27	0.6051	997.9	1015.5		0.653	3.671	90.856	3.989	0.653	0.057	0.072	0.016	0.012	0.021	0.000				1305.54	
28	0.6052	998.7	1016.4		0.655	3.627	90.837	4.053	0.649	0.058	0.072	0.016	0.012	0.022	0.000				1306.53	
29	0.6059	1002.6	1020.3		0.827	3.191	91.045	4.053	0.675	0.068	0.081	0.020	0.015	0.027	0.000				1310.86	
30	0.6073	1004.8	1022.5		0.814	3.213	90.798	4.243	0.712	0.071	0.085	0.021	0.015	0.029	0.000				1312.14	
31	0.6071	1005.0	1022.8		0.828	3.158	90.863	4.222	0.706	0.072	0.085	0.021	0.016	0.030	0.000				1312.68	
Avg	0.6052	999.0	1016.6		0.711	3.528	90.931	3.990	0.658	0.058	0.072	0.016	0.012	0.023	0.000				1306.78	

Zone 28

GQ Source Daily Summary

January 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	0.6076	1002.4	1020.1		0.573	3.746	90.212	4.586	0.746	0.049	0.064	0.000	0.000	0.024	0.000				1308.75	
2	0.6057	998.3	1015.9		0.569	3.829	90.532	4.235	0.700	0.048	0.062	0.000	0.000	0.025	0.000				1305.35	
3	0.6029	993.2	1010.8		0.599	3.824	91.046	3.788	0.617	0.045	0.057	0.000	0.000	0.025	0.000				1301.84	
4	0.6013	990.6	1008.1		0.646	3.760	91.376	3.529	0.563	0.043	0.054	0.000	0.000	0.027	0.000				1300.13	
5	0.6016	993.5	1011.1		0.731	3.488	91.494	3.559	0.588	0.050	0.060	0.000	0.000	0.030	0.000				1303.53	
6	0.6025	995.3	1013.0		0.722	3.473	91.327	3.729	0.607	0.050	0.061	0.000	0.000	0.032	0.000				1305.00	
7	0.6037	997.4	1015.0		0.707	3.479	91.114	3.914	0.642	0.051	0.062	0.000	0.000	0.031	0.000				1306.42	
8	0.6058	1001.5	1019.2		0.700	3.442	90.746	4.259	0.699	0.055	0.068	0.000	0.000	0.031	0.000				1309.49	
9	0.6046	998.9	1016.6		0.728	3.436	90.996	4.024	0.665	0.055	0.066	0.000	0.000	0.031	0.000				1307.50	
10	0.6032	996.4	1014.1		0.738	3.449	91.242	3.790	0.631	0.054	0.065	0.000	0.000	0.031	0.000				1305.65	
11	0.6035	997.2	1014.9		0.772	3.378	91.252	3.797	0.644	0.057	0.068	0.000	0.000	0.033	0.000				1306.36	
12	0.6024	995.1	1012.7		0.806	3.348	91.495	3.578	0.615	0.056	0.068	0.000	0.000	0.033	0.000				1304.80	
13	0.6021	994.5	1012.1		0.801	3.363	91.537	3.538	0.606	0.056	0.067	0.000	0.000	0.033	0.000				1304.37	
14	0.6026	996.2	1013.8		0.818	3.279	91.495	3.631	0.617	0.058	0.069	0.000	0.000	0.034	0.000				1306.04	
15	0.6020	996.6	1014.2		0.796	3.240	91.587	3.601	0.613	0.059	0.070	0.000	0.000	0.034	0.000				1307.12	
16	0.6017	995.9	1013.6		0.777	3.276	91.613	3.570	0.603	0.058	0.069	0.000	0.000	0.033	0.000				1306.64	
17	0.6027	998.2	1015.9		0.810	3.180	91.503	3.710	0.629	0.061	0.072	0.000	0.000	0.034	0.000				1308.56	
18	0.6045	1001.1	1018.8		0.792	3.198	91.174	3.989	0.675	0.063	0.076	0.000	0.000	0.035	0.000				1310.44	
19	0.6045	999.4	1017.1		0.680	3.476	90.966	4.058	0.664	0.056	0.070	0.000	0.000	0.031	0.000				1308.15	
20	0.6051	999.0	1016.6		0.603	3.674	90.720	4.185	0.672	0.052	0.066	0.000	0.000	0.028	0.000				1306.97	
21	0.6063	999.9	1017.6		0.596	3.745	90.462	4.359	0.694	0.051	0.067	0.000	0.000	0.026	0.000				1306.83	
22	0.6061	999.5	1017.2		0.553	3.821	90.417	4.390	0.683	0.048	0.064	0.000	0.000	0.025	0.000				1306.48	
23	0.6056	1000.5	1018.2		0.683	3.504	90.752	4.226	0.681	0.056	0.071	0.000	0.000	0.029	0.000				1308.48	
24	0.6063	1001.9	1019.7		0.694	3.472	90.649	4.322	0.703	0.058	0.073	0.000	0.000	0.030	0.000				1309.50	
25	0.6058	1001.1	1018.8		0.686	3.487	90.720	4.260	0.689	0.057	0.071	0.000	0.000	0.030	0.000				1308.98	
26	0.6048	998.7	1016.4		0.660	3.578	90.844	4.109	0.658	0.054	0.068	0.000	0.000	0.029	0.000				1306.93	
27	0.6038	996.6	1014.2		0.669	3.597	91.042	3.902	0.638	0.054	0.067	0.000	0.000	0.030	0.000				1305.24	
28	0.6055	1000.9	1018.6		0.705	3.437	90.810	4.215	0.673	0.058	0.072	0.000	0.000	0.030	0.000				1309.10	
29	0.6049	1001.4	1019.2		0.854	3.125	91.168	3.998	0.676	0.066	0.078	0.000	0.000	0.035	0.000				1310.38	
30	0.6063	1004.0	1021.8		0.827	3.134	90.907	4.243	0.705	0.068	0.081	0.000	0.000	0.036	0.000				1312.33	
31	0.6058	1003.5	1021.3		0.838	3.107	91.015	4.155	0.699	0.068	0.082	0.000	0.000	0.037	0.000				1312.12	
Avg	0.6042	998.0	1016.0		0.714	3.463	91.039	3.976	0.655	0.055	0.068	0.000	0.000	0.031	0.000				1307.08	

Zone 31

GQ Source Daily Summary

January 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	0.6075	1000.6	1018.4		0.555	3.877	90.255	4.411	0.749	0.053	0.067	0.012	0.010	0.011	0.000				1306.57	
2	0.6049	995.2	1012.9		0.571	3.937	90.722	3.940	0.683	0.050	0.065	0.012	0.009	0.012	0.000				1302.32	
3	0.6024	990.5	1008.1		0.622	3.912	91.216	3.489	0.616	0.048	0.062	0.012	0.009	0.013	0.000				1298.84	
4	0.6005	987.6	1005.1		0.662	3.852	91.603	3.171	0.566	0.048	0.060	0.013	0.009	0.015	0.000				1297.04	
5	0.6014	991.6	1009.2		0.757	3.546	91.647	3.287	0.598	0.055	0.067	0.015	0.011	0.018	0.000				1301.34	
6	0.6029	994.1	1011.7		0.715	3.604	91.304	3.581	0.634	0.054	0.066	0.014	0.011	0.017	0.000				1302.93	
7	0.6039	995.9	1013.5		0.716	3.585	91.141	3.733	0.661	0.055	0.068	0.015	0.011	0.017	0.000				1304.23	
8	0.6053	998.6	1016.2		0.708	3.565	90.910	3.943	0.700	0.059	0.072	0.015	0.011	0.017	0.000				1306.22	
9	0.6040	996.1	1013.7		0.731	3.557	91.163	3.714	0.664	0.058	0.070	0.015	0.011	0.017	0.000				1304.40	
10	0.6031	994.9	1012.5		0.749	3.519	91.353	3.564	0.639	0.059	0.070	0.016	0.012	0.019	0.000				1303.80	
11	0.6036	996.0	1013.6		0.780	3.450	91.330	3.606	0.653	0.060	0.073	0.017	0.012	0.021	0.000				1304.71	
12	0.6021	993.2	1010.8		0.804	3.442	91.628	3.328	0.615	0.060	0.072	0.017	0.012	0.022	0.000				1302.65	
13	0.6020	992.9	1010.5		0.799	3.459	91.628	3.321	0.613	0.059	0.071	0.017	0.012	0.021	0.000				1302.41	
14	0.6020	993.8	1011.4		0.833	3.354	91.711	3.290	0.622	0.062	0.074	0.018	0.012	0.023	0.000				1303.54	
15	0.6025	994.7	1012.3		0.833	3.347	91.603	3.407	0.621	0.062	0.074	0.018	0.013	0.021	0.000				1304.17	
16	0.6020	993.9	1011.5		0.821	3.369	91.671	3.344	0.607	0.062	0.073	0.018	0.013	0.021	0.000				1303.61	
17	0.6037	997.5	1015.1		0.855	3.254	91.457	3.583	0.652	0.066	0.078	0.019	0.014	0.022	0.000				1306.54	
18	0.6037	997.2	1014.8		0.821	3.327	91.432	3.540	0.682	0.066	0.080	0.019	0.013	0.023	0.000				1306.12	
19	0.6045	996.4	1014.1		0.688	3.655	91.002	3.813	0.668	0.058	0.072	0.015	0.011	0.018	0.000				1304.23	
20	0.6058	997.3	1014.9		0.609	3.844	90.633	4.055	0.695	0.054	0.071	0.014	0.010	0.015	0.000				1303.95	
21	0.6060	997.4	1015.1		0.590	3.878	90.569	4.104	0.698	0.053	0.070	0.013	0.010	0.014	0.000				1303.99	
22	0.6060	997.2	1014.8		0.559	3.942	90.513	4.133	0.697	0.052	0.069	0.013	0.010	0.012	0.000				1303.67	
23	0.6052	999.0	1016.7		0.731	3.498	90.982	3.912	0.690	0.062	0.077	0.017	0.012	0.019	0.000				1306.83	
24	0.6063	1000.4	1018.1		0.692	3.576	90.716	4.121	0.712	0.061	0.077	0.016	0.012	0.018	0.000				1307.48	
25	0.6054	998.8	1016.5		0.693	3.580	90.889	3.966	0.690	0.061	0.075	0.016	0.012	0.018	0.000				1306.43	
26	0.6043	995.9	1013.6		0.661	3.704	91.003	3.797	0.661	0.057	0.072	0.016	0.011	0.017	0.000				1303.84	
27	0.6034	994.3	1011.9		0.654	3.733	91.150	3.655	0.637	0.057	0.071	0.015	0.011	0.018	0.000				1302.61	
28	0.6054	1000.0	1017.7		0.766	3.397	91.039	3.899	0.699	0.066	0.081	0.019	0.013	0.021	0.000				1307.97	
29	0.6051	1000.6	1018.4		0.838	3.217	91.214	3.838	0.687	0.069	0.083	0.020	0.013	0.023	0.000				1309.19	
30	0.6054	1001.3	1019.0		0.835	3.209	91.196	3.829	0.714	0.072	0.086	0.021	0.014	0.024	0.000				1309.72	
31	0.6057	1002.4	1020.2		0.845	3.160	91.138	3.935	0.703	0.072	0.086	0.021	0.015	0.025	0.000				1310.77	
Avg	0.6041	996.0	1013.9		0.726	3.560	91.155	3.720	0.662	0.059	0.073	0.016	0.012	0.018	0.000				1304.58	

Zone 32

GQ Source Daily Summary

January 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	0.6352	1098.3	1117.7		0.000	1.386	83.783	14.368	0.443	0.009	0.010	0.000	0.000	0.000	0.000				1402.45	
2	0.6397	1103.9	1123.5		0.000	1.468	82.904	15.110	0.497	0.010	0.011	0.000	0.000	0.000	0.000				1404.66	
3	0.6381	1101.4	1120.9		0.000	1.467	83.241	14.776	0.494	0.010	0.012	0.000	0.000	0.000	0.000				1403.22	
4	0.6297	1091.2	1110.5		0.000	1.299	84.936	13.288	0.456	0.010	0.010	0.000	0.000	0.000	0.000				1399.47	
5	0.6301	1091.7	1111.0		0.000	1.306	84.862	13.350	0.461	0.010	0.010	0.000	0.000	0.000	0.000				1399.66	
6	0.6301	1091.7	1111.0		0.000	1.306	84.852	13.370	0.453	0.010	0.010	0.000	0.000	0.000	0.000				1399.66	
7	0.6289	1090.2	1109.5		0.000	1.291	85.059	13.208	0.423	0.009	0.010	0.000	0.000	0.000	0.000				1398.98	
8	0.6325	1094.7	1114.1		0.000	1.350	84.357	13.810	0.462	0.010	0.011	0.000	0.000	0.000	0.000				1400.85	
9	0.6292	1091.2	1110.5		0.000	1.251	85.038	13.246	0.445	0.010	0.010	0.000	0.000	0.000	0.000				1400.03	
10	0.6309	1093.4	1112.8		0.000	1.276	84.701	13.545	0.458	0.010	0.010	0.000	0.000	0.000	0.000				1400.97	
11	0.6296	1091.9	1111.2		0.000	1.247	84.960	13.329	0.445	0.010	0.010	0.000	0.000	0.000	0.000				1400.48	
12	0.6299	1092.5	1111.9		0.000	1.237	84.915	13.366	0.462	0.010	0.010	0.000	0.000	0.000	0.000				1400.94	
13	0.6348	1098.4	1117.8		0.000	1.339	83.918	14.242	0.481	0.010	0.011	0.000	0.000	0.000	0.000				1403.05	
14	0.6305	1092.0	1111.4		0.000	1.325	84.777	13.412	0.466	0.010	0.010	0.000	0.000	0.000	0.000				1399.64	
15	0.6301	1091.3	1110.7		0.000	1.331	84.815	13.407	0.427	0.010	0.010	0.000	0.000	0.000	0.000				1399.18	
16	0.6310	1092.7	1112.0		0.000	1.330	84.634	13.596	0.420	0.009	0.010	0.000	0.000	0.000	0.000				1399.94	
17	0.6321	1093.6	1113.0		0.000	1.380	84.398	13.780	0.423	0.009	0.010	0.000	0.000	0.000	0.000				1399.87	
18	0.6318	1093.4	1112.7		0.000	1.368	84.447	13.757	0.410	0.009	0.010	0.000	0.000	0.000	0.000				1399.88	
19	0.6319	1093.4	1112.7		0.000	1.374	84.455	13.712	0.439	0.010	0.010	0.000	0.000	0.000	0.000				1399.81	
20	0.6322	1093.9	1113.2		0.000	1.372	84.386	13.796	0.427	0.009	0.010	0.000	0.000	0.000	0.000				1400.12	
21	0.6308	1091.8	1111.2		0.000	1.366	84.648	13.559	0.408	0.009	0.010	0.000	0.000	0.000	0.000				1399.05	
22	0.6322	1093.6	1113.0		0.000	1.384	84.395	13.765	0.435	0.009	0.010	0.000	0.000	0.000	0.000				1399.84	
23	0.6328	1094.6	1114.0		0.000	1.384	84.260	13.913	0.424	0.009	0.010	0.000	0.000	0.000	0.000				1400.38	
24	0.6331	1095.1	1114.4		0.000	1.384	84.227	13.916	0.453	0.010	0.010	0.000	0.000	0.000	0.000				1400.64	
25	0.6345	1096.8	1116.2		0.000	1.415	83.923	14.194	0.448	0.010	0.010	0.000	0.000	0.000	0.000				1401.25	
26	0.6333	1095.2	1114.6		0.000	1.395	84.198	13.921	0.466	0.010	0.011	0.000	0.000	0.000	0.000				1400.59	
27	0.6336	1095.5	1114.9		0.000	1.407	84.129	13.971	0.473	0.010	0.011	0.000	0.000	0.000	0.000				1400.63	
28	0.6319	1092.9	1112.3		0.000	1.398	84.399	13.804	0.381	0.009	0.009	0.000	0.000	0.000	0.000				1399.29	
29	0.6361	1098.2	1117.6		0.000	1.479	83.542	14.562	0.400	0.009	0.009	0.000	0.000	0.000	0.000				1401.29	
30	0.6328	1094.5	1113.9		0.000	1.392	84.221	13.970	0.399	0.009	0.009	0.000	0.000	0.000	0.000				1400.25	
31	0.6333	1094.9	1114.3		0.000	1.413	84.180	13.930	0.456	0.010	0.010	0.000	0.000	0.000	0.000				1400.22	
Avg	0.6323	1094.0	1113.7		0.000	1.359	84.373	13.806	0.443	0.010	0.010	0.000	0.000	0.000	0.000				1400.53	

Zone 33

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	1202160	Specific Gravity:	0.7960
GQ Source Name:	BOWMAN BORDER	BTU Base:	Dry
Effective Date:	1/1/2008 9:00:00 AM	Dry Heat Value:	1173.89
Effective End Date:	1/18/2038 9:14:00 PM	Wet Heat Value:	1153.46
Pressure Base:	14.730	As Deliv. Heat Value:	1173.89
Viscosity:			

1174-

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	55.258		
C2	Ethane	28.463		7.589
C3	Propane	3.921	1.078	1.077
IC4	Iso-Butane	0.072	0.024	0.024
NC4	N-Butane	0.200	0.063	0.063
IC5	Iso-Pentane	0.008	0.003	0.003
NC5	N-Pentane	0.021	0.008	0.008
C6+	Hexanes Plus	0.000	0.000	0.000
CO2	Carbon Dioxide	2.084		
N2	Nitrogen	9.974		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		100.000	1.175	8.763

Sample Date: 12/31/2007 12:00:00 AM
Sample Type:
Sample Tech: composite
Sample Remarks: Zone 3A
Analysis Remarks:

Williston Basin Interstate Pipeline Co. GQ Source Analysis

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

976-

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
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
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	JAN 08	DEC 07	NOV 07	OCT 07	SEPT 07	AUG 07	JULY 07	JUNE 07	MAY 07	APR 07	MAR 07	FEB 07	ZONE
MT/ND	211	Sidney Area	1149	1075	1124	1160	1170	1183	1189	1188	1185	1175	1151	1130	1057	21
ND	24	Williston Area	1180	1181	1192	1195	1194	1190	1193	1186	1186	1179	1150	1138	1174	24
ND	25	Watford City Area	1119	1126	1118	1118	1119	1119	1120	1118	1118	1125	1117	1110	1124	25
ND	261	Williston - Tioga - Minot Line	1152	1136	1142	1147	1158	1152	1164	1168	1173	1159	1159	1144	1127	261
ND	262	Minot Area	1154	1136	1143	1149	1159	1153	1167	1170	1175	1160	1160	1147	1129	262
ND	263	Tioga - Portal	1123	1129	1132	1128	1129	1131	1130	1117	1117	1122	1117	1111	1117	263
ND	271	Bismarck - Cleveland	1122	1059	1063	1105	1158	1153	1166	1169	1174	1159	1125	1080	1056	271
ND	272	Cleveland - Mapleton	1122	1059	1062	1107	1158	1152	1167	1169	1175	1159	1124	1079	1056	272
ND	273	Cleveland - Grafton	1122	1059	1062	1107	1158	1152	1167	1170	1175	1159	1124	1079	1056	273
ND	28	Bismarck	1095	1017	1015	1030	1124	1151	1167	1169	1171	1143	1091	1029	1033	28
ND	31	Dickinson	1024	1016	1014	1023	1023	1017	1006	1033	1033	1038	1027	1028	1032	31
ND/MT	32	Cabin Creek - Dickinson	1019	1014	1012	1021	1020	1013	991	1023	1028	1033	1022	1025	1030	32
ND	33	Killdeer	1109	1114	1111	1118	1113	1109	1106	1104	1101	1103	1102	1107	1114	33
ND	34	Bowman Area	1178	1174	1182	1189	1175	1175	1172	1190	1172	1180	1185	1172	1173	34
ND	35	Baker Field - North Dakota	975	976	976	976	976	976	976	974	974	974	974	974	974	35

THERMAL ZONE VARIANCE DOCUMENTATION		
January 2008		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
211	-49	Receipt from Morgan Creek Area