

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

December 30, 2008

RECEIVED

JAN 02 2009

PUBLIC SERVICE COMMISSION

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

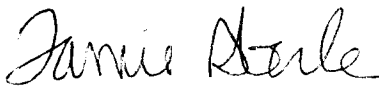
Re: Case No. 11,006 (Therm Billing)
Monthly Report – November 2008

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 December 2008.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of November 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 November.

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

MONTANA-DAKOTA UTILITIES CO.
 Therm Billing Factor
 DEC 2008

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.0894
12	327	BISMARCK	28	.9774
12	343	CARRINGTON	273	1.0894
12	344	CLEVELAND	272	1.0817
12	364	CAVALIER	273	1.1123
12	365	DAWSON	271	1.0817
12	374	FT TOTTEN	273	1.0970
12	375	DEVILS LAKE	273	1.0970
12	379	BARLOW	273	1.0894
12	387	ELDRIDGE	272	1.0894
12	411	GLEN ULLIN	31	.9521
12	417	GRAFTON	273	1.1200
12	439	HANKINSON	600	1.0758
12	449	JAMESTOWN	272	1.0970
12	463	LANGDON	273	1.0894
12	475	LINTON	802	.9726
12	478	LINCOLN	28	.9774
12	494	MEDINA	271	1.0817
12	498	MANDAN	28	.9774
12	524	NEW SALEM	28	.9568
12	532	NEW ROCKFORD	273	1.0894
12	539	PARK RIVER	273	1.1123
12	574	SANBORN	272	1.0970
12	593	STEELE	271	1.0817
12	598	SHEYENNE	273	1.0970
12	610	TAPPEN	271	1.0817
12	625	VALLEY CITY	272	1.1046
12	629	WALHALLA	273	1.1123
12	647	WILTON	262	1.0833
12	717	SPIRITWOOD	272	1.0970
12	718	FAIRMOUNT	600	1.0737
12	732	MSR SITE	273	1.0894
12	733	PAR SITE	273	1.0894
15	303	ALEXANDER	25	1.0635
15	308	ARNEGARD	25	1.0635

MONTANA-DAKOTA UTILITIES CO.
 Therm Billing Factor
 DEC 2008

Attachment A
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Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	318	BEACH	32	.9306
15	319	BELFIELD	32	.9374
15	323	BERTHOLD	262	1.0833
15	330	BOWMAN	34	1.0641
15	337	BURLINGTON	262	1.1067
15	368	DES LACS	262	1.0911
15	369	DICKINSON	31	.9452
15	384	EPPING	264	1.1060
15	407	GLADSTONE	31	.9452
15	413	GOLVA	32	.9170
15	416	GARRISON	262	1.0911
15	429	HEBRON	31	.9521
15	459	KILLDEER	33	1.0956
15	469	LEFOR	31	.9452
15	474	LIGNITE	263	1.0702
15	500	MARMARTH	34	1.0720
15	505	MINOT	262	1.1067
15	510	MOTT	31	.9452
15	512	MAX	262	1.0833
15	522	NEW ENGLAND	31	.9383
15	540	PALERMO	262	1.0833
15	558	RAY	264	1.1060
15	561	REGENT	31	.9452
15	563	RHAME	34	1.0563
15	564	RICHARDTON	31	.9383
15	568	ROSS	261	1.0765
15	572	RUTHVILLE	262	1.1067
15	583	SENTINEL BUTTE	32	.9306
15	588	SOUTH HEART	31	.9383
15	590	SPRINGBROOK	264	1.1060
15	591	STANLEY	261	1.0843
15	605	SURREY	262	1.1067
15	611	TAYLOR	31	.9383
15	616	TIOGA	261	1.0765
15	619	TURTLE LAKE	262	1.0911

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
DEC 2008

Attachment A
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Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	620	TRENTON	24	1.1140
15	624	UNDERWOOD	262	1.0911
15	632	WATFORD CITY	25	1.0635
15	636	WHEELLOCK	264	1.0980
15	637	WHITE EARTH	261	1.0843
15	642	WILLISTON	24	1.1140
15	646	WASHBURN	262	1.0989
15	664	RIVERDALE	262	1.0911
15	691	FAIRVIEW	24	1.1140
15	712	MINOT AFB	262	1.1067
15	743	BAKER FIELD	35	.8935

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

GQ Source Daily Summary

November 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	Crit/therm
1	0.7312	1176.7	1197.5		1.085	3.978	68.679	22.374	3.461	0.140	0.257	0.014	0.012	0.001	0.000	0.000	0.000	0.000	1400.40	
2	0.7306	1175.4	1196.2		1.079	4.004	68.750	22.327	3.422	0.137	0.254	0.014	0.012	0.001	0.000	0.000	0.000	0.000	1399.52	
3	0.7304	1175.0	1195.8		1.082	4.012	68.754	22.336	3.420	0.137	0.251	0.014	0.011	0.001	0.000	0.000	0.000	0.000	1399.13	
4	0.7108	1166.5	1187.1		0.512	3.551	71.135	21.960	2.600	0.083	0.144	0.008	0.007	0.001	0.000	0.000	0.000	0.000	1408.31	
5	0.6961	1162.7	1183.3		0.020	3.150	72.856	21.828	2.057	0.035	0.048	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1418.31	
6	0.6889	1152.3	1172.7		0.021	3.112	73.939	21.137	1.733	0.026	0.029	0.001	0.001	0.001	0.000	0.000	0.000	0.000	1412.87	
7	0.6933	1158.6	1179.2		0.019	3.141	73.314	21.510	1.903	0.042	0.060	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1416.12	
8	0.6873	1149.6	1170.0		0.020	3.124	73.984	21.362	1.455	0.024	0.029	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1411.28	
9	0.6936	1159.8	1180.4		0.024	3.094	73.229	21.665	1.879	0.040	0.062	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1417.23	
10	0.7043	1173.1	1193.9		0.093	3.177	72.173	21.658	2.645	0.091	0.142	0.009	0.010	0.003	0.000	0.000	0.000	0.000	1422.55	
11	0.6956	1162.4	1183.0		0.018	3.131	73.010	21.688	2.013	0.054	0.075	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1418.34	
12	0.7060	1161.2	1181.8		0.448	3.525	71.674	21.843	2.299	0.073	0.124	0.006	0.006	0.001	0.000	0.000	0.000	0.000	1406.68	
13	0.7032	1163.4	1184.0		0.296	3.360	72.136	21.677	2.333	0.071	0.114	0.006	0.006	0.001	0.000	0.000	0.000	0.000	1412.06	
14	0.6988	1161.7	1182.3		0.164	3.242	72.652	21.652	2.131	0.057	0.090	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1414.46	
15	0.6948	1161.8	1182.4		0.017	3.088	73.215	21.519	2.006	0.055	0.085	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1418.47	
16	0.6985	1167.8	1188.5		0.023	3.057	72.729	21.774	2.255	0.059	0.089	0.005	0.006	0.002	0.000	0.000	0.000	0.000	1422.07	
17	0.6931	1158.9	1179.4		0.018	3.112	73.334	21.547	1.871	0.044	0.065	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1416.60	
18	0.6978	1166.7	1187.3		0.015	3.078	72.804	21.742	2.191	0.065	0.091	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1421.34	
19	0.6928	1157.4	1177.9		0.016	3.176	73.241	21.690	1.788	0.038	0.045	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1415.15	
20	0.7006	1164.9	1185.5		0.171	3.216	72.401	21.809	2.236	0.064	0.091	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1416.43	
21	0.6960	1164.2	1184.8		0.015	3.055	72.971	21.796	2.014	0.056	0.081	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1420.24	
22	0.6964	1165.1	1185.7		0.014	3.042	72.876	21.904	2.030	0.053	0.072	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1420.87	
23	0.6993	1168.8	1189.5		0.014	3.096	72.431	22.136	2.173	0.057	0.082	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1422.36	
24	0.6953	1163.1	1183.7		0.016	3.066	72.877	22.053	1.882	0.038	0.061	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1419.49	
25	0.7016	1169.0	1189.7		0.127	3.118	72.346	21.880	2.324	0.072	0.116	0.008	0.007	0.002	0.000	0.000	0.000	0.000	1420.46	
26	0.6961	1164.5	1185.2		0.015	3.050	72.991	21.723	2.078	0.054	0.078	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1420.46	
27	0.6990	1167.7	1188.4		0.016	3.123	72.585	21.896	2.212	0.063	0.090	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1421.40	
28	0.6897	1153.1	1173.5		0.018	3.142	73.610	21.591	1.590	0.021	0.025	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1413.04	
29	0.6929	1158.6	1179.1		0.018	3.109	73.232	21.758	1.806	0.030	0.042	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1416.49	
30	0.6955	1162.2	1182.8		0.018	3.124	73.158	21.432	2.128	0.051	0.080	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1418.33	
AVG	0.7003	1164.0	1184.4		0.180	3.242	72.436	21.776	2.197	0.061	0.096	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1415.35	

Zone 211

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	0602330	Specific Gravity:	0.7289
GQ Source Name:	WILLISTON BORDER	BTU Base:	Dry
Effective Date:	11/10/2008 9:00:00 AM	Dry Heat Value:	1171.18
Effective End Date:	1/18/2038 9:14:07 PM	Wet Heat Value:	1150.80
Pressure Base:	14.730	As Deliv. Heat Value:	1171.18
Viscosity:			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	68.707		
C2	Ethane	20.695	0.000	5.518
C3	Propane	3.588	0.986	0.986
IC4	Iso-Butane	0.162	0.053	0.053
NC4	N-Butane	0.301	0.095	0.095
IC5	Iso-Pentane	0.023	0.008	0.008
NC5	N-Pentane	0.021	0.008	0.008
C6+	Hexanes Plus	0.005	0.002	0.002
CO2	Carbon Dioxide	0.882		
N2	Nitrogen	5.613		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		99.997	1.151	6.669

Sample Date: 10/31/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 24 & 264
Analysis Remarks:

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	0602230	Specific Gravity:	0.7292
GQ Source Name:	WATFORD CITY BORDER	BTU Base:	Dry
Effective Date:	11/10/2008 9:00:00 AM	Dry Heat Value:	1125.50
Effective End Date:	1/18/2038 9:14:07 PM	Wet Heat Value:	1105.91
Pressure Base:	14.730	As Deliv. Heat Value:	1125.50
Viscosity:			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	68.365		
C2	Ethane	17.986		4.796
C3	Propane	3.673	1.009	1.009
IC4	Iso-Butane	0.193	0.063	0.063
NC4	N-Butane	0.362	0.114	0.114
IC5	Iso-Pentane	0.030	0.011	0.011
NC5	N-Pentane	0.030	0.011	0.011
C6+	Hexanes Plus	0.008	0.004	0.003
CO2	Carbon Dioxide	0.732		
N2	Nitrogen	8.619		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		99.998	1.211	6.007

Sample Date: 10/31/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 15

Analysis Remarks:

GQ Source Daily Summary

November 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	Critherm
1	0.6687	1106.9	1126.5		0.303	3.551	78.112	16.519	1.348	0.055	0.091	0.007	0.006	0.008					1377.59	
2	0.6645	1107.4	1127.1		0.255	3.195	78.783	16.434	1.190	0.047	0.075	0.006	0.006	0.010					1382.62	
3	0.6717	1114.7	1134.5		0.332	3.312	77.733	16.969	1.466	0.063	0.101	0.008	0.008	0.009					1384.20	
4	0.6878	1128.1	1148.0		0.517	3.733	75.079	18.525	1.917	0.075	0.132	0.008	0.007	0.007					1384.26	
5	0.6890	1131.9	1152.0		0.520	3.601	74.945	18.724	1.970	0.081	0.139	0.009	0.008	0.005					1387.85	
6	0.6852	1130.4	1150.4		0.445	3.450	75.534	18.486	1.862	0.074	0.126	0.009	0.009	0.006					1389.78	
7	0.6861	1131.1	1151.2		0.457	3.471	75.457	18.440	1.939	0.079	0.133	0.009	0.009	0.006					1389.80	
8	0.6829	1128.3	1148.2		0.406	3.422	75.900	18.251	1.802	0.074	0.123	0.009	0.008	0.006					1389.52	
9	0.6858	1130.8	1150.9		0.481	3.427	75.519	18.418	1.919	0.080	0.134	0.009	0.008	0.005					1389.72	
10	0.6851	1131.2	1151.3		0.454	3.375	75.587	18.483	1.874	0.077	0.128	0.009	0.008	0.005					1389.30	
11	0.6848	1129.7	1149.7		0.437	3.470	75.610	18.380	1.887	0.073	0.121	0.008	0.008	0.006					1388.11	
12	0.6802	1124.8	1144.7		0.401	3.387	76.242	18.126	1.653	0.064	0.106	0.007	0.006	0.007					1388.03	
13	0.6817	1126.2	1146.1		0.437	3.395	76.112	18.096	1.744	0.072	0.120	0.009	0.009	0.007					1388.11	
14	0.6840	1129.1	1149.1		0.451	3.414	75.748	18.321	1.847	0.074	0.123	0.008	0.008	0.006					1389.37	
15	0.6842	1127.5	1147.5		0.456	3.511	75.766	18.157	1.882	0.076	0.128	0.008	0.008	0.007					1387.33	
16	0.6862	1129.3	1149.3		0.499	3.525	75.499	18.283	1.952	0.081	0.137	0.009	0.009	0.006					1387.51	
17	0.6926	1137.2	1157.3		0.555	3.567	74.470	18.987	2.164	0.086	0.147	0.009	0.008	0.007					1390.62	
18	0.6931	1140.8	1161.0		0.503	3.470	74.402	19.138	2.230	0.087	0.147	0.009	0.008	0.006					1394.56	
19	0.6901	1135.6	1155.8		0.501	3.506	74.826	18.843	2.083	0.081	0.137	0.009	0.008	0.005					1391.27	
20	0.6830	1126.5	1146.5		0.436	3.497	75.785	18.340	1.745	0.066	0.113	0.007	0.006	0.005					1387.24	
21	0.6836	1128.2	1148.2		0.453	3.422	75.916	18.081	1.895	0.080	0.132	0.009	0.008	0.006					1388.73	
22	0.6811	1125.0	1144.9		0.430	3.426	76.223	17.942	1.766	0.073	0.121	0.008	0.007	0.006					1387.22	
23	0.6810	1124.8	1144.7		0.442	3.409	76.295	17.843	1.793	0.074	0.123	0.008	0.007	0.006					1387.09	
24	0.6832	1126.2	1146.2		0.486	3.460	75.957	18.026	1.843	0.076	0.129	0.008	0.007	0.007					1386.64	
25	0.6847	1127.9	1147.9		0.501	3.475	75.728	18.169	1.891	0.079	0.134	0.009	0.008	0.007					1387.18	
26	0.6858	1130.2	1150.2		0.486	3.455	75.576	18.284	1.961	0.081	0.137	0.008	0.008	0.006					1388.96	
27	0.6853	1130.0	1150.0		0.465	3.460	75.657	18.211	1.958	0.083	0.141	0.009	0.008	0.006					1389.12	
28	0.6866	1130.6	1150.6		0.479	3.523	75.425	18.330	2.001	0.081	0.139	0.009	0.008	0.005					1388.59	
29	0.6862	1130.1	1150.1		0.455	3.546	75.428	18.382	1.962	0.077	0.131	0.008	0.007	0.006					1388.44	
30	0.6865	1130.1	1150.1		0.454	3.582	75.359	18.406	1.970	0.077	0.131	0.008	0.007	0.005					1388.05	
Avg	0.6837	1128.0	1147.7		0.450	3.468	75.822	18.186	1.850	0.075	0.126	0.008	0.008	0.006					1387.99	

Zone 261

GQ Source Daily Summary

November 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	Gr/therm
1	0.6671	1100.5	1120.0		0.190	3.960	78.945	14.848	1.770	0.100	0.156	0.011	0.010	0.011	0.000	0.000	0.000	0.000	0.000	1371.28
2	0.6815	1112.2	1131.9		0.403	4.281	76.227	16.943	1.874	0.083	0.159	0.010	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1371.08
3	0.6714	1104.4	1124.0		0.302	3.954	77.667	16.421	1.475	0.058	0.098	0.005	0.005	0.014	0.000	0.000	0.000	0.000	0.000	1371.76
4	0.6750	1111.5	1131.2		0.344	3.803	77.175	16.861	1.614	0.066	0.112	0.006	0.006	0.014	0.000	0.000	0.000	0.000	0.000	1376.80
5	0.6932	1127.9	1147.9		0.537	4.216	74.365	18.376	2.209	0.096	0.173	0.009	0.008	0.010	0.000	0.000	0.000	0.000	0.000	1378.68
6	0.6934	1131.7	1151.8		0.504	4.057	74.269	18.690	2.191	0.094	0.169	0.010	0.009	0.007	0.000	0.000	0.000	0.000	0.000	1383.11
7	0.6917	1130.0	1150.0		0.480	4.034	74.626	18.366	2.196	0.098	0.171	0.011	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1382.74
8	0.6940	1133.7	1153.8		0.446	4.075	74.359	18.450	2.314	0.110	0.206	0.016	0.016	0.008	0.000	0.000	0.000	0.000	0.000	1384.98
9	0.6880	1126.6	1146.5		0.480	3.890	75.146	18.214	2.017	0.084	0.143	0.008	0.007	0.011	0.000	0.000	0.000	0.000	0.000	1382.30
10	0.6892	1128.2	1148.2		0.493	3.884	74.943	18.376	2.053	0.083	0.143	0.007	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1383.12
11	0.6889	1129.3	1149.3		0.472	3.824	74.942	18.497	2.024	0.081	0.137	0.007	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1384.74
12	0.6841	1120.7	1140.5		0.407	3.997	75.534	18.065	1.792	0.069	0.116	0.005	0.004	0.012	0.000	0.000	0.000	0.000	0.000	1379.00
13	0.6889	1125.2	1145.2		0.503	4.026	74.988	18.172	2.058	0.085	0.145	0.008	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1379.74
14	0.6880	1122.4	1142.2		0.477	4.153	75.037	18.112	1.980	0.081	0.136	0.007	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1377.14
15	0.6895	1126.1	1146.1		0.494	4.043	74.885	18.238	2.084	0.085	0.146	0.008	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1380.20
16	0.6904	1125.8	1145.8		0.495	4.143	74.792	18.152	2.145	0.091	0.158	0.009	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1378.93
17	0.6930	1127.4	1147.4		0.535	4.227	74.368	18.373	2.227	0.090	0.155	0.008	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1378.32
18	0.7092	1147.7	1168.0		0.628	4.373	71.983	19.744	2.913	0.120	0.210	0.010	0.008	0.010	0.000	0.000	0.000	0.000	0.000	1386.95
19	0.6983	1137.2	1157.3		0.462	4.240	73.582	18.884	2.522	0.104	0.179	0.010	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1384.99
20	0.7032	1135.4	1155.5		0.548	4.679	72.686	19.154	2.628	0.105	0.178	0.008	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1377.99
21	0.6975	1136.0	1156.1		0.486	4.201	73.728	18.802	2.470	0.106	0.182	0.010	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1384.33
22	0.6949	1129.6	1149.6		0.485	4.353	74.128	18.326	2.412	0.101	0.171	0.008	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1379.04
23	0.6952	1131.0	1151.1		0.456	4.332	74.131	18.324	2.438	0.108	0.186	0.009	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1380.55
24	0.6960	1129.1	1149.1		0.522	4.427	73.941	18.399	2.417	0.100	0.169	0.008	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1377.40
25	0.6948	1127.8	1147.8		0.527	4.385	74.065	18.430	2.310	0.096	0.162	0.008	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1377.02
26	0.6963	1130.7	1150.7		0.565	4.296	73.790	18.761	2.316	0.093	0.157	0.007	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1379.01
27	0.6933	1127.8	1147.8		0.503	4.280	74.289	18.396	2.265	0.092	0.153	0.007	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1378.51
28	0.6945	1129.3	1149.3		0.511	4.292	74.067	18.581	2.285	0.091	0.153	0.007	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1379.09
29	0.6937	1127.6	1147.6		0.500	4.332	74.084	18.640	2.202	0.083	0.140	0.006	0.004	0.008	0.000	0.000	0.000	0.000	0.000	1377.91
30	0.6946	1129.3	1149.3		0.494	4.327	73.993	18.651	2.279	0.088	0.150	0.007	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1379.04
Avg	0.6910	1127.0	1146.7		0.475	4.169	74.691	18.208	2.183	0.091	0.157	0.008	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1379.52

Zone 26a

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	2501030	Specific Gravity:	0.6599
GQ Source Name:	LIGNITE PLANT	BTU Base:	Dry
Effective Date:	11/10/2008 9:00:00 AM	Dry Heat Value:	1125.13
Effective End Date:	1/18/2038 9:14:07 PM	Wet Heat Value:	1105.55
Pressure Base:	14.730	As Deliv. Heat Value:	1125.13
Viscosity:			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	79.200		
C2	Ethane	16.485		4.396
C3	Propane	1.097	0.301	0.301
IC4	Iso-Butane	0.000	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	0.036	0.016	0.015
CO2	Carbon Dioxide	0.106		
N2	Nitrogen	3.067		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		99.991	0.318	4.712

Sample Date: 10/31/2008 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks: Zone 263

Analysis Remarks:

GQ Source Daily Summary

November 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	Crit'herm
1	0.6742	1092.4	1111.7		0.211	5.089	77.122	15.709	1.652	0.069	0.110	0.007	0.007	0.025	0.000	0.000	0.000	0.000	0.000	1353.94
2	0.6737	1090.2	1109.5		0.214	5.177	77.070	15.776	1.568	0.064	0.099	0.006	0.006	0.021	0.000	0.000	0.000	0.000	0.000	1351.67
3	0.6732	1099.6	1119.1		0.337	4.364	77.465	16.073	1.533	0.064	0.119	0.010	0.010	0.025	0.000	0.000	0.000	0.000	0.000	1363.94
4	0.6759	1106.2	1125.8		0.375	4.155	77.060	16.563	1.622	0.068	0.116	0.008	0.008	0.024	0.000	0.000	0.000	0.000	0.000	1369.40
5	0.6939	1122.1	1142.0		0.562	4.588	74.253	18.080	2.211	0.094	0.173	0.011	0.010	0.020	0.000	0.000	0.000	0.000	0.000	1370.97
6	0.6939	1125.2	1145.1		0.543	4.428	74.228	18.316	2.179	0.094	0.171	0.011	0.010	0.019	0.000	0.000	0.000	0.000	0.000	1374.76
7	0.6907	1123.7	1143.6		0.488	4.315	74.756	18.034	2.103	0.093	0.168	0.012	0.012	0.021	0.000	0.000	0.000	0.000	0.000	1375.93
8	0.6937	1127.2	1147.2		0.500	4.353	74.475	18.024	2.283	0.107	0.202	0.016	0.016	0.023	0.000	0.000	0.000	0.000	0.000	1377.36
9	0.6898	1123.0	1142.9		0.451	4.323	74.955	17.844	2.105	0.096	0.177	0.013	0.013	0.023	0.000	0.000	0.000	0.000	0.000	1376.05
10	0.6881	1121.9	1141.7		0.511	4.140	75.158	17.923	2.004	0.083	0.146	0.009	0.008	0.018	0.000	0.000	0.000	0.000	0.000	1376.40
11	0.6878	1122.4	1142.3		0.496	4.103	75.165	18.007	1.974	0.081	0.140	0.009	0.008	0.018	0.000	0.000	0.000	0.000	0.000	1377.33
12	0.6873	1119.1	1139.0		0.481	4.280	75.214	17.795	1.977	0.080	0.136	0.009	0.008	0.019	0.000	0.000	0.000	0.000	0.000	1373.81
13	0.6864	1116.4	1136.2		0.470	4.376	75.253	17.780	1.882	0.074	0.128	0.008	0.007	0.021	0.000	0.000	0.000	0.000	0.000	1371.43
14	0.6860	1117.4	1137.2		0.486	4.250	75.413	17.712	1.883	0.079	0.136	0.010	0.009	0.021	0.000	0.000	0.000	0.000	0.000	1373.08
15	0.6883	1117.5	1137.3		0.501	4.444	75.013	17.809	1.977	0.080	0.138	0.009	0.008	0.020	0.000	0.000	0.000	0.000	0.000	1370.79
16	0.6890	1120.6	1140.5		0.502	4.310	75.077	17.737	2.089	0.089	0.157	0.010	0.009	0.020	0.000	0.000	0.000	0.000	0.000	1374.01
17	0.6905	1119.0	1138.8		0.537	4.503	74.795	17.765	2.113	0.089	0.157	0.011	0.010	0.020	0.000	0.000	0.000	0.000	0.000	1370.43
18	0.6969	1127.5	1147.5		0.594	4.492	73.899	18.300	2.394	0.100	0.177	0.012	0.010	0.020	0.000	0.000	0.000	0.000	0.000	1374.61
19	0.7064	1138.2	1158.3		0.583	4.755	72.385	19.111	2.804	0.116	0.205	0.012	0.011	0.017	0.000	0.000	0.000	0.000	0.000	1378.17
20	0.6969	1129.0	1149.0		0.488	4.562	73.814	18.382	2.439	0.101	0.175	0.011	0.010	0.019	0.000	0.000	0.000	0.000	0.000	1376.44
21	0.6992	1128.7	1148.7		0.535	4.726	73.339	18.653	2.441	0.098	0.172	0.010	0.008	0.017	0.000	0.000	0.000	0.000	0.000	1373.80
22	0.6961	1128.0	1148.0		0.506	4.520	74.047	18.150	2.444	0.107	0.186	0.012	0.011	0.018	0.000	0.000	0.000	0.000	0.000	1375.98
23	0.6941	1122.9	1142.8		0.501	4.659	74.274	17.904	2.350	0.100	0.173	0.010	0.009	0.018	0.000	0.000	0.000	0.000	0.000	1371.62
24	0.6935	1123.0	1142.9		0.506	4.581	74.563	17.598	2.406	0.109	0.188	0.014	0.013	0.020	0.000	0.000	0.000	0.000	0.000	1372.41
25	0.6951	1122.1	1142.0		0.545	4.734	74.100	17.956	2.359	0.099	0.169	0.010	0.008	0.020	0.000	0.000	0.000	0.000	0.000	1369.70
26	0.6949	1123.5	1143.4		0.572	4.581	74.022	18.325	2.216	0.091	0.156	0.009	0.008	0.020	0.000	0.000	0.000	0.000	0.000	1371.71
27	0.6924	1121.6	1141.5		0.526	4.537	74.453	18.006	2.201	0.089	0.152	0.009	0.008	0.019	0.000	0.000	0.000	0.000	0.000	1371.79
28	0.6931	1121.0	1140.8		0.538	4.624	74.395	17.895	2.257	0.094	0.159	0.010	0.009	0.018	0.000	0.000	0.000	0.000	0.000	1370.30
29	0.6939	1122.9	1142.8		0.533	4.586	74.150	18.243	2.216	0.087	0.150	0.009	0.008	0.018	0.000	0.000	0.000	0.000	0.000	1371.94
30	0.6934	1122.3	1142.2		0.514	4.611	74.210	18.178	2.219	0.086	0.148	0.009	0.008	0.017	0.000	0.000	0.000	0.000	0.000	1371.61
AVG	0.6903	1120.0	1139.7		0.487	4.506	74.804	17.788	2.130	0.089	0.156	0.010	0.009	0.020	0.000	0.000	0.000	0.000	0.000	1371.71

L Incorrect BTH (Oct & Nov)

This heating value is wrong but everything has been sent across to MDU. We (Acot) - will make adjustments for October & November (PPA's) in December. Mjel

Zone 271

GQ Source Daily Summary

November 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	Crit'herm
1	0.6639	1084.8	1104.0		0.307	4.429	79.456	13.896	1.682	0.075	0.122	0.009	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1354.99
2	0.6564	1081.2	1100.4		0.242	4.041	80.671	13.025	1.559	0.090	0.137	0.011	0.011	0.264	0.000	0.000	0.000	0.000	0.000	1358.24
3	0.6710	1095.9	1115.3		0.434	4.230	78.184	15.208	1.696	0.077	0.139	0.010	0.010	0.011	0.000	0.000	0.000	0.000	0.000	1361.57
4	0.6704	1105.4	1125.0		0.308	3.787	77.890	16.366	1.464	0.059	0.099	0.007	0.007	0.014	0.000	0.000	0.000	0.000	0.000	1373.95
5	0.6912	1123.5	1143.4		0.533	4.299	74.578	18.219	2.101	0.086	0.156	0.009	0.008	0.011	0.000	0.000	0.000	0.000	0.000	1375.27
6	0.6931	1127.0	1146.9		0.550	4.237	74.391	18.309	2.212	0.097	0.174	0.012	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1377.66
7	0.6807	1111.8	1131.5		0.514	4.057	76.575	16.642	1.946	0.086	0.149	0.011	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1371.30
8	0.6713	1097.1	1116.5		0.513	4.067	78.322	15.047	1.799	0.083	0.139	0.011	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1362.66
9	0.6804	1111.5	1131.1		0.475	4.103	76.863	16.169	2.052	0.101	0.188	0.017	0.017	0.014	0.000	0.000	0.000	0.000	0.000	1371.27
10	0.6757	1106.2	1125.8		0.504	3.939	77.395	16.133	1.797	0.077	0.129	0.009	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1369.52
11	0.6844	1119.8	1139.6		0.504	3.928	75.801	17.562	1.962	0.080	0.137	0.009	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1377.51
12	0.6882	1127.2	1147.1		0.481	3.866	75.071	18.328	2.011	0.081	0.136	0.009	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1382.83
13	0.6832	1118.5	1138.3		0.423	4.019	75.689	17.894	1.767	0.068	0.115	0.007	0.007	0.011	0.000	0.000	0.000	0.000	0.000	1377.16
14	0.6806	1112.3	1132.0		0.524	3.995	76.525	16.816	1.894	0.081	0.135	0.010	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1372.19
15	0.6792	1108.4	1128.0		0.509	4.130	76.665	16.639	1.827	0.077	0.126	0.009	0.008	0.010	0.000	0.000	0.000	0.000	0.000	1368.69
16	0.6825	1114.7	1134.4		0.523	4.033	76.206	17.023	1.966	0.083	0.139	0.009	0.008	0.010	0.000	0.000	0.000	0.000	0.000	1373.11
17	0.6875	1120.1	1140.0		0.520	4.175	75.329	17.620	2.082	0.089	0.154	0.010	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1374.82
18	0.6779	1104.5	1124.1		0.588	4.121	77.177	15.920	1.945	0.083	0.137	0.010	0.008	0.011	0.000	0.000	0.000	0.000	0.000	1365.21
19	0.6914	1121.5	1141.4		0.657	4.246	75.194	17.055	2.524	0.109	0.185	0.012	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1372.61
20	0.6716	1096.3	1115.8		0.562	4.059	78.533	14.599	1.980	0.091	0.145	0.012	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1361.46
21	0.6666	1083.6	1102.7		0.650	4.239	79.483	13.488	1.890	0.088	0.134	0.011	0.008	0.010	0.000	0.000	0.000	0.000	0.000	1350.62
22	0.6638	1087.8	1107.1		0.574	3.836	79.911	13.646	1.803	0.077	0.121	0.009	0.008	0.015	0.000	0.000	0.000	0.000	0.000	1358.83
23	0.6662	1086.8	1106.0		0.576	4.117	79.476	13.730	1.844	0.089	0.136	0.012	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1355.03
24	0.6663	1088.7	1108.0		0.542	4.059	79.492	13.776	1.857	0.094	0.147	0.012	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1357.34
25	0.6870	1115.9	1135.7		0.553	4.334	75.601	16.996	2.232	0.096	0.158	0.010	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1370.16
26	0.6894	1118.7	1138.5		0.559	4.382	75.044	17.556	2.187	0.092	0.153	0.009	0.008	0.011	0.000	0.000	0.000	0.000	0.000	1371.16
27	0.6929	1124.8	1144.7		0.569	4.326	74.394	18.197	2.245	0.091	0.152	0.009	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1375.11
28	0.6929	1126.0	1145.9		0.511	4.333	74.344	18.305	2.238	0.091	0.152	0.009	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1376.71
29	0.6935	1126.9	1146.9		0.526	4.312	74.245	18.388	2.263	0.090	0.151	0.009	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1377.22
30	0.6930	1125.9	1145.8		0.506	4.365	74.189	18.514	2.181	0.083	0.140	0.008	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1376.41
AVG	0.6798	1109.0	1128.7		0.508	4.135	76.756	16.369	1.967	0.085	0.143	0.010	0.009	0.019	0.000	0.000	0.000	0.000	0.000	1369.02

Zone 272

GQ Source Daily Summary

November 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	Crittherm
1	0.6639	1084.6	1103.8		0.308	4.444	79.440	13.889	1.685	0.076	0.125	0.009	0.008	0.014	0.000				1354.59	
2	0.6559	1080.9	1100.0		0.242	4.007	80.982	12.993	1.518	0.088	0.134	0.011	0.011	0.014	0.000				1358.37	
3	0.6704	1096.7	1116.1		0.464	4.049	78.450	14.989	1.791	0.084	0.143	0.010	0.009	0.010	0.000				1363.16	
4	0.6707	1105.8	1125.4		0.303	3.800	77.823	16.416	1.473	0.059	0.099	0.007	0.007	0.014	0.000				1374.13	
5	0.6912	1123.5	1143.4		0.533	4.296	74.585	18.219	2.098	0.086	0.156	0.009	0.008	0.011	0.000				1375.32	
6	0.6931	1127.0	1146.9		0.549	4.242	74.384	18.311	2.212	0.097	0.174	0.012	0.010	0.009	0.000				1377.62	
7	0.6808	1111.7	1131.4		0.514	4.060	76.579	16.634	1.946	0.086	0.149	0.011	0.011	0.010	0.000				1371.23	
8	0.6713	1097.1	1116.5		0.512	4.064	78.334	15.041	1.797	0.083	0.138	0.011	0.010	0.009	0.000				1362.73	
9	0.6805	1111.6	1131.3		0.474	4.100	76.849	16.182	2.056	0.102	0.190	0.016	0.016	0.015	0.000				1371.43	
10	0.6758	1106.3	1125.9		0.504	3.940	77.378	16.145	1.801	0.077	0.129	0.009	0.008	0.009	0.000				1369.58	
11	0.6846	1120.1	1140.0		0.505	3.927	75.764	17.592	1.969	0.081	0.137	0.009	0.008	0.009	0.000				1377.72	
12	0.6884	1127.4	1147.4		0.483	3.867	75.033	18.357	2.016	0.081	0.136	0.009	0.008	0.009	0.000				1382.91	
13	0.6836	1119.1	1138.9		0.427	4.017	75.615	17.954	1.779	0.068	0.116	0.007	0.007	0.011	0.000				1377.44	
14	0.6807	1112.5	1132.2		0.522	3.995	76.521	16.821	1.896	0.081	0.135	0.010	0.009	0.011	0.000				1372.31	
15	0.6793	1108.5	1128.1		0.509	4.128	76.662	16.641	1.829	0.077	0.126	0.009	0.009	0.011	0.000				1368.77	
16	0.6828	1115.2	1134.9		0.520	4.033	76.153	17.077	1.967	0.083	0.140	0.010	0.008	0.010	0.000				1373.46	
17	0.6854	1115.5	1135.2		0.560	4.201	75.776	17.104	2.089	0.089	0.155	0.010	0.010	0.011	0.000				1371.16	
18	0.6783	1105.1	1124.7		0.588	4.116	77.116	15.978	1.951	0.083	0.138	0.010	0.008	0.011	0.000				1365.58	
19	0.6918	1122.1	1142.0		0.657	4.240	75.119	17.121	2.535	0.110	0.186	0.012	0.010	0.009	0.000				1373.00	
20	0.6717	1096.6	1116.0		0.563	4.054	78.475	14.654	1.988	0.091	0.145	0.012	0.010	0.010	0.000				1361.63	
21	0.6667	1083.9	1103.1		0.649	4.225	79.471	13.514	1.891	0.088	0.134	0.011	0.008	0.010	0.000				1350.99	
22	0.6641	1088.3	1107.5		0.575	3.828	79.880	13.676	1.808	0.078	0.122	0.010	0.008	0.015	0.000				1359.06	
23	0.6663	1087.0	1106.3		0.575	4.113	79.468	13.741	1.846	0.089	0.137	0.012	0.010	0.009	0.000				1355.23	
24	0.6664	1088.8	1108.1		0.541	4.058	79.484	13.781	1.860	0.094	0.147	0.012	0.010	0.010	0.000				1357.44	
25	0.6870	1115.9	1135.6		0.556	4.325	75.629	16.975	2.231	0.096	0.158	0.010	0.009	0.010	0.000				1370.11	
26	0.6892	1118.5	1138.3		0.559	4.374	75.084	17.528	2.183	0.092	0.153	0.009	0.008	0.011	0.000				1371.15	
27	0.6929	1124.8	1144.7		0.570	4.324	74.389	18.205	2.245	0.091	0.152	0.009	0.008	0.009	0.000				1375.15	
28	0.6930	1126.1	1146.0		0.512	4.335	74.330	18.312	2.241	0.091	0.153	0.009	0.008	0.009	0.000				1376.72	
29	0.6936	1127.1	1147.0		0.527	4.312	74.236	18.396	2.264	0.090	0.151	0.009	0.008	0.009	0.000				1377.31	
30	0.6932	1126.2	1146.1		0.506	4.363	74.162	18.536	2.187	0.083	0.140	0.008	0.007	0.008	0.000				1376.61	
AVG	0.6798	1109.0	1128.8		0.510	4.128	76.772	16.359	1.972	0.086	0.143	0.010	0.009	0.011	0.000				1369.06	

Zone 273

GQ Source Daily Summary

November 2008

Number: 041

Pressure Base: 14.730

Name: BISMARCK PLANT DICKINSON PLANT

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	Crittherm	
1	0.6218	1021.9	1040.0		0.605	3.850	87.722	6.603	1.043	0.064	0.084	0.012	0.008	0.009	0.000	0.000	0.000	0.000	1318.89		
2	0.6229	1023.4	1041.5		0.620	3.835	87.612	6.634	1.102	0.069	0.093	0.014	0.010	0.010	0.000	0.000	0.000	0.000	1319.72		
3	0.6569	1081.3	1100.5		0.374	3.882	80.546	13.741	1.285	0.053	0.087	0.008	0.007	0.017	0.000	0.000	0.000	0.000	1357.59		
4	0.6246	1026.5	1044.7		0.531	3.952	86.858	7.579	0.941	0.047	0.067	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1321.64		
5	0.6062	995.9	1013.5		0.649	3.899	90.370	4.364	0.613	0.040	0.043	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1301.81		
6	0.5984	986.2	1003.7		0.584	3.860	91.750	3.235	0.471	0.040	0.036	0.009	0.006	0.010	0.000	0.000	0.000	0.000	1297.47		
7	0.5959	980.7	998.1		0.583	3.966	92.203	2.722	0.420	0.042	0.039	0.009	0.006	0.010	0.000	0.000	0.000	0.000	1292.86		
8	0.5982	982.1	999.5		0.624	4.065	92.066	2.713	0.429	0.040	0.039	0.009	0.006	0.010	0.000	0.000	0.000	0.000	1290.15		
9	0.5980	981.6	999.0		0.593	4.078	91.728	3.068	0.440	0.036	0.036	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1292.27		
10	0.5962	981.0	998.3		0.595	4.087	91.758	3.030	0.436	0.036	0.037	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1291.86		
11	0.5959	983.1	1000.5		0.726	3.760	92.330	2.652	0.419	0.044	0.041	0.010	0.007	0.011	0.000	0.000	0.000	0.000	1292.90		
12	0.5959	983.1	1000.5		0.752	3.561	92.521	2.600	0.433	0.052	0.046	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1296.02		
13	0.6011	995.0	1012.6		0.716	3.371	91.577	3.663	0.531	0.056	0.050	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1306.16		
14	0.5992	989.8	1007.3		0.758	3.453	91.953	3.189	0.504	0.055	0.051	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1301.25		
15	0.6000	988.9	1006.4		0.797	3.521	91.802	3.249	0.496	0.052	0.048	0.012	0.008	0.015	0.000	0.000	0.000	0.000	1299.23		
16	0.6017	993.0	1010.6		0.797	3.430	91.536	3.545	0.549	0.055	0.052	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1302.82		
17	0.6015	992.2	1009.8		0.839	3.424	91.997	3.091	0.495	0.054	0.049	0.013	0.008	0.016	0.000	0.000	0.000	0.000	1302.02		
18	0.5994	988.2	1005.7		0.820	3.463	92.413	2.708	0.457	0.053	0.048	0.013	0.008	0.016	0.000	0.000	0.000	0.000	1299.07		
19	0.5970	984.6	1002.1		0.806	3.481	92.017	3.064	0.492	0.054	0.050	0.013	0.008	0.016	0.000	0.000	0.000	0.000	1296.92		
20	0.5990	987.8	1005.3		0.799	3.336	91.888	3.297	0.531	0.057	0.054	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1298.90		
21	0.6000	991.9	1009.5		0.785	3.338	91.799	3.379	0.543	0.061	0.056	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1303.20		
22	0.6006	993.0	1010.6		0.762	3.432	91.694	3.378	0.557	0.066	0.062	0.017	0.011	0.020	0.000	0.000	0.000	0.000	1304.11		
23	0.6012	993.1	1010.6		0.734	3.417	91.347	3.784	0.560	0.059	0.056	0.015	0.010	0.020	0.000	0.000	0.000	0.000	1303.43		
24	0.6026	996.2	1013.8		0.745	3.387	91.294	3.842	0.575	0.060	0.056	0.015	0.009	0.018	0.000	0.000	0.000	0.000	1306.00		
25	0.6030	997.0	1014.6		0.800	3.355	91.335	3.816	0.544	0.057	0.053	0.014	0.009	0.017	0.000	0.000	0.000	0.000	1306.64		
26	0.6028	995.9	1013.5		0.798	3.405	91.870	3.257	0.517	0.058	0.053	0.015	0.009	0.017	0.000	0.000	0.000	0.000	1305.40		
27	0.6001	990.9	1008.4		0.784	3.405	91.742	3.373	0.537	0.060	0.057	0.015	0.009	0.017	0.000	0.000	0.000	0.000	1301.77		
28	0.6008	992.3	1009.9		0.791	3.398	91.635	3.482	0.543	0.058	0.054	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1302.94		
29	0.6013	993.0	1010.6		0.831	3.415	91.912	3.167	0.521	0.059	0.055	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1303.31		
30	0.6000	989.8	1007.3		0.714	3.609	90.963	3.989	0.594	0.053	0.054	0.012	0.008	0.014	0.000	0.000	0.000	0.000	1300.45		
AV9	0.6041	996.0	1013.5																	1303.89	

Zone 28

GQ Source Daily Summary

November 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	Crit'herm
1	0.6073	1002.3	1020.0		0.528	3.799	90.073	4.814	0.680	0.042	0.046	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	1308.88
2	0.6156	1012.2	1030.1		0.561	3.924	88.580	5.965	0.854	0.043	0.058	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	1312.92
3	0.6156	1010.7	1028.6		0.623	3.919	88.629	5.866	0.849	0.043	0.055	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	1310.99
4	0.6046	993.4	1011.0		0.626	3.937	90.561	4.206	0.583	0.035	0.037	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	1300.21
5	0.5998	988.2	1005.7		0.571	3.880	91.413	3.564	0.492	0.033	0.030	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	1298.62
6	0.5962	983.2	1000.6		0.583	3.835	92.199	2.815	0.439	0.078	0.035	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	1295.84
7	0.5962	979.6	997.0		0.617	3.994	92.149	2.714	0.434	0.038	0.036	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	1291.23
8	0.5967	980.2	997.6		0.583	4.058	91.985	2.852	0.438	0.034	0.033	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	1291.46
9	0.5986	983.3	1000.7		0.595	4.031	91.625	3.210	0.457	0.033	0.032	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	1293.46
10	0.5965	980.5	997.8		0.659	3.908	92.117	2.806	0.423	0.036	0.034	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	1292.00
11	0.6003	994.4	998.8		0.746	3.593	92.584	2.536	0.430	0.048	0.041	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	1294.65
12	0.6003	994.3	1011.9		0.707	3.357	91.643	3.640	0.532	0.053	0.046	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	1305.94
13	0.5997	992.0	1009.6		0.755	3.361	91.849	3.357	0.549	0.056	0.051	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	1303.69
14	0.5988	988.1	1005.6		0.774	3.491	91.926	3.211	0.487	0.048	0.043	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	1299.47
15	0.5990	987.9	1005.4		0.810	3.464	91.957	3.148	0.504	0.051	0.046	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	1299.03
16	0.6019	992.6	1010.2		0.848	3.391	91.505	3.561	0.566	0.055	0.052	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	1302.06
17	0.5992	988.4	1005.9		0.831	3.418	91.965	3.160	0.504	0.053	0.047	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	1299.48
18	0.5975	985.9	1003.3		0.829	3.415	92.279	2.881	0.479	0.051	0.045	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	1298.01
19	0.5974	984.6	1002.0		0.840	3.466	92.295	2.809	0.470	0.051	0.046	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	1296.45
20	0.6004	991.0	1008.5		0.833	3.370	91.753	3.390	0.531	0.052	0.048	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	1301.59
21	0.5988	990.4	1008.0		0.795	3.316	92.050	3.187	0.522	0.056	0.050	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	1302.52
22	0.5991	990.0	1007.5		0.772	3.396	91.997	3.166	0.532	0.059	0.054	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1301.74
23	0.6024	996.4	1014.1		0.730	3.380	91.385	3.757	0.594	0.065	0.060	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.000	1306.58
24	0.6022	995.3	1013.0		0.760	3.381	91.362	3.812	0.556	0.055	0.050	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1305.39
25	0.6021	995.1	1012.7		0.792	3.341	91.419	3.764	0.555	0.055	0.050	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1305.13
26	0.5999	991.0	1008.6		0.805	3.368	91.837	3.332	0.529	0.055	0.051	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	1302.11
27	0.6003	990.7	1008.2		0.831	3.379	91.798	3.331	0.530	0.056	0.051	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1301.32
28	0.6014	994.0	1011.6		0.776	3.366	91.547	3.622	0.558	0.056	0.052	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1304.48
29	0.5996	989.5	1007.1		0.835	3.378	91.936	3.193	0.527	0.056	0.052	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1300.57
30	0.5996	988.7	1006.2		0.850	3.409	91.936	3.155	0.517	0.056	0.052	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	1299.44
Avg	0.6007	991.0	1008.2		0.729	3.577	91.545	3.494	0.537	0.050	0.046	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	1300.84

Zone 31

GQ Source Daily Summary

November 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	Crit'herm
1	0.6092	1003.2	1021.0		0.546	3.901	89.753	4.982	0.698	0.044	0.053	0.008	0.006	0.009	0.000	0.000	0.000	0.000	1308.02	
2	0.6153	1010.0	1027.9		0.588	3.995	88.689	5.760	0.836	0.048	0.064	0.008	0.006	0.007	0.000	0.000	0.000	0.000	1310.36	
3	0.6115	1001.6	1019.3		0.660	4.041	89.408	5.040	0.733	0.044	0.054	0.008	0.005	0.007	0.000	0.000	0.000	0.000	1303.46	
4	0.6023	989.2	1006.8		0.647	3.946	91.034	3.765	0.509	0.039	0.039	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1297.24	
5	0.5969	983.1	1000.5		0.571	3.925	91.986	2.997	0.426	0.037	0.034	0.008	0.005	0.009	0.000	0.000	0.000	0.000	1295.03	
6	0.5962	982.0	999.4		0.595	3.895	92.173	2.801	0.429	0.042	0.039	0.009	0.006	0.010	0.000	0.000	0.000	0.000	1294.31	
7	0.5955	977.6	994.9		0.619	4.058	92.302	2.511	0.405	0.040	0.039	0.009	0.006	0.010	0.000	0.000	0.000	0.000	1289.25	
8	0.5971	980.1	997.4		0.594	4.095	91.938	2.855	0.432	0.037	0.037	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1290.80	
9	0.5979	981.5	998.9		0.601	4.069	91.799	2.998	0.437	0.037	0.038	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1291.90	
10	0.5960	979.9	997.3		0.696	3.842	92.324	2.622	0.410	0.041	0.040	0.009	0.006	0.011	0.000	0.000	0.000	0.000	1291.86	
11	0.5954	982.4	999.8		0.745	3.560	92.610	2.529	0.425	0.052	0.046	0.012	0.007	0.015	0.000	0.000	0.000	0.000	1295.76	
12	0.6006	994.7	1012.3		0.726	3.338	91.693	3.554	0.543	0.058	0.052	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1306.13	
13	0.5988	989.4	1006.9		0.754	3.441	92.054	3.093	0.514	0.056	0.052	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1301.24	
14	0.5989	987.5	1005.0		0.787	3.524	91.986	3.086	0.484	0.051	0.047	0.012	0.007	0.014	0.000	0.000	0.000	0.000	1298.53	
15	0.6008	991.6	1009.2		0.792	3.433	91.704	3.393	0.536	0.055	0.052	0.012	0.008	0.014	0.000	0.000	0.000	0.000	1302.02	
16	0.6006	990.7	1008.3		0.817	3.433	91.779	3.299	0.522	0.058	0.054	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1301.05	
17	0.5985	986.8	1004.3		0.838	3.444	92.152	2.950	0.477	0.054	0.048	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1298.14	
18	0.5961	983.4	1000.8		0.826	3.447	92.595	2.548	0.447	0.054	0.048	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1296.25	
19	0.5970	984.2	1001.6		0.803	3.520	92.384	2.693	0.464	0.053	0.048	0.012	0.008	0.015	0.000	0.000	0.000	0.000	1296.29	
20	0.5998	991.2	1008.7		0.809	3.347	91.926	3.244	0.528	0.057	0.053	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1302.45	
21	0.5989	990.4	1007.9		0.789	3.334	92.113	3.093	0.519	0.059	0.054	0.014	0.008	0.016	0.000	0.000	0.000	0.000	1302.46	
22	0.5989	989.3	1006.8		0.785	3.446	92.106	2.989	0.525	0.064	0.060	0.016	0.010	0.018	0.000	0.000	0.000	0.000	1300.90	
23	0.6023	995.8	1013.5		0.739	3.405	91.435	3.683	0.573	0.062	0.059	0.015	0.010	0.020	0.000	0.000	0.000	0.000	1305.86	
24	0.6019	994.8	1012.5		0.753	3.401	91.496	3.641	0.555	0.059	0.055	0.014	0.009	0.017	0.000	0.000	0.000	0.000	1305.06	
25	0.6017	994.1	1011.7		0.803	3.351	91.564	3.595	0.537	0.057	0.053	0.014	0.009	0.017	0.000	0.000	0.000	0.000	1304.32	
26	0.5993	989.6	1007.1		0.804	3.400	92.020	3.115	0.510	0.057	0.053	0.014	0.009	0.017	0.000	0.000	0.000	0.000	1300.95	
27	0.5996	990.4	1008.0		0.783	3.412	91.957	3.166	0.527	0.060	0.055	0.015	0.009	0.016	0.000	0.000	0.000	0.000	1301.70	
28	0.6005	991.8	1009.3		0.795	3.398	91.794	3.317	0.545	0.058	0.055	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1302.46	
29	0.5990	988.2	1005.7		0.832	3.418	92.108	2.971	0.518	0.059	0.055	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1299.41	
30	0.5991	988.2	1005.7		0.828	3.433	92.090	2.983	0.512	0.059	0.055	0.014	0.009	0.016	0.000	0.000	0.000	0.000	1299.30	
AVG	0.6002	989.0	1006.9		0.730	3.608	91.699	3.309	0.519	0.052	0.050	0.012	0.007	0.013	0.000	0.000	0.000	0.000	1299.75	

Zone 32

GQ Source Daily Summary

November 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	Cr'therm
1	0.6606	1132.0	1152.0		0.000	1.718	80.117	16.117	2.027	0.010	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1417.34	
2	0.6634	1136.2	1156.4		0.000	1.719	79.883	16.012	2.363	0.010	0.011	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1419.69	
3	0.6648	1136.9	1157.0		0.000	1.815	79.344	16.694	2.122	0.012	0.012	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1418.99	
4	0.6680	1141.7	1162.0		0.000	1.818	78.971	16.783	2.403	0.011	0.012	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1421.64	
5	0.6635	1134.1	1154.1		0.000	1.861	79.339	16.923	1.855	0.010	0.011	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1416.91	
6	0.6696	1141.0	1161.2		0.000	2.024	77.682	18.790	1.484	0.009	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1418.98	
7	0.6687	1139.4	1159.6		0.000	2.035	77.596	19.123	1.227	0.008	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1418.00	
8	0.6684	1138.4	1158.6		0.000	2.067	77.472	19.406	1.037	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1417.10	
9	0.6689	1139.0	1159.2		0.000	2.072	77.324	19.607	0.980	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.41	
10	0.6701	1140.1	1160.3		0.017	2.098	77.281	19.418	1.161	0.009	0.011	0.002	0.002	0.002	0.000	0.000	0.000	0.000	1417.41	
11	0.6763	1150.6	1171.0		0.000	2.054	76.965	18.837	2.122	0.010	0.012	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1423.96	
12	0.6790	1154.6	1175.1		0.000	2.066	76.502	19.200	2.206	0.012	0.013	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1426.04	
13	0.6789	1153.9	1174.4		0.000	2.101	76.562	19.050	2.262	0.011	0.012	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1425.26	
14	0.6702	1140.4	1160.6		0.000	2.113	77.450	19.036	1.381	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1417.67	
15	0.6696	1139.9	1160.1		0.000	2.083	77.464	19.169	1.265	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1417.74	
16	0.6706	1141.7	1161.9		0.000	2.070	77.289	19.329	1.293	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1418.89	
17	0.6685	1137.4	1157.5		0.000	2.135	77.665	18.929	1.253	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1415.75	
18	0.6697	1138.6	1158.8		0.000	2.174	77.422	19.122	1.264	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1416.00	
19	0.6694	1138.7	1158.8		0.000	2.142	77.481	19.099	1.260	0.008	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1416.39	
20	0.6709	1140.7	1160.9		0.000	2.154	77.197	19.358	1.273	0.008	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1417.42	
21	0.6722	1143.2	1163.5		0.000	2.128	77.034	19.443	1.375	0.008	0.010	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1419.07	
22	0.6718	1142.1	1162.4		0.000	2.154	76.982	19.609	1.235	0.008	0.010	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1418.19	
23	0.6725	1143.4	1163.6		0.000	2.146	76.883	19.668	1.283	0.009	0.010	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1418.98	
24	0.6659	1132.5	1152.6		0.000	2.193	77.969	18.833	0.936	0.024	0.037	0.003	0.003	0.003	0.000	0.000	0.000	0.000	1412.35	
25	0.6673	1134.9	1155.0		0.000	2.178	77.253	19.961	0.585	0.009	0.012	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1413.91	
26	0.6661	1133.7	1153.8		0.000	2.144	77.415	19.905	0.516	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1413.65	
27	0.6670	1134.8	1154.9		0.000	2.159	77.212	20.104	0.506	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1414.11	
28	0.6673	1135.2	1155.3		0.000	2.165	77.158	20.154	0.504	0.008	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1414.23	
29	0.6678	1136.2	1156.3		0.000	2.145	77.060	20.274	0.501	0.008	0.011	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1415.04	
30	0.6678	1136.4	1156.6		0.000	2.137	77.055	20.282	0.506	0.008	0.011	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1415.26	
Avg	0.6692	1140.0	1159.8		0.001	2.062	77.634	18.941	1.339	0.009	0.011	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1417.78	

Zou 33

Williston Basin Interstate Pipeline Co. GQ Source Analysis

GQ Source Number:	1202160	Specific Gravity:	0.7995
GQ Source Name:	BOWMAN BORDER	BTU Base:	Dry
Effective Date:	11/10/2008 9:00:00 AM	Dry Heat Value:	1159.71
Effective End Date:	12/1/2008 9:00:00 AM	Wet Heat Value:	1139.53
Pressure Base:	14.730	As Deliv. Heat Value:	1159.71
Viscosity:			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	55.205		
C2	Ethane	27.016		7.204
C3	Propane	4.184	1.149	1.149
IC4	Iso-Butane	0.102	0.033	0.033
NC4	N-Butane	0.301	0.095	0.095
IC5	Iso-Pentane	0.014	0.005	0.005
NC5	N-Pentane	0.035	0.012	0.012
C6+	Hexanes Plus	0.003	0.002	0.001
CO2	Carbon Dioxide	2.267		
N2	Nitrogen	10.869		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
Totals		99.997	1.297	8.500

Sample Date: 10/30/2008 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	Specific Gravity:	0.5740
GQ Source Name:	EAGLE 8B ND	BTU Base:	Dry
Effective Date:	7/1/2008 9:00:00 AM	Dry Heat Value:	974.02
Effective End Date:	1/18/2038 9:14:07 PM	Wet Heat Value:	957.16
Pressure Base:	14.730	As Deliv. Heat Value:	974.02
Viscosity:			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	95.505		
C2	Ethane	0.281	0.076	0.075
C3	Propane	0.009	0.002	0.002
IC4	Iso-Butane	0.007	0.002	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	0.072		
N2	Nitrogen	4.126		
O2	Oxygen	0.000		
HE	Helium	0.000		
H2	Hydrogen	0.000		
H2S	Hydrogen Sulfide	0.000		
Totals		100.000	0.080	0.080

Sample Date: 6/13/2006 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	NOV 08	OCT 08	SEPT 08	AUG 08	JULY 08	JUNE 08	MAY 08	APR 08	MAR 08	FEB 08	JAN 08	DEC 07	ZONE
MT/ND	211	Sidney Area	1154	1184	1195	1198	1194	1192	1195	1190	1180	1095	1028	1075	1124	21
ND	24	Williston Area	1179	1171	1173	1175	1189	1189	1189	1193	1167	1160	1173	1181	1192	24
ND	25	Watford City Area	1126	1126	1130	1129	1131	1132	1130	1130	1120	1119	1125	1126	1118	25
ND	261	Williston - Toga - Minot Line	1138	1148	1112	1130	1135	1148	1141	1147	1155	1140	1126	1136	1142	261
ND	262	Minot Area	1140	1147	1116	1133	1141	1147	1144	1152	1156	1141	1127	1136	1143	262
ND	263	Toga - Portal	1133	1125	1129	1142	1145	1141	1132	1136	1127	1125	1130	1129	1132	263
ND	264	Williston - Ray	1181	1171	1173	1175	1189	1189	1189	1193	1167	0	0	0	0	264
ND	271	Bismarck - Cleveland	1109	1129	1068	1127	1140	1146	1142	1151	1138	1086	1053	1059	1063	271
ND	272	Cleveland - Mapleton	1108	1129	1068	1126	1140	1146	1142	1151	1137	1086	1052	1059	1062	272
ND	273	Cleveland - Grafton	1108	1129	1068	1127	1140	1146	1142	1151	1137	1086	1052	1059	1062	273
ND	28	Bismarck - Cabin Creek	1066	1013	1038	1088	1116	1147	1143	1135	1035	1023	1022	1017	1015	28
ND	31	Dickinson Area	1028	1008	1037	1038	1044	1040	1032	1037	1023	1022	1021	1016	1014	31
ND/MT	32	Cabin Creek - Dickinson	1024	1007	1037	1032	1036	1036	1027	1031	1019	1020	1019	1014	1012	32
ND	33	Killdeer	1140	1160	1158	1161	1158	1158	1149	1146	1126	1122	1118	1114	1111	33
ND	34	Bowman Area	1169	1160	1176	1179	1179	1170	1165	1167	1158	1161	1165	1174	1182	34
ND	35	Baker Field - North Dakota	975	974	974	974	974	974	974	976	976	976	976	976	976	35

THERMAL ZONE VARIANCE DOCUMENTATION		
November 2008		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
261	36	Receipt from Plants in the Area
262	31	Receipt from Plants in the Area
271	61	Receipt from Dickinson and Minot Area
272	61	Receipt from Dickinson and Minot Area
273	61	Receipt from Dickinson and Minot Area
28	-25	Receipt from Cabin Creek Area
31	-29	Receipt from Cabin Creek Area
32	-30	Receipt from Cabin Creek Area