



UTILITIES CO.
A Division of MDU Resources Group, Inc.

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

March 4, 2011

RECEIVED

MAR 17 2011

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 – February 2011

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 2011.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of January 2011. 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 January 2011.

There were no thermal variances to report for the month of January 2011.

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
Regulatory Affairs Manager

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
FEB 2011

Attachment A
Page 1 of 3

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.0903
12	327	BISMARCK	28	1.0083
12	343	CARRINGTON	273	1.0903
12	344	CLEVELAND	272	1.0827
12	364	CAVALIER	273	1.1133
12	365	DAWSON	271	1.0827
12	374	FT TOTTEN	273	1.0980
12	375	DEVILS LAKE	273	1.0980
12	379	BARLOW	273	1.0903
12	387	ELDRIDGE	272	1.0903
12	411	GLEN ULLIN	31	.9861
12	417	GRAFTON	273	1.1210
12	439	HANKINSON	600	1.0680
12	449	JAMESTOWN	272	1.0980
12	463	LANGDON	273	1.0903
12	475	LINTON	802	.9736
12	478	LINCOLN	28	1.0083
12	494	MEDINA	271	1.0827
12	498	MANDAN	28	1.0083
12	524	NEW SALEM	28	.9870
12	532	NEW ROCKFORD	273	1.0903
12	539	PARK RIVER	273	1.1133
12	574	SANBORN	272	1.0980
12	593	STEELE	271	1.0827
12	598	SHEYENNE	273	1.0980
12	610	TAPPEN	271	1.0827
12	625	VALLEY CITY	272	1.1056
12	629	WALHALLA	273	1.1133
12	647	WILTON	262	1.1164
12	717	SPIRITWOOD	272	1.0980
12	718	FAIRMOUNT	600	1.0658
12	732	MSR SITE	273	1.0903
12	733	PAR SITE	273	1.0903
15	303	ALEXANDER	25	1.0862
15	308	ARNEGARD	25	1.0862

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
FEB 2011

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	318	BEACH	32	.9620
15	319	BELFIELD	32	.9691
15	323	BERTHOLD	262	1.1164
15	330	BOWMAN	34	1.0668
15	337	BURLINGTON	262	1.1405
15	368	DES LACS	262	1.1244
15	369	DICKINSON	31	.9790
15	384	EPPING	264	1.1372
15	407	GLADSTONE	31	.9790
15	413	GOLVA	32	.9479
15	416	GARRISON	262	1.1244
15	429	HEBRON	31	.9861
15	459	KILLDEER	33	1.1098
15	469	LEFOR	31	.9790
15	474	LIGNITE	263	1.0407
15	500	MARMARTH	34	1.0747
15	505	MINOT	262	1.1405
15	510	MOTT	31	.9790
15	512	MAX	262	1.1164
15	522	NEW ENGLAND	31	.9719
15	540	PALERMO	262	1.1164
15	558	RAY	264	1.1372
15	561	REGENT	31	.9790
15	563	RHAME	34	1.0590
15	564	RICHARDTON	31	.9719
15	568	ROSS	261	1.0980
15	572	RUTHVILLE	262	1.1405
15	583	SENTINEL BUTTE	32	.9620
15	588	SOUTH HEART	31	.9719
15	590	SPRINGBROOK	264	1.1372
15	591	STANLEY	261	1.1060
15	605	SURREY	262	1.1405
15	611	TAYLOR	31	.9719
15	616	TIOGA	261	1.0980
15	619	TURTLE LAKE	262	1.1244

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
FEB 2011

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	620	TRENTON	24	1.1454
15	624	UNDERWOOD	262	1.1244
15	632	WATFORD CITY	25	1.0862
15	636	WHEELLOCK	264	1.1290
15	637	WHITE EARTH	261	1.1060
15	642	WILLISTON	24	1.1454
15	646	WASHBURN	262	1.1325
15	664	RIVERDALE	262	1.1244
15	691	FAIRVIEW	24	1.1454
15	712	MINOT AFB	262	1.1405
15	743	BAKER FIELD	35	.8980

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

GQ Source Daily Summary

January 2011

Number: 251 **Pressure Base:** 14.730 **Contract Day:** 1
Name: SIDNEY AREA **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7207	1199.1	1220.3	0.034	3.226	69.505	23.398	3.740	0.045	0.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1437.46
2	0.7139	1191.2	1212.3	0.031	3.075	70.378	23.216	3.211	0.040	0.047	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1434.78
3	0.7114	1187.8	1208.9	0.034	3.046	70.605	23.277	2.961	0.034	0.040	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1433.20
4	0.7133	1190.8	1211.9	0.037	3.034	70.443	23.243	3.163	0.036	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1434.90
5	0.7172	1198.1	1219.3	0.035	2.959	70.143	23.141	3.627	0.043	0.049	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1439.71
6	0.7166	1195.8	1217.0	0.037	3.042	70.110	23.224	3.499	0.041	0.046	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1437.58
7	0.7162	1195.2	1216.3	0.036	3.041	70.093	23.345	3.404	0.038	0.042	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1437.27
8	0.7167	1196.0	1217.2	0.036	3.037	70.160	23.113	3.568	0.041	0.044	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1437.75
9	0.7164	1195.8	1217.0	0.034	3.021	70.221	23.069	3.567	0.040	0.045	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1437.87
10	0.7147	1193.1	1214.2	0.032	3.033	70.274	23.295	3.288	0.037	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1436.23
11	0.7131	1190.7	1211.8	0.040	3.018	70.370	23.443	3.052	0.036	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1435.02
12	0.7152	1193.7	1214.9	0.036	3.039	70.213	23.306	3.316	0.041	0.048	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1435.15
13	0.7130	1190.7	1211.8	0.038	3.008	70.506	23.200	3.174	0.034	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1437.60
14	0.7157	1195.1	1216.2	0.040	2.996	70.168	23.337	3.379	0.037	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1436.75
15	0.7145	1193.4	1214.5	0.038	2.989	70.375	23.178	3.340	0.038	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1438.86
16	0.7153	1195.8	1217.0	0.038	2.917	70.355	23.141	3.470	0.037	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1437.63
17	0.7170	1196.1	1217.3	0.046	3.038	70.147	23.081	3.606	0.039	0.042	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1439.06
18	0.7152	1195.9	1217.1	0.027	2.921	70.082	23.815	2.962	0.065	0.114	0.006	0.005	0.001	0.000	0.000	0.000	0.000	0.000	1429.07
19	0.7022	1176.7	1197.6	0.026	2.877	71.532	23.478	2.030	0.024	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1392.52
20	0.6775	1126.8	1146.8	0.056	3.544	76.538	17.752	2.050	0.027	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1427.92
21	0.7050	1178.2	1199.1	0.040	3.021	71.768	22.276	2.830	0.031	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1433.72
22	0.7105	1187.5	1208.5	0.041	2.970	70.803	23.154	2.958	0.034	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1440.58
23	0.7167	1198.4	1219.6	0.031	2.902	70.140	23.311	3.523	0.043	0.049	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1436.02
24	0.7104	1189.3	1210.4	0.033	2.861	70.959	22.994	3.069	0.039	0.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1436.62
25	0.7146	1193.3	1214.4	0.037	3.002	70.492	22.927	3.448	0.045	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1436.46
26	0.7133	1192.1	1213.2	0.034	2.960	70.554	23.117	3.247	0.041	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1437.25
27	0.7157	1194.8	1216.0	0.038	3.017	70.247	23.170	3.430	0.045	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1443.51
28	0.7195	1202.8	1224.1	0.037	2.993	70.235	23.271	3.375	0.041	0.047	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1443.08
29	0.7159	1194.8	1215.9	0.033	2.887	69.686	23.681	3.612	0.046	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1439.19
30	0.7172	1197.6	1218.8	0.034	2.986	70.046	23.299	3.556	0.038	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1436.07
31	0.7184	1196.0	1217.2	0.038	3.190	69.730	23.450	3.511	0.038	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1435.14
Avg	0.7133	1191.0	1212.1	0.036	3.021	70.544	23.055	3.257	0.039	0.046	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1435.14

Zone 211

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	0602330	Specific Gravity:	0.7242
GQ Source Name:	WILLISTON BORDER	BTU Base:	Dry
Effective Date:	1/1/2011 9:00:00 AM	Measured Heat Value:	1206.17
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1203.50
Pressure Base:	14.730	Wet Heat Value:	1182.56
Viscosity:		As Deliv. Heat Value:	1203.50
		Sample Pressure:	0.00
		Sample Temperature:	

	<u>Mol %</u>	<u>GPM</u>		<u>Mol %</u>
C1 Methane	70.208		CO2 Carbon Dioxide	0.693
C2 Ethane	21.198	5.652	N2 Nitrogen	3.516
C3 Propane	3.853	1.058	O2 Oxygen	0.000
IC4 Iso-Butane	0.155	0.051	HE Helium	
NC4 N-Butane	0.222	0.070	H2 Hydrogen	
IC5 Iso-Pentane	0.069	0.025	H2S Hydrogen Sulfide	
NC5 N-Pentane	0.068	0.025	AR Argon	
C6 Hexane	0.008	0.004	CO Carbon Monoxide	
C7 Heptane			H2O Water	
C8 Octane			Neo-C5 Neo-Pentane	
C9 Nonane				
C10 Decane				
Totals		99.990%	6.884 GPM	

Sample Date: 1/31/2011 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Tech: Mary Berger

Analysis Remarks:

Zone 24,264

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	0602230	Specific Gravity:	0.7270
GQ Source Name:	WATFORD CITY BORDER	BTU Base:	Dry
Effective Date:	1/1/2011 9:00:00 AM	Measured Heat Value:	1153.21
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1150.43
Pressure Base:	14.730	Wet Heat Value:	1130.41
Viscosity:		As Deliv. Heat Value:	1150.43
		Sample Pressure:	0.00
		Sample Temperature:	

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	69.008		CO2	Carbon Dioxide	0.603
C2	Ethane	18.835	0.000	N2	Nitrogen	7.113
C3	Propane	3.849	1.057	O2	Oxygen	0.000
IC4	Iso-Butane	0.184	0.060	HE	Helium	
NC4	N-Butane	0.342	0.108	H2	Hydrogen	
IC5	Iso-Pentane	0.028	0.010	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.028	0.010	AR	Argon	
C6	Hexane	0.008	0.004	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane			Neo-C5	Neo-Pentane	
C9	Nonane					
C10	Decane					

Totals 99.998% 1.249 GPM

Sample Date: 1/31/2011 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Tech: Mary Berger

Analysis Remarks:

Zone 25

GQ Source Daily Summary

January 2011

Number: 163 **Pressure Base:** 14.730 **Contract Day:** 1
Name: NORTH TIOGA-MINOT **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6880	1138.4	1158.6	0.401	3.290	75.096	19.012	1.932	0.081	0.165	0.009	0.009	0.004						1396.83
2	0.6900	1141.0	1161.2	0.399	3.322	75.050	18.752	2.134	0.096	0.208	0.014	0.016	0.008						1397.96
3	0.6865	1135.2	1155.3	0.388	3.371	75.540	18.381	2.006	0.090	0.192	0.013	0.014	0.006						1394.30
4	0.6873	1136.0	1156.1	0.373	3.418	75.315	18.649	1.924	0.085	0.190	0.015	0.018	0.014						1394.51
5	0.6994	1156.6	1177.0	0.452	3.176	74.131	18.970	2.805	0.132	0.280	0.018	0.019	0.016						1407.39
6	0.6919	1144.1	1164.3	0.418	3.282	74.943	18.659	2.332	0.104	0.223	0.014	0.016	0.011						1399.81
7	0.6901	1141.4	1161.6	0.432	3.258	75.120	18.628	2.240	0.096	0.197	0.011	0.011	0.006						1398.33
8	0.6903	1140.9	1161.1	0.434	3.306	75.080	18.631	2.210	0.099	0.208	0.012	0.013	0.007						1397.48
9	0.6916	1143.1	1163.3	0.460	3.254	75.018	18.542	2.385	0.105	0.213	0.011	0.010	0.004						1398.85
10	0.6947	1147.5	1167.8	0.455	3.278	74.637	18.717	2.519	0.116	0.238	0.015	0.015	0.005						1401.16
11	0.6971	1149.8	1170.1	0.467	3.355	74.163	19.071	2.555	0.112	0.238	0.016	0.018	0.005						1401.44
12	0.6943	1145.9	1166.2	0.432	3.386	74.244	19.340	2.304	0.087	0.178	0.012	0.012	0.005						1399.50
13	0.6961	1149.0	1169.4	0.434	3.354	74.000	19.484	2.446	0.086	0.170	0.010	0.010	0.005						1401.61
14	0.6960	1146.8	1167.1	0.439	3.472	73.821	19.666	2.381	0.072	0.133	0.007	0.006	0.003						1399.00
15	0.6996	1150.9	1171.3	0.460	3.531	73.503	19.518	2.737	0.082	0.153	0.007	0.007	0.002						1400.33
16	0.7013	1154.4	1174.8	0.453	3.487	73.410	19.459	2.894	0.094	0.180	0.010	0.009	0.003						1402.86
17	0.7026	1157.4	1177.9	0.457	3.422	73.221	19.640	2.962	0.096	0.182	0.009	0.009	0.001						1405.18
18	0.7034	1158.7	1179.2	0.457	3.415	73.075	19.757	3.013	0.092	0.173	0.008	0.008	0.001						1406.03
19	0.7016	1154.7	1175.2	0.487	3.445	73.359	19.555	2.842	0.100	0.192	0.010	0.009	0.002						1402.98
20	0.6969	1147.3	1167.6	0.489	3.454	73.874	19.433	2.481	0.087	0.166	0.008	0.007	0.001						1398.65
21	0.6943	1142.7	1162.9	0.454	3.535	74.659	18.374	2.653	0.100	0.199	0.011	0.011	0.003						1395.72
22	0.7011	1154.5	1174.9	0.481	3.422	73.381	19.646	2.756	0.099	0.193	0.010	0.010	0.002						1403.17
23	0.7056	1162.2	1182.8	0.469	3.380	73.007	19.659	3.064	0.125	0.257	0.016	0.017	0.005						1408.16
24	0.7124	1173.4	1194.1	0.464	3.343	72.528	19.542	3.475	0.173	0.395	0.033	0.038	0.008						1414.84
25	0.7044	1162.5	1183.0	0.421	3.329	73.609	18.935	3.140	0.154	0.342	0.024	0.027	0.018						1409.56
26	0.7106	1170.0	1190.8	0.482	3.351	72.752	19.478	3.284	0.169	0.391	0.035	0.041	0.017						1412.62
27	0.7026	1154.9	1175.4	0.514	3.483	73.210	19.690	2.732	0.111	0.226	0.014	0.015	0.006						1402.23
28	0.7007	1152.5	1173.0	0.503	3.466	73.528	19.489	2.631	0.108	0.227	0.018	0.021	0.010						1401.26
29	0.6967	1145.8	1166.1	0.515	3.492	73.715	19.693	2.362	0.073	0.133	0.007	0.007	0.002						1396.98
30	0.7010	1154.2	1174.7	0.479	3.426	73.094	20.119	2.681	0.070	0.121	0.005	0.004	0.000						1403.06
31	0.6988	1150.9	1171.3	0.471	3.439	73.186	20.339	2.384	0.063	0.108	0.004	0.004	0.001						1401.21
Av9	0.6976	1150.0	1170.8	0.453	3.385	73.976	19.253	2.589	0.102	0.209	0.013	0.014	0.006						1401.71

Zone 261

GQ Source Daily Summary

January 2011

Number: 091 **Pressure Base:** 14.730 **Contract Day:** 1
Name: MINOT **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7205	1164.3	1184.9	0.547	4.552	69.749	21.719	3.051	0.104	0.239	0.016	0.018	0.005	0.000	0.000	0.000	0.000	0.000	1395.88
2	0.7221	1167.4	1188.1	0.552	4.498	69.674	21.643	3.217	0.115	0.260	0.017	0.019	0.004	0.000	0.000	0.000	0.000	0.000	1398.14
3	0.7213	1165.4	1186.0	0.548	4.557	69.843	21.399	3.237	0.115	0.261	0.017	0.019	0.005	0.000	0.000	0.000	0.000	0.000	1396.41
4	0.7223	1165.6	1186.2	0.552	4.627	69.617	21.566	3.234	0.110	0.252	0.017	0.019	0.005	0.000	0.000	0.000	0.000	0.000	1395.76
5	0.7133	1163.1	1183.7	0.509	3.995	71.471	20.422	3.200	0.116	0.251	0.016	0.017	0.005	0.000	0.000	0.000	0.000	0.000	1401.65
6	0.7197	1167.7	1188.3	0.543	4.271	70.329	21.058	3.401	0.117	0.248	0.014	0.015	0.003	0.000	0.000	0.000	0.000	0.000	1400.74
7	0.7136	1160.5	1181.1	0.538	4.144	71.164	20.724	3.078	0.105	0.221	0.011	0.011	0.003	0.000	0.000	0.000	0.000	0.000	1398.09
8	0.7188	1168.6	1189.3	0.544	4.123	70.658	20.818	3.415	0.125	0.276	0.018	0.020	0.005	0.000	0.000	0.000	0.000	0.000	1402.80
9	0.7187	1168.5	1189.3	0.544	4.111	70.726	20.686	3.495	0.125	0.268	0.016	0.016	0.004	0.000	0.000	0.000	0.000	0.000	1402.67
10	0.7214	1173.3	1194.1	0.560	4.054	70.539	20.660	3.691	0.143	0.308	0.019	0.020	0.005	0.000	0.000	0.000	0.000	0.000	1405.87
11	0.7196	1172.3	1193.1	0.546	3.969	70.856	20.524	3.583	0.145	0.322	0.023	0.025	0.007	0.000	0.000	0.000	0.000	0.000	1406.42
12	0.7134	1164.2	1184.8	0.518	3.921	71.604	20.265	3.253	0.124	0.269	0.018	0.021	0.006	0.000	0.000	0.000	0.000	0.000	1402.79
13	0.7036	1153.5	1174.0	0.479	3.716	72.930	19.742	2.782	0.102	0.216	0.013	0.015	0.004	0.000	0.000	0.000	0.000	0.000	1399.57
14	0.6985	1150.6	1171.0	0.452	3.464	73.326	19.785	2.509	0.082	0.161	0.008	0.008	0.006	0.000	0.000	0.000	0.000	0.000	1401.01
15	0.6995	1151.5	1171.9	0.471	3.472	73.462	19.674	2.678	0.080	0.149	0.005	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1401.13
16	0.7018	1154.9	1175.3	0.467	3.484	73.267	19.635	2.859	0.092	0.176	0.008	0.007	0.005	0.000	0.000	0.000	0.000	0.000	1402.95
17	0.7029	1157.9	1178.4	0.470	3.397	73.222	19.621	2.980	0.099	0.190	0.008	0.008	0.005	0.000	0.000	0.000	0.000	0.000	1405.54
18	0.7045	1160.7	1181.2	0.467	3.377	72.950	19.860	3.050	0.095	0.182	0.007	0.007	0.005	0.000	0.000	0.000	0.000	0.000	1407.38
19	0.6986	1149.8	1170.2	0.481	3.398	73.253	19.654	2.904	0.099	0.192	0.008	0.007	0.005	0.000	0.000	0.000	0.000	0.000	1404.80
20	0.6986	1147.4	1167.7	0.464	3.422	73.692	19.502	2.590	0.090	0.173	0.007	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1400.04
21	0.6966	1147.4	1167.7	0.464	3.453	74.153	18.999	2.617	0.098	0.195	0.009	0.009	0.003	0.000	0.000	0.000	0.000	0.000	1399.09
22	0.6992	1151.1	1171.5	0.491	3.426	73.758	19.285	2.728	0.099	0.192	0.008	0.008	0.005	0.000	0.000	0.000	0.000	0.000	1401.06
23	0.7050	1161.3	1181.9	0.481	3.365	73.011	19.752	3.000	0.119	0.242	0.013	0.014	0.003	0.000	0.000	0.000	0.000	0.000	1407.61
24	0.7097	1169.4	1190.1	0.474	3.322	72.659	19.666	3.375	0.149	0.317	0.018	0.018	0.003	0.000	0.000	0.000	0.000	0.000	1412.69
25	0.7190	1176.8	1197.6	0.498	3.709	71.350	20.142	3.642	0.170	0.400	0.035	0.042	0.013	0.000	0.000	0.000	0.000	0.000	1412.45
26	0.7160	1179.9	1200.8	0.495	3.242	72.278	19.512	3.716	0.203	0.475	0.035	0.037	0.007	0.000	0.000	0.000	0.000	0.000	1419.04
27	0.7023	1155.8	1176.2	0.506	3.416	73.366	19.550	2.769	0.113	0.235	0.017	0.022	0.008	0.000	0.000	0.000	0.000	0.000	1403.56
28	0.7023	1155.3	1175.8	0.517	3.427	73.254	19.737	2.684	0.110	0.232	0.016	0.018	0.005	0.000	0.000	0.000	0.000	0.000	1403.00
29	0.6987	1148.7	1169.0	0.537	3.464	73.601	19.643	2.459	0.089	0.178	0.010	0.011	0.007	0.000	0.000	0.000	0.000	0.000	1398.54
30	0.7011	1154.5	1174.9	0.495	3.401	73.107	20.105	2.685	0.072	0.126	0.002	0.001	0.007	0.000	0.000	0.000	0.000	0.000	1403.20
31	0.7005	1153.9	1174.3	0.489	3.387	73.079	20.296	2.555	0.068	0.119	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	1403.12
AVG	0.7093	1161.0	1181.5	0.508	3.747	72.134	20.182	3.046	0.112	0.236	0.014	0.015	0.005	0.000	0.000	0.000	0.000	0.000	1403.00

Zone 262

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	2501030	Specific Gravity:	0.6416
GQ Source Name:	LIGNITE PLANT	BTU Base:	Dry
Effective Date:	1/1/2011 9:00:00 AM	Measured Heat Value:	1095.04
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1093.58
Pressure Base:	14.730	Wet Heat Value:	1074.54
Viscosity:		As Deliv. Heat Value:	1093.58
		Sample Pressure:	0.00
		Sample Temperature:	

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	82.201		CO2	Carbon Dioxide	0.100
C2	Ethane	13.973	3.726	N2	Nitrogen	3.259
C3	Propane	0.434	0.119	O2	Oxygen	0.000
IC4	Iso-Butane	0.003	0.001	HE	Helium	
NC4	N-Butane	0.005	0.002	H2	Hydrogen	
IC5	Iso-Pentane	0.000	0.000	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.001	0.000	AR	Argon	
C6	Hexane	0.020	0.009	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane			Neo-C5	Neo-Pentane	
C9	Nonane					
C10	Decane					

Totals 99.997% 3.857 GPM

Sample Date: 1/31/2011 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Tech: Mary Berger
Analysis Remarks:

*** End of Report ***

Zone 263

GQ Source Daily Summary

January 2011

Number: 043 **Pressure Base:** 14.730 **Contract Day:** 1
Name: BISMARCK-CLEVELAND **Temperature Base:** **Contract Hour:** 9

Day	Relative Density		Heating Value		C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
	Wet	Dry	Wet	Dry													
1	0.7029	1141.8	1162.1	0.579	4.214	73.193	18.845	2.789	0.102	0.226	0.018	0.019	0.015	0.000	0.000	0.000	1386.04
2	0.7096	1151.0	1171.4	0.576	4.288	71.886	20.008	2.868	0.101	0.225	0.017	0.018	0.013	0.000	0.000	0.000	1390.57
3	0.6965	1133.7	1153.8	0.584	4.098	74.350	17.937	2.688	0.095	0.204	0.016	0.016	0.013	0.000	0.000	0.000	1382.52
4	0.6927	1127.7	1147.7	0.587	4.100	74.995	17.418	2.563	0.092	0.198	0.016	0.017	0.014	0.000	0.000	0.000	1379.01
5	0.6818	1117.9	1137.7	0.557	3.722	76.891	16.224	2.319	0.081	0.165	0.014	0.014	0.013	0.000	0.000	0.000	1377.87
6	0.7043	1146.4	1166.7	0.562	4.089	73.177	18.718	3.092	0.104	0.215	0.013	0.015	0.014	0.000	0.000	0.000	1390.24
7	0.6881	1126.7	1146.7	0.555	3.775	75.797	17.074	2.511	0.085	0.169	0.012	0.011	0.012	0.000	0.000	0.000	1382.40
8	0.6827	1119.5	1139.4	0.580	3.671	76.856	16.179	2.423	0.085	0.169	0.013	0.012	0.012	0.000	0.000	0.000	1378.95
9	0.6851	1122.3	1142.2	0.609	3.682	76.655	16.126	2.599	0.094	0.190	0.015	0.015	0.014	0.000	0.000	0.000	1379.92
10	0.6867	1125.4	1145.3	0.635	3.603	76.573	16.083	2.742	0.106	0.212	0.016	0.016	0.013	0.000	0.000	0.000	1382.11
11	0.6857	1123.9	1143.8	0.628	3.613	76.777	15.896	2.699	0.109	0.226	0.019	0.019	0.014	0.000	0.000	0.000	1381.26
12	0.6774	1113.8	1133.6	0.622	3.455	78.161	14.975	2.434	0.100	0.202	0.018	0.019	0.015	0.000	0.000	0.000	1377.26
13	0.6683	1099.7	1119.2	0.609	3.484	79.453	14.129	2.053	0.081	0.153	0.013	0.013	0.013	0.000	0.000	0.000	1369.01
14	0.6602	1092.2	1111.6	0.591	3.201	80.780	13.419	1.779	0.070	0.125	0.012	0.011	0.013	0.000	0.000	0.000	1368.08
15	0.6569	1087.3	1106.6	0.585	3.200	81.196	13.198	1.645	0.058	0.093	0.008	0.006	0.011	0.000	0.000	0.000	1365.34
16	0.6599	1091.3	1110.6	0.584	3.248	80.786	13.349	1.838	0.064	0.105	0.009	0.007	0.010	0.000	0.000	0.000	1367.13
17	0.6585	1089.8	1109.1	0.599	3.180	81.217	12.885	1.902	0.070	0.118	0.010	0.009	0.011	0.000	0.000	0.000	1366.75
18	0.6564	1087.1	1106.4	0.627	3.102	81.606	12.627	1.825	0.069	0.113	0.010	0.008	0.012	0.000	0.000	0.000	1365.59
19	0.6574	1088.7	1108.0	0.626	3.101	81.423	12.781	1.859	0.068	0.111	0.010	0.008	0.012	0.000	0.000	0.000	1366.54
20	0.6534	1082.0	1101.2	0.654	3.087	82.135	12.209	1.699	0.069	0.114	0.011	0.009	0.012	0.000	0.000	0.000	1362.31
21	0.6553	1085.7	1104.9	0.649	3.059	81.659	12.784	1.638	0.068	0.112	0.010	0.008	0.012	0.000	0.000	0.000	1364.86
22	0.6502	1075.7	1094.8	0.626	3.216	82.687	11.616	1.632	0.071	0.120	0.011	0.009	0.013	0.000	0.000	0.000	1357.68
23	0.6646	1098.6	1118.1	0.586	3.235	80.094	13.863	1.970	0.079	0.141	0.011	0.010	0.011	0.000	0.000	0.000	1371.50
24	0.6678	1104.3	1123.9	0.567	3.210	79.694	14.103	2.126	0.090	0.170	0.014	0.013	0.014	0.000	0.000	0.000	1375.36
25	0.6850	1125.9	1145.8	0.560	3.525	77.227	15.374	2.818	0.130	0.290	0.028	0.031	0.016	0.000	0.000	0.000	1384.45
26	0.6827	1127.0	1146.9	0.452	3.409	77.315	15.729	2.655	0.121	0.262	0.028	0.020	0.017	0.000	0.000	0.000	1388.07
27	0.6855	1130.9	1151.0	0.475	3.400	76.661	16.489	2.530	0.117	0.260	0.023	0.026	0.019	0.000	0.000	0.000	1390.08
28	0.6831	1125.8	1145.7	0.493	3.459	76.690	16.704	2.337	0.093	0.186	0.013	0.013	0.012	0.000	0.000	0.000	1386.22
29	0.6749	1112.9	1132.6	0.485	3.483	80.033	15.646	2.068	0.080	0.162	0.014	0.016	0.014	0.000	0.000	0.000	1378.73
30	0.6597	1089.0	1108.3	0.499	3.493	80.409	13.817	1.641	0.048	0.078	0.005	0.004	0.007	0.000	0.000	0.000	1364.57
31	0.6550	1083.7	1102.9	0.569	3.264	81.511	12.853	1.647	0.054	0.080	0.007	0.005	0.009	0.000	0.000	0.000	1362.82
Avg	0.6751	1111.0	1130.3	0.578	3.505	78.254	15.131	2.238	0.086	0.168	0.014	0.013	0.013	0.000	0.000	0.000	1375.59

Zone 271

GQ Source Daily Summary

January 2011

Number: 063 **Pressure Base:** 14.730 **Contract Day:** 1

Name: CLEVELAND-MAPLETON **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6976	1134.7	1154.8	0.574	4.157	74.203	17.964	2.724	0.102	0.228	0.019	0.020	0.009	0.000	0.000	0.000	0.000	0.000	1382.62
2	0.7052	1144.4	1164.7	0.574	4.279	72.585	19.486	2.726	0.095	0.212	0.016	0.017	0.009	0.000	0.000	0.000	0.000	0.000	1386.93
3	0.7024	1141.4	1161.6	0.574	4.201	73.280	18.761	2.819	0.100	0.221	0.017	0.018	0.008	0.000	0.000	0.000	0.000	0.000	1386.01
4	0.6904	1124.8	1144.7	0.583	4.069	75.408	17.095	2.510	0.093	0.199	0.017	0.017	0.010	0.000	0.000	0.000	0.000	0.000	1377.68
5	0.6875	1120.6	1140.4	0.587	4.047	75.864	16.744	2.467	0.082	0.170	0.014	0.015	0.009	0.000	0.000	0.000	0.000	0.000	1375.44
6	0.6968	1139.3	1159.5	0.536	3.860	74.515	17.827	2.900	0.104	0.217	0.015	0.016	0.009	0.000	0.000	0.000	0.000	0.000	1389.04
7	0.6925	1132.1	1152.2	0.547	3.877	75.033	17.589	2.646	0.090	0.184	0.013	0.012	0.008	0.000	0.000	0.000	0.000	0.000	1384.52
8	0.6816	1117.8	1137.6	0.561	3.700	76.960	16.132	2.375	0.082	0.161	0.011	0.010	0.007	0.000	0.000	0.000	0.000	0.000	1377.96
9	0.6836	1120.4	1140.2	0.593	3.685	76.884	15.958	2.552	0.094	0.192	0.016	0.016	0.010	0.000	0.000	0.000	0.000	0.000	1379.05
10	0.6847	1121.9	1141.7	0.629	3.640	76.832	15.899	2.657	0.101	0.202	0.015	0.015	0.009	0.000	0.000	0.000	0.000	0.000	1379.79
11	0.6857	1123.4	1143.3	0.625	3.649	76.767	15.850	2.730	0.110	0.224	0.018	0.018	0.010	0.000	0.000	0.000	0.000	0.000	1380.66
12	0.6780	1114.1	1133.8	0.621	3.496	78.096	14.946	2.472	0.104	0.214	0.019	0.020	0.011	0.000	0.000	0.000	0.000	0.000	1377.00
13	0.6728	1105.7	1125.2	0.610	3.240	80.534	13.549	1.843	0.074	0.137	0.012	0.011	0.009	0.000	0.000	0.000	0.000	0.000	1371.85
14	0.6618	1094.0	1113.4	0.590	3.194	81.282	13.153	1.617	0.059	0.097	0.009	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1368.71
15	0.6563	1086.8	1106.0	0.574	3.230	81.140	13.074	1.784	0.063	0.102	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1365.64
16	0.6579	1088.4	1107.7	0.584	3.227	81.100	13.009	1.869	0.069	0.117	0.010	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1366.44
17	0.6587	1089.7	1109.0	0.585	3.100	81.723	12.514	1.832	0.070	0.116	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1365.33
18	0.6558	1086.4	1105.7	0.618	3.104	81.361	12.816	1.893	0.069	0.113	0.010	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1367.11
19	0.6578	1089.5	1108.8	0.617	3.110	82.257	12.073	1.705	0.070	0.117	0.011	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1361.67
20	0.6527	1080.9	1100.1	0.640	3.076	81.847	12.608	1.623	0.067	0.109	0.010	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1363.63
21	0.6542	1083.7	1102.9	0.644	3.150	82.821	11.550	1.619	0.072	0.124	0.012	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1358.28
22	0.6496	1075.7	1094.7	0.632	3.225	80.829	13.292	1.836	0.073	0.128	0.011	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1367.54
23	0.6601	1091.8	1111.1	0.590	3.212	79.819	13.978	2.118	0.091	0.172	0.014	0.013	0.009	0.000	0.000	0.000	0.000	0.000	1374.53
24	0.6671	1103.1	1122.6	0.574	3.235	78.845	14.511	2.450	0.119	0.256	0.019	0.019	0.015	0.000	0.000	0.000	0.000	0.000	1381.66
25	0.6745	1115.0	1134.7	0.539	3.612	76.980	15.746	2.738	0.117	0.252	0.024	0.029	0.015	0.000	0.000	0.000	0.000	0.000	1384.76
26	0.6848	1126.0	1145.9	0.488	3.368	76.783	16.058	2.780	0.141	0.325	0.028	0.033	0.008	0.000	0.000	0.000	0.000	0.000	1391.97
27	0.6870	1133.7	1153.8	0.475	3.478	76.664	16.771	2.305	0.089	0.178	0.012	0.012	0.005	0.000	0.000	0.000	0.000	0.000	1385.77
28	0.6827	1125.1	1145.0	0.486	3.466	77.776	15.857	2.140	0.084	0.172	0.013	0.015	0.006	0.000	0.000	0.000	0.000	0.000	1380.85
29	0.6764	1115.9	1135.6	0.471	3.511	79.900	14.192	1.720	0.057	0.102	0.007	0.007	0.005	0.000	0.000	0.000	0.000	0.000	1367.09
30	0.6629	1093.7	1113.0	0.497	3.351	81.275	12.976	1.720	0.052	0.080	0.006	0.005	0.003	0.000	0.000	0.000	0.000	0.000	1363.18
31	0.6561	1084.9	1104.2	0.532	3.519	78.327	15.049	2.239	0.087	0.171	0.014	0.014	0.008	0.000	0.000	0.000	0.000	0.000	1375.10
Avg	0.6747	1110.0	1129.5	0.573															

Zone 27a

GQ Source Daily Summary

January 2011

Number: 061 **Pressure Base:** 14.730 **Contract Day:** 1
Name: CLEVELAND-GRAFTON **Temperature Base:** **Contract Hour:** 9

Day	Heating Value		CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
	Relative Density	Wet																
1	0.6969	1133.7	1153.7	0.574	4.158	74.273	17.940	2.694	0.099	0.218	0.017	0.018	0.008	0.000	0.000	0.000	0.000	1382.01
2	0.7053	1144.7	1165.0	0.574	4.273	72.560	19.510	2.732	0.095	0.213	0.016	0.017	0.009	0.000	0.000	0.000	0.000	1387.20
3	0.7025	1141.6	1161.8	0.574	4.196	73.255	18.792	2.821	0.100	0.220	0.017	0.017	0.007	0.000	0.000	0.000	0.000	1386.17
4	0.6907	1125.4	1145.4	0.584	4.058	75.356	17.141	2.525	0.093	0.200	0.017	0.017	0.010	0.000	0.000	0.000	0.000	1378.17
5	0.6873	1120.6	1140.4	0.589	4.033	75.895	16.727	2.466	0.082	0.170	0.014	0.014	0.009	0.000	0.000	0.000	0.000	1375.54
6	0.6969	1139.6	1159.8	0.536	3.852	74.497	17.846	2.905	0.105	0.218	0.015	0.016	0.009	0.000	0.000	0.000	0.000	1389.30
7	0.6928	1132.7	1152.8	0.548	3.869	74.985	17.633	2.656	0.091	0.185	0.013	0.013	0.008	0.000	0.000	0.000	0.000	1384.93
8	0.6819	1118.4	1138.2	0.561	3.695	76.910	16.174	2.387	0.082	0.161	0.011	0.010	0.007	0.000	0.000	0.000	0.000	1378.33
9	0.6837	1120.7	1140.5	0.594	3.677	76.868	15.972	2.559	0.094	0.193	0.016	0.016	0.010	0.000	0.000	0.000	0.000	1379.30
10	0.6848	1122.2	1142.1	0.630	3.634	76.811	15.921	2.661	0.101	0.203	0.015	0.015	0.009	0.000	0.000	0.000	0.000	1380.03
11	0.6856	1123.3	1143.1	0.626	3.645	76.778	15.852	2.724	0.109	0.222	0.017	0.018	0.009	0.000	0.000	0.000	0.000	1380.59
12	0.6783	1114.7	1134.4	0.622	3.488	78.056	14.982	2.480	0.105	0.217	0.019	0.020	0.012	0.000	0.000	0.000	0.000	1377.38
13	0.6730	1106.1	1125.7	0.610	3.530	78.737	14.579	2.238	0.089	0.175	0.015	0.015	0.011	0.000	0.000	0.000	0.000	1372.17
14	0.6620	1094.5	1113.9	0.591	3.235	80.496	13.586	1.847	0.074	0.138	0.012	0.012	0.009	0.000	0.000	0.000	0.000	1369.01
15	0.6565	1087.2	1106.5	0.575	3.188	81.247	13.186	1.624	0.059	0.097	0.009	0.007	0.008	0.000	0.000	0.000	0.000	1365.59
16	0.6580	1088.7	1108.0	0.585	3.225	81.117	13.097	1.788	0.063	0.103	0.009	0.007	0.008	0.000	0.000	0.000	0.000	1365.87
17	0.6588	1089.9	1109.2	0.584	3.221	81.092	13.019	1.872	0.069	0.118	0.010	0.008	0.007	0.000	0.000	0.000	0.000	1366.63
18	0.6559	1086.7	1105.9	0.619	3.095	81.700	12.536	1.836	0.070	0.116	0.010	0.008	0.008	0.000	0.000	0.000	0.000	1365.54
19	0.6580	1089.9	1109.2	0.618	3.098	81.332	12.842	1.901	0.069	0.113	0.010	0.008	0.009	0.000	0.000	0.000	0.000	1367.39
20	0.6528	1081.2	1100.4	0.640	3.106	82.232	12.095	1.711	0.070	0.118	0.011	0.008	0.009	0.000	0.000	0.000	0.000	1361.90
21	0.6544	1084.1	1103.3	0.645	3.070	81.821	12.632	1.629	0.067	0.109	0.010	0.008	0.009	0.000	0.000	0.000	0.000	1363.88
22	0.6498	1076.1	1095.2	0.633	3.145	82.787	11.580	1.626	0.073	0.125	0.012	0.010	0.010	0.000	0.000	0.000	0.000	1358.56
23	0.6603	1092.1	1111.4	0.591	3.218	80.804	13.315	1.841	0.074	0.128	0.011	0.009	0.009	0.000	0.000	0.000	0.000	1367.80
24	0.6673	1103.5	1123.1	0.575	3.205	79.786	14.010	2.124	0.091	0.173	0.014	0.013	0.009	0.000	0.000	0.000	0.000	1374.83
25	0.6747	1115.3	1135.1	0.540	3.228	78.822	14.535	2.454	0.120	0.256	0.019	0.019	0.008	0.000	0.000	0.000	0.000	1381.92
26	0.6849	1126.3	1146.2	0.488	3.603	76.970	15.754	2.744	0.117	0.255	0.024	0.029	0.015	0.000	0.000	0.000	0.000	1385.04
27	0.6872	1134.1	1154.2	0.475	3.362	76.756	16.082	2.785	0.142	0.327	0.028	0.033	0.009	0.000	0.000	0.000	0.000	1392.26
28	0.6829	1125.5	1145.4	0.486	3.472	76.632	16.805	2.310	0.089	0.178	0.012	0.012	0.005	0.000	0.000	0.000	0.000	1386.05
29	0.6766	1116.4	1136.2	0.471	3.460	77.734	15.893	2.152	0.085	0.172	0.013	0.015	0.006	0.000	0.000	0.000	0.000	1381.22
30	0.6634	1094.5	1113.9	0.498	3.504	79.820	14.265	1.732	0.058	0.103	0.007	0.007	0.005	0.000	0.000	0.000	0.000	1367.66
31	0.6563	1085.4	1104.6	0.532	3.345	81.240	13.009	1.728	0.052	0.080	0.006	0.005	0.003	0.000	0.000	0.000	0.000	1363.50
AVG	0.6748	1110.0	1129.8	0.573	3.513	78.302	15.075	2.244	0.087	0.171	0.014	0.014	0.008	0.000	0.000	0.000	0.000	1375.35

Zone 273

GQ Source Daily Summary

January 2011

Number: 041 **Pressure Base:** 14.730 **Contract Day:** 1
Name: BISMARCK-DICKINSON **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	NZ	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6182	1030.1	1048.3	0.679	2.911	88.309	7.148	0.845	0.040	0.043	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1333.30
2	0.6162	1026.5	1044.7	0.704	2.895	88.771	6.667	0.852	0.042	0.044	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1330.91
3	0.6206	1033.8	1052.1	0.660	2.940	87.900	7.440	0.953	0.041	0.043	0.009	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1335.49
4	0.6199	1032.6	1050.9	0.665	2.936	88.002	7.388	0.902	0.040	0.042	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1334.74
5	0.6232	1037.9	1056.3	0.620	2.993	87.345	7.954	0.986	0.039	0.041	0.008	0.005	0.010	0.000	0.000	0.000	0.000	0.000	1338.03
6	0.6275	1044.3	1062.8	0.548	3.113	86.468	8.688	1.086	0.037	0.039	0.007	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1341.69
7	0.6274	1044.8	1063.3	0.573	3.036	86.590	8.558	1.142	0.039	0.041	0.007	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1342.42
8	0.6256	1042.0	1060.4	0.625	2.964	86.919	8.341	1.045	0.039	0.041	0.008	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1340.68
9	0.6196	1032.4	1050.7	0.710	2.849	88.155	7.255	0.920	0.041	0.043	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1334.80
10	0.6143	1023.9	1042.0	0.784	2.760	89.225	6.251	0.829	0.044	0.046	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1329.46
11	0.6146	1023.5	1041.6	0.758	2.848	89.124	6.356	0.794	0.043	0.046	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1328.68
12	0.6147	1023.8	1042.0	0.755	2.843	89.108	6.372	0.801	0.044	0.046	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1329.41
13	0.6136	1021.7	1039.8	0.748	2.880	89.302	6.171	0.780	0.043	0.046	0.010	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1327.12
14	0.6126	1020.7	1038.7	0.746	2.856	89.461	6.069	0.749	0.043	0.045	0.010	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1326.02
15	0.6127	1019.9	1037.9	0.709	2.966	89.379	6.091	0.742	0.041	0.044	0.010	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1325.31
16	0.6122	1018.9	1037.0	0.710	2.978	89.460	6.011	0.729	0.042	0.045	0.010	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1325.44
17	0.6123	1019.1	1037.2	0.723	2.958	89.474	5.984	0.746	0.042	0.045	0.010	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1326.04
18	0.6121	1019.4	1037.4	0.771	2.845	89.605	5.920	0.735	0.044	0.047	0.011	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1326.17
19	0.6123	1019.7	1037.7	0.771	2.849	89.572	5.934	0.749	0.045	0.048	0.011	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1326.09
20	0.6122	1019.5	1037.5	0.772	2.844	89.583	5.946	0.728	0.045	0.048	0.011	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1327.39
21	0.6121	1020.5	1038.5	0.809	2.727	89.669	5.924	0.740	0.047	0.051	0.012	0.008	0.015	0.000	0.000	0.000	0.000	0.000	1319.49
22	0.6075	1010.5	1028.4	0.760	2.970	90.397	5.125	0.625	0.043	0.046	0.011	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1322.16
23	0.6106	1015.1	1033.1	0.710	3.055	89.759	5.662	0.697	0.042	0.045	0.010	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1324.28
24	0.6125	1018.4	1036.5	0.689	3.072	89.378	6.001	0.744	0.041	0.044	0.010	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1327.89
25	0.6163	1024.3	1042.5	0.616	3.178	88.624	6.608	0.862	0.039	0.045	0.011	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1334.85
26	0.6250	1036.6	1055.0	0.404	3.575	86.602	8.343	1.005	0.029	0.032	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1334.39
27	0.6258	1037.6	1055.9	0.390	3.605	86.485	8.393	1.055	0.029	0.033	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1334.81
28	0.6269	1039.8	1058.2	0.383	3.593	86.254	8.633	1.064	0.030	0.034	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1336.41
29	0.6257	1037.5	1055.9	0.394	3.594	86.449	8.493	0.998	0.029	0.033	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1334.90
30	0.6183	1024.5	1042.6	0.469	3.577	87.876	7.179	0.830	0.027	0.031	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1325.99
31	0.6163	1023.8	1042.0	0.617	3.207	88.535	6.735	0.803	0.038	0.042	0.008	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1327.25
Avg	0.6174	1027.0	1045.4	0.654	3.046	88.445	6.892	0.856	0.040	0.043	0.009	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1330.45

Zone 28

GQ Source Daily Summary

January 2011

Number: 271 **Pressure Base:** 14,730 **Contract Day:** 1
Name: DICKINSON AREA **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	M2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6148	1024.8	1043.0	0.687	2.887	88.891	6.640	0.813	0.037	0.040	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	1330.13
2	0.6182	1030.3	1048.5	0.670	2.896	88.320	7.084	0.947	0.038	0.041	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	1333.60
3	0.6188	1031.7	1049.9	0.650	2.899	88.135	7.329	0.907	0.037	0.039	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	1334.73
4	0.6189	1031.7	1049.9	0.656	2.905	88.121	7.316	0.923	0.037	0.039	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	1334.56
5	0.6262	1042.6	1061.1	0.539	3.097	86.618	8.603	1.073	0.033	0.036	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1340.93
6	0.6254	1042.2	1060.6	0.562	3.019	86.851	8.380	1.113	0.035	0.037	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1341.14
7	0.6257	1042.5	1060.9	0.580	2.999	86.809	8.441	1.096	0.035	0.038	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1341.21
8	0.6222	1036.9	1055.3	0.651	2.905	87.547	7.791	1.024	0.038	0.040	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	1337.76
9	0.6132	1022.5	1040.6	0.773	2.748	89.334	6.255	0.804	0.039	0.040	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	1328.77
10	0.6136	1022.7	1040.8	0.756	2.793	89.235	6.295	0.810	0.040	0.043	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	1328.73
11	0.6136	1022.3	1040.4	0.749	2.832	89.237	6.287	0.801	0.041	0.044	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1328.16
12	0.6139	1022.8	1040.9	0.746	2.831	89.161	6.375	0.795	0.040	0.044	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	1328.56
13	0.6114	1018.5	1036.5	0.746	2.865	89.622	5.910	0.767	0.040	0.043	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	1325.58
14	0.6121	1020.0	1038.1	0.720	2.870	89.445	6.130	0.746	0.039	0.042	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	1326.88
15	0.6114	1017.9	1035.9	0.695	2.974	89.523	5.992	0.733	0.037	0.041	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	1324.84
16	0.6113	1016.2	1034.2	0.726	3.027	89.557	5.873	0.728	0.039	0.042	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	1322.71
17	0.6122	1019.4	1037.5	0.738	2.891	89.462	6.056	0.763	0.040	0.043	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	1325.98
18	0.6112	1018.5	1036.6	0.766	2.811	89.685	5.899	0.743	0.042	0.045	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1325.87
19	0.6102	1016.6	1034.6	0.763	2.839	89.860	5.717	0.725	0.041	0.045	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1324.47
20	0.6116	1019.5	1037.5	0.774	2.772	89.633	5.984	0.739	0.042	0.047	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1326.75
21	0.6086	1014.7	1032.7	0.811	2.725	90.247	5.423	0.694	0.043	0.047	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1323.79
22	0.6071	1009.8	1027.7	0.716	3.028	90.326	5.212	0.629	0.038	0.041	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1319.01
23	0.6119	1016.2	1034.2	0.726	3.083	89.463	5.880	0.756	0.040	0.044	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	1322.08
24	0.6141	1021.2	1039.3	0.637	3.112	88.950	6.422	0.796	0.036	0.040	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	1326.26
25	0.6203	1030.0	1048.3	0.483	3.401	87.568	7.542	0.941	0.030	0.033	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1330.91
26	0.6221	1032.1	1050.4	0.401	3.563	87.150	7.822	1.010	0.025	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1337.12
27	0.6266	1040.0	1058.5	0.364	3.563	86.262	8.668	1.086	0.026	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1331.76
28	0.6259	1037.8	1056.2	0.370	3.627	86.332	8.594	1.021	0.025	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1334.98
29	0.6214	1030.9	1049.1	0.412	3.555	87.231	7.811	0.937	0.025	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1330.92
30	0.6183	1021.8	1039.9	0.506	3.681	87.838	7.082	0.837	0.026	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1322.58
31	0.6154	1024.3	1042.4	0.674	2.998	88.758	6.670	0.806	0.040	0.045	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	1328.77
Avg	0.6164	1026.0	1043.9	0.647	3.039	88.555	6.822	0.857	0.036	0.040	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	1329.66

Zone 31

GQ Source Daily Summary

January 2011

Number: 051

Pressure Base: 14.730

Contract Day: 1

Name: CABIN CR-DICKINSON

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6145	1023.7	1041.8	0.712	2.903	89.129	6.278	0.864	0.042	0.046	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1328.97
2	0.6177	1028.5	1046.8	0.683	2.954	88.543	6.729	0.979	0.042	0.045	0.009	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1331.79
3	0.6172	1027.9	1046.1	0.685	2.939	88.596	6.759	0.911	0.041	0.044	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1331.53
4	0.6205	1033.3	1051.5	0.642	2.990	87.921	7.358	0.983	0.040	0.043	0.008	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1334.91
5	0.6249	1039.6	1058.0	0.565	3.128	87.037	8.071	1.100	0.038	0.041	0.007	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1338.44
6	0.6243	1039.2	1057.6	0.594	3.049	87.283	7.795	1.173	0.040	0.044	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1338.62
7	0.6238	1038.5	1056.9	0.624	3.003	87.328	7.865	1.073	0.040	0.043	0.008	0.006	0.010	0.000	0.000	0.000	0.000	0.000	1338.17
8	0.6198	1032.5	1050.8	0.695	2.889	88.183	7.103	1.013	0.043	0.046	0.009	0.006	0.012	0.000	0.000	0.000	0.000	0.000	1334.68
9	0.6106	1017.9	1035.9	0.828	2.709	90.027	5.523	0.790	0.044	0.046	0.011	0.007	0.014	0.000	0.000	0.000	0.000	0.000	1325.67
10	0.6119	1019.2	1037.2	0.781	2.821	89.711	5.768	0.796	0.044	0.048	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1326.02
11	0.6130	1019.5	1037.6	0.765	2.932	89.459	5.911	0.810	0.044	0.047	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1325.23
12	0.6123	1019.5	1037.6	0.762	2.871	89.595	5.853	0.796	0.044	0.048	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1325.99
13	0.6107	1017.2	1035.2	0.764	2.858	89.896	5.600	0.762	0.043	0.047	0.010	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1324.69
14	0.6104	1016.1	1034.1	0.733	2.951	89.878	5.570	0.751	0.042	0.046	0.010	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1323.50
15	0.6101	1015.2	1033.1	0.726	2.980	89.925	5.519	0.734	0.042	0.046	0.010	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1322.75
16	0.6094	1013.7	1031.7	0.732	2.996	90.061	5.367	0.727	0.042	0.046	0.010	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1321.58
17	0.6103	1016.4	1034.4	0.773	2.855	89.986	5.506	0.755	0.045	0.049	0.011	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1324.12
18	0.6108	1017.0	1035.0	0.783	2.846	89.917	5.566	0.758	0.046	0.050	0.011	0.008	0.015	0.000	0.000	0.000	0.000	0.000	1324.39
19	0.6091	1014.0	1031.9	0.784	2.873	90.211	5.287	0.717	0.045	0.050	0.011	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1322.25
20	0.6109	1018.0	1036.0	0.798	2.780	89.916	5.616	0.758	0.047	0.051	0.012	0.008	0.014	0.000	0.000	0.000	0.000	0.000	1325.45
21	0.6059	1009.2	1027.0	0.826	2.805	90.865	4.716	0.655	0.046	0.050	0.012	0.008	0.016	0.000	0.000	0.000	0.000	0.000	1319.38
22	0.6074	1009.6	1027.4	0.730	3.063	90.422	4.992	0.675	0.042	0.046	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1318.35
23	0.6100	1014.2	1032.2	0.717	3.042	89.934	5.458	0.730	0.042	0.046	0.011	0.007	0.013	0.000	0.000	0.000	0.000	0.000	1321.62
24	0.6154	1022.6	1040.7	0.630	3.175	88.831	6.389	0.865	0.040	0.044	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1326.64
25	0.6215	1030.2	1048.5	0.434	3.584	87.353	7.561	0.992	0.030	0.035	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1329.96
26	0.6242	1034.5	1052.8	0.395	3.636	86.847	7.957	1.090	0.030	0.035	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1332.60
27	0.6239	1034.3	1052.6	0.392	3.630	86.864	7.988	1.051	0.030	0.036	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1332.57
28	0.6234	1033.0	1051.3	0.401	3.644	87.003	7.804	1.071	0.031	0.036	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1331.49
29	0.6169	1021.6	1039.7	0.461	3.637	88.186	6.772	0.872	0.029	0.034	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1323.72
30	0.6136	1017.6	1035.6	0.563	3.412	88.973	6.165	0.800	0.033	0.038	0.006	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1322.08
31	0.6143	1021.7	1039.8	0.704	3.017	89.129	6.207	0.819	0.044	0.050	0.010	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1326.59
Avg	0.6151	1023.0	1041.2	0.667	3.064	88.936	6.357	0.867	0.040	0.044	0.009	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1327.54

Zone 3a

GQ Source Daily Summary

January 2011

Number: 111 **Pressure Base:** 14.730 **Contract Day:** 1
Name: LITTLE KNIFE PLANT **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6819	1153.2	1173.6	0.000	2.438	74.078	23.008	0.462	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.29
2	0.6826	1154.1	1174.6	0.000	2.450	73.912	23.186	0.438	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.68
3	0.6836	1155.4	1175.9	0.000	2.464	73.711	23.363	0.447	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.23
4	0.6829	1154.8	1175.2	0.000	2.435	73.852	23.265	0.433	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.20
5	0.6818	1153.4	1173.8	0.000	2.427	74.071	23.043	0.444	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.50
6	0.6830	1154.8	1175.3	0.000	2.448	73.850	23.216	0.471	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.09
7	0.6837	1156.1	1176.6	0.000	2.432	73.760	23.285	0.507	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.96
8	0.6825	1154.0	1174.4	0.000	2.453	73.944	23.125	0.462	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.55
9	0.6831	1154.9	1175.3	0.000	2.455	73.944	23.125	0.462	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.03
10	0.6826	1154.1	1174.5	0.000	2.455	73.951	23.107	0.478	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1421.66
11	0.6827	1154.9	1175.3	0.000	2.414	74.003	23.028	0.539	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.47
12	0.6843	1157.1	1177.6	0.000	2.427	73.773	23.155	0.624	0.007	0.011	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1422.56
13	0.6820	1153.0	1173.5	0.000	2.458	74.093	22.939	0.493	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.96
14	0.6819	1153.3	1173.7	0.000	2.437	74.097	22.969	0.481	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.35
15	0.6823	1153.9	1174.3	0.000	2.434	74.063	22.972	0.515	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.69
16	0.6818	1153.2	1173.6	0.000	2.438	74.125	22.936	0.484	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1421.26
17	0.6823	1153.9	1174.4	0.000	2.437	74.011	23.061	0.474	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1421.70
18	0.6819	1153.9	1174.3	0.000	2.406	74.070	23.044	0.463	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.00
19	0.6836	1156.3	1176.7	0.000	2.414	73.770	23.305	0.493	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.24
20	0.6832	1155.3	1175.8	0.000	2.431	73.822	23.268	0.462	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.55
21	0.6839	1156.5	1177.0	0.000	2.427	73.734	23.308	0.514	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.23
22	0.6828	1154.8	1175.2	0.000	2.430	73.962	23.060	0.531	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.24
23	0.6824	1153.9	1174.3	0.000	2.442	74.030	23.012	0.500	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1421.63
24	0.6819	1153.5	1174.0	0.000	2.425	74.112	22.947	0.499	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1421.60
25	0.6833	1155.7	1176.2	0.000	2.425	73.836	23.213	0.509	0.007	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.82
26	0.6832	1155.7	1176.2	0.000	2.416	73.856	23.204	0.507	0.007	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.92
27	0.6828	1155.7	1176.1	0.000	2.378	73.944	23.158	0.503	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.32
28	0.6826	1154.7	1175.2	0.000	2.414	73.931	23.195	0.444	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.40
29	0.6823	1154.5	1174.9	0.000	2.400	73.974	23.186	0.425	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.41
30	0.6825	1154.9	1175.3	0.000	2.394	73.946	23.206	0.439	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.70
31	0.6823	1154.5	1175.0	0.000	2.399	73.987	23.138	0.461	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.43
Av9	0.6827	1155.0	1175.1	0.000	2.429	73.940	23.131	0.484	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.18

Zone 33

GQ Source Daily Summary

January 2011

Number: 331 **Pressure Base:** 14.730 **Contract Day:** 1
Name: MARMARTH PLANT **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7945	1135.8	1155.9	1.652	11.591	54.331	29.255	2.822	0.078	0.232	0.010	0.025	0.004	0.000	0.000	0.000	0.000	0.000	1296.77
2	0.7973	1138.5	1158.7	1.773	11.498	53.954	29.560	2.859	0.079	0.237	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1297.68
3	0.7978	1140.0	1160.1	1.801	11.414	53.919	29.628	2.882	0.080	0.237	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1298.90
4	0.8008	1147.3	1167.6	1.819	11.218	53.678	29.779	3.100	0.090	0.271	0.012	0.030	0.004	0.000	0.000	0.000	0.000	0.000	1304.84
5	0.8003	1147.8	1168.1	1.772	11.223	53.648	29.900	3.073	0.085	0.255	0.011	0.028	0.004	0.000	0.000	0.000	0.000	0.000	1305.67
6	0.7986	1142.7	1162.9	1.852	11.246	53.898	29.703	2.943	0.079	0.238	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1301.32
7	0.8105	1165.4	1186.0	1.854	10.975	52.894	29.863	3.811	0.129	0.401	0.018	0.048	0.007	0.000	0.000	0.000	0.000	0.000	1317.28
8	0.8010	1148.6	1169.0	1.898	11.038	53.513	30.222	2.973	0.079	0.237	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1306.15
9	0.7981	1143.0	1163.3	1.860	11.171	53.780	30.075	2.792	0.073	0.215	0.009	0.025	0.003	0.000	0.000	0.000	0.000	0.000	1302.11
10	0.8000	1143.7	1163.9	1.938	11.193	53.658	29.927	2.934	0.079	0.234	0.010	0.025	0.003	0.000	0.000	0.000	0.000	0.000	1301.28
11	0.8085	1160.7	1181.2	1.901	11.000	52.961	29.995	3.612	0.117	0.355	0.015	0.039	0.004	0.000	0.000	0.000	0.000	0.000	1313.67
12	0.8071	1157.8	1178.3	1.909	11.039	53.003	30.136	3.423	0.107	0.327	0.014	0.037	0.005	0.000	0.000	0.000	0.000	0.000	1311.49
13	0.7986	1142.4	1162.6	1.873	11.234	53.889	29.725	2.923	0.079	0.236	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1301.00
14	0.7984	1141.4	1161.6	1.945	11.164	53.805	29.983	2.798	0.073	0.215	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1300.07
15	0.8031	1148.2	1168.6	1.999	11.113	53.195	30.330	2.998	0.081	0.243	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1303.95
16	0.8037	1146.5	1166.8	2.030	11.221	53.334	29.847	3.176	0.086	0.262	0.011	0.029	0.004	0.000	0.000	0.000	0.000	0.000	1301.56
17	0.8006	1143.1	1163.3	1.993	11.203	53.431	30.214	2.841	0.072	0.212	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1300.09
18	0.7985	1138.8	1159.0	1.981	11.281	53.799	29.819	2.809	0.070	0.207	0.008	0.022	0.003	0.000	0.000	0.000	0.000	0.000	1297.02
19	0.8089	1152.2	1172.6	2.198	11.097	53.713	28.367	4.062	0.123	0.376	0.016	0.043	0.006	0.000	0.000	0.000	0.000	0.000	1303.63
20	0.8038	1141.1	1161.3	2.364	11.049	53.596	29.451	3.187	0.080	0.235	0.010	0.024	0.003	0.000	0.000	0.000	0.000	0.000	1295.38
21	0.8029	1138.4	1158.6	2.364	11.131	53.974	28.806	3.348	0.085	0.252	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1292.98
22	0.8021	1135.9	1156.0	2.395	11.167	54.059	28.728	3.295	0.081	0.239	0.009	0.024	0.003	0.000	0.000	0.000	0.000	0.000	1290.70
23	0.8062	1137.5	1157.7	2.636	11.084	53.515	29.095	3.295	0.084	0.250	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1289.31
24	0.8086	1142.1	1162.3	2.691	10.946	53.152	29.496	3.335	0.085	0.253	0.011	0.027	0.003	0.000	0.000	0.000	0.000	0.000	1292.59
25	0.8086	1135.3	1155.4	2.797	11.197	53.641	28.281	3.649	0.098	0.292	0.012	0.030	0.003	0.000	0.000	0.000	0.000	0.000	1284.81
26	0.8003	1123.5	1143.4	2.406	11.730	54.745	27.157	3.534	0.096	0.285	0.012	0.031	0.003	0.000	0.000	0.000	0.000	0.000	1277.93
27	0.8172	1156.5	1177.0	2.542	11.097	53.003	28.067	4.761	0.118	0.353	0.016	0.043	0.007	0.000	0.000	0.000	0.000	0.000	1301.71
28	0.8027	1134.3	1154.4	2.402	11.310	53.909	28.738	3.289	0.080	0.235	0.010	0.025	0.003	0.000	0.000	0.000	0.000	0.000	1288.40
29	0.8094	1147.0	1167.3	2.374	11.197	53.578	28.246	4.187	0.096	0.278	0.011	0.029	0.003	0.000	0.000	0.000	0.000	0.000	1297.17
30	0.8098	1149.6	1169.9	2.402	11.037	53.519	28.473	4.133	0.102	0.292	0.011	0.028	0.003	0.000	0.000	0.000	0.000	0.000	1300.03
31	0.8165	1105.6	1125.2	2.305	14.502	51.280	27.541	3.962	0.096	0.274	0.011	0.027	0.003	0.000	0.000	0.000	0.000	0.000	1245.31
Avg	0.8037	1143.0	1163.2	2.120	11.302	53.561	29.303	3.316	0.089	0.265	0.011	0.029	0.004	0.000	0.000	0.000	0.000	0.000	1297.44

*** End of Report***

Zone 34

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	1201140	Specific Gravity:	0.5725
GQ Source Name:	EAGLE 8B ND	BTU Base:	Dry
Effective Date:	6/7/2010 9:00:00 AM	Measured Heat Value:	979.18
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	979.09
Pressure Base:	14.730	Wet Heat Value:	962.05
Viscosity:		As Deliv. Heat Value:	979.09
		Sample Pressure:	29.00
		Sample Temperature:	

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	95.949		CO2	Carbon Dioxide	0.088
C2	Ethane	0.311	0.083	N2	Nitrogen	3.635
C3	Propane	0.009	0.003	O2	Oxygen	0.000
IC4	Iso-Butane	0.007	0.002	HE	Helium	
NC4	N-Butane	0.000	0.000	H2	Hydrogen	
IC5	Iso-Pentane	0.000	0.000	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.000	0.000	AR	Argon	
C6	Hexane	0.000	0.000	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane			Neo-C5	Neo-Pentane	
C9	Nonane					
C10	Decane					

Totals 100.000% 0.088 GPM

Sample Date: 6/7/2010 12:00:00 AM
Sample Type: Spot
Sample Tech: MG
Sample Remarks:

Analysis Tech: Mary Berger

Analysis Remarks:

Zone 35

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	Chromatograph	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 11	DEC 10	NOV 10	OCT 10	SEPT 10	AUG 10	JULY 10	JUNE 10	MAY 10	APR 10	MAR 10	FEB 10	ZONE
MT/ND	211	Sidney Area	1199	1212	1218	1210	1206	1209	1208	1204	1197	1199	1197	1193	1132	21
ND	24	Williston Area	1195	1204	1207	1208	1193	1200	1212	1208	1171	1186	1192	1200	1161	24
ND	25	Watford City Area	1133	1150	1135	1133	1130	1133	1129	1130	1134	1132	1128	1132	1125	25
ND	261	Williston - Tioga - Minot Line	1150	1171	1154	1135	1140	1145	1161	1160	1147	1134	1150	1156	1144	261
ND	262	Minot Area	1185	1182	1191	1186	1190	1191	1189	1193	1188	1187	1184	1175	1164	262
ND	263	Tioga - Portal	1107	1094	1100	1107	1120	1133	1127	1124	1104	1102	1110	1090	1078	263
ND	264	Williston - Ray	1195	1204	1207	1208	1193	1200	1212	1208	1171	1186	1192	1200	1161	264
ND	271	Bismarck - Cleveland	1172	1130	1160	1172	1190	1191	1187	1193	1186	1185	1183	1164	1117	271
ND	272	Cleveland - Mapleton	1171	1130	1159	1171	1190	1190	1187	1193	1187	1186	1182	1163	1115	272
ND	273	Cleveland - Grafton	1171	1130	1159	1172	1190	1190	1187	1193	1187	1186	1182	1163	1116	273
ND	28	Bismarck - Cabin Creek	1129	1045	1055	1097	1173	1191	1182	1193	1186	1174	1178	1055	1023	28
ND	31	Dickinson Area	1051	1044	1053	1082	1088	1056	1065	1023	1053	1066	1033	1029	1021	31
ND/MT	32	Cabin Creek - Dickinson	1032	1041	1050	1079	1075	1040	1031	986	1043	1005	996	1022	1019	32
ND	33	Killdeer	1173	1175	1175	1177	1179	1179	1177	1177	1172	1169	1168	1169	1163	33
ND	34	Bowman Area	1164	1163	1172	1167	1163	1157	1157	1156	1165	1162	1170	1169	1172	34
ND	35	Baker Field - North Dakota	979	979	979	979	979	979	979	979	979	979	978	978	978	35

**THERMAL ZONE VARIANCE
DOCUMENTATION**

January 2011

ZONE	BTU VARIANCE	REASON
271	-30	Lower BTU gas coming from the West
272	-29	Lower BTU gas coming from the West
273	-29	Lower BTU gas coming from the West