

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

October 8, 2009

**RECEIVED**

OCT 13 2009

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

**PUBLIC SERVICE COMMISSION**

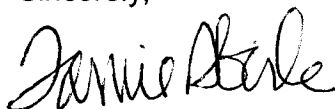
Re: Case No. 11,006 (Therm Billing)  
Monthly Report – August 2009

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 September 2009.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of August 2009. 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 August.

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  
SEPT 2009

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.1212
12	327	BISMARCK	28	1.1222
12	343	CARRINGTON	273	1.1222
12	344	CLEVELAND	272	1.1143
12	364	CAVALIER	273	1.1458
12	365	DAWSON	271	1.1133
12	374	FT TOTTEN	273	1.1301
12	375	DEVILS LAKE	273	1.1301
12	379	BARLOW	273	1.1222
12	387	ELDRIDGE	272	1.1222
12	411	GLEN ULLIN	31	.9936
12	417	GRAFTON	273	1.1537
12	439	HANKINSON	600	1.0768
12	449	JAMESTOWN	272	1.1301
12	463	LANGDON	273	1.1222
12	475	LINTON	802	.9707
12	478	LINCOLN	28	1.1222
12	494	MEDINA	271	1.1133
12	498	MANDAN	28	1.1222
12	524	NEW SALEM	28	1.0985
12	532	NEW ROCKFORD	273	1.1222
12	539	PARK RIVER	273	1.1458
12	574	SANBORN	272	1.1301
12	593	STEELE	271	1.1133
12	598	SHEYENNE	273	1.1301
12	610	TAPPEN	271	1.1133
12	625	VALLEY CITY	272	1.1379
12	629	WALHALLA	273	1.1458
12	647	WILTON	262	1.1003
12	717	SPIRITWOOD	272	1.1301
12	718	FAIRMOUNT	600	1.0746
12	732	MSR SITE	273	1.1222
12	733	PAR SITE	273	1.1222
15	303	ALEXANDER	25	1.0673
15	308	ARNEGARD	25	1.0673

MONTANA-DAKOTA UTILITIES CO.  
Therm Billing Factor  
SEPT 2009

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	318	BEACH	32	.9611
15	319	BELFIELD	32	.9681
15	323	BERTHOLD	262	1.1003
15	330	BOWMAN	34	1.0751
15	337	BURLINGTON	262	1.1241
15	368	DES LACS	262	1.1083
15	369	DICKINSON	31	.9865
15	384	EPPING	264	1.1098
15	407	GLADSTONE	31	.9865
15	413	GOLVA	32	.9470
15	416	GARRISON	262	1.1083
15	429	HEBRON	31	.9936
15	459	KILLDEER	33	1.0956
15	469	LEFOR	31	.9865
15	474	LIGNITE	263	1.0854
15	500	MARMARTH	34	1.0830
15	505	MINOT	262	1.1241
15	510	MOTT	31	.9865
15	512	MAX	262	1.1003
15	522	NEW ENGLAND	31	.9793
15	540	PALERMO	262	1.1003
15	558	RAY	264	1.1098
15	561	REGENT	31	.9865
15	563	RHAME	34	1.0672
15	564	RICHARDTON	31	.9793
15	568	ROSS	261	1.0587
15	572	RUTHVILLE	262	1.1241
15	583	SENTINEL BUTTE	32	.9611
15	588	SOUTH HEART	31	.9793
15	590	SPRINGBROOK	264	1.1098
15	591	STANLEY	261	1.0663
15	605	SURREY	262	1.1241
15	611	TAYLOR	31	.9793
15	616	TIOGA	261	1.0587
15	619	TURTLE LAKE	262	1.1083

MONTANA-DAKOTA UTILITIES CO.  
Therm Billing Factor  
SEPT 2009

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	620	TRENTON	24	1.1178
15	624	UNDERWOOD	262	1.1083
15	632	WATFORD CITY	25	1.0673
15	636	WHEELLOCK	264	1.1018
15	637	WHITE EARTH	261	1.0663
15	642	WILLISTON	24	1.1178
15	646	WASHBURN	262	1.1162
15	664	RIVERDALE	262	1.1083
15	691	FAIRVIEW	24	1.1178
15	712	MINOT AFB	262	1.1241
15	743	BAKER FIELD	35	.8971

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



# GQ Source Daily Summary

August 2009

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	0.6753	1122.6	1142.5	0.255	3.277	77.523	16.905	1.689	0.085	0.208	0.019	0.023	0.016						1390.34
2	0.6627	1103.1	1122.6	0.234	3.327	78.868	16.426	1.045	0.027	0.055	0.003	0.004	0.010						1379.04
3	0.6662	1108.0	1127.6	0.253	3.329	78.328	16.793	1.191	0.031	0.060	0.003	0.003	0.008						1381.48
4	0.6740	1120.6	1140.5	0.266	3.263	77.516	17.079	1.621	0.064	0.150	0.012	0.015	0.013						1389.19
5	0.6715	1116.6	1136.4	0.282	3.255	77.566	17.326	1.456	0.038	0.066	0.002	0.001	0.008						1386.78
6	0.6679	1111.4	1131.1	0.273	3.245	78.166	16.858	1.360	0.032	0.054	0.001	0.000	0.010						1384.04
7	0.6629	1103.6	1123.2	0.207	3.352	78.886	16.307	1.163	0.027	0.046	0.001	0.000	0.011						1379.48
8	0.6532	1089.2	1108.5	0.105	3.471	80.200	15.508	0.664	0.014	0.024	0.000	0.000	0.014						1371.64
9	0.6638	1105.7	1125.3	0.165	3.368	78.726	16.467	1.163	0.031	0.060	0.002	0.002	0.015						1381.24
10	0.6729	1119.4	1139.3	0.219	3.307	77.482	17.209	1.630	0.045	0.087	0.003	0.003	0.015						1388.84
11	0.6659	1108.3	1127.9	0.170	3.408	78.494	16.457	1.351	0.034	0.066	0.003	0.002	0.015						1382.17
12	0.6706	1115.6	1135.3	0.223	3.317	77.894	16.836	1.586	0.042	0.081	0.003	0.004	0.014						1388.46
13	0.6721	1118.4	1138.2	0.267	3.220	77.649	17.116	1.606	0.045	0.081	0.003	0.002	0.011						1388.40
14	0.6555	1093.4	1112.7	0.109	3.429	79.947	15.650	0.766	0.023	0.052	0.004	0.006	0.015						1374.41
15	0.6473	1080.3	1099.4	0.059	3.532	81.001	15.022	0.359	0.005	0.009	0.000	0.000	0.013						1366.58
16	0.6497	1083.3	1102.5	0.084	3.540	80.626	15.263	0.454	0.007	0.012	0.000	0.000	0.013						1367.79
17	0.6529	1089.4	1108.7	0.082	3.467	80.294	15.455	0.592	0.024	0.059	0.005	0.006	0.016						1372.19
18	0.6494	1084.1	1103.3	0.069	3.492	80.661	15.322	0.416	0.008	0.015	0.000	0.000	0.017						1369.04
19	0.6525	1089.4	1108.7	0.073	3.449	80.383	15.394	0.571	0.027	0.070	0.007	0.008	0.018						1372.53
20	0.6592	1098.9	1118.4	0.103	3.446	79.634	15.660	0.919	0.053	0.136	0.014	0.017	0.019						1377.51
21	0.6606	1099.7	1119.2	0.160	3.448	79.093	16.260	0.949	0.023	0.045	0.002	0.002	0.016						1377.00
22	0.6736	1120.1	1139.9	0.204	3.357	76.833	18.265	1.244	0.027	0.051	0.001	0.002	0.016						1388.97
23	0.6681	1110.6	1130.3	0.205	3.413	78.124	16.737	1.408	0.033	0.063	0.002	0.002	0.013						1382.89
24	0.6710	1114.4	1134.1	0.236	3.409	77.748	16.902	1.583	0.038	0.070	0.002	0.002	0.011						1384.55
25	0.6677	1107.4	1127.0	0.246	3.517	78.185	16.555	1.393	0.032	0.057	0.002	0.002	0.012						1379.18
26	0.6734	1117.7	1137.5	0.265	3.394	77.370	17.186	1.657	0.040	0.071	0.002	0.002	0.013						1386.13
27	0.6733	1119.9	1139.8	0.319	3.163	77.360	17.491	1.547	0.039	0.068	0.002	0.002	0.010						1389.04
28	0.6891	1143.6	1163.9	0.282	3.249	76.018	17.446	2.378	0.145	0.379	0.038	0.045	0.020						1402.06
29	0.6882	1141.0	1161.2	0.251	3.374	76.210	17.156	2.343	0.150	0.399	0.041	0.049	0.027						1399.72
30	0.6877	1140.9	1161.1	0.275	3.295	76.206	17.303	2.308	0.138	0.359	0.040	0.051	0.026						1400.16
31	0.6767	1125.1	1145.0	0.233	3.291	77.498	16.775	1.757	0.100	0.263	0.026	0.032	0.024						1391.94
Avg	0.6669	1110.0	1129.4	0.199	3.368	78.403	16.553	1.296	0.046	0.104	0.008	0.009	0.015						1382.93

Zone 261

# GQ Source Daily Summary

August 2009

Number: 091      Pressure Base: 14.730      Contract Day: 1

Name: MINOT      Temperature Base:      Contract Hour: 9

Day	Relative Density		Heating Value		CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT	
	Wet	Dry	Wet	Dry																	
1	0.7217	1141.7	1161.9	0.483	6.139	69.213	20.647	3.180	0.118	0.204	0.006	0.006	0.003	0.008	0.000	0.000	0.000	0.000	0.000	1367.70	
2	0.7254	1144.6	1164.9	0.494	6.293	68.649	20.862	3.339	0.126	0.220	0.007	0.007	0.004	0.007	0.000	0.000	0.000	0.000	0.000	1367.69	
3	0.7256	1144.9	1165.1	0.488	6.302	68.665	20.814	3.342	0.133	0.237	0.008	0.008	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1367.82	
4	0.7267	1147.6	1167.9	0.480	6.248	68.612	20.826	3.386	0.145	0.274	0.013	0.012	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1370.05	
5	0.7249	1143.5	1163.8	0.481	6.330	68.721	20.818	3.261	0.131	0.235	0.009	0.007	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1366.85	
6	0.7247	1147.4	1167.7	0.483	6.094	68.918	20.706	3.394	0.133	0.248	0.011	0.010	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1371.43	
7	0.7229	1146.1	1166.8	0.489	6.114	68.956	20.642	3.310	0.132	0.243	0.010	0.008	0.004	0.007	0.000	0.000	0.000	0.000	0.000	1370.66	
8	0.7252	1147.0	1167.3	0.492	5.965	69.179	20.698	3.401	0.121	0.215	0.007	0.004	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1371.84	
9	0.7228	1143.2	1163.4	0.498	6.129	69.280	20.335	3.393	0.125	0.220	0.007	0.005	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1370.76	
10	0.7292	1145.6	1165.9	0.497	6.558	68.179	20.775	3.581	0.136	0.241	0.008	0.005	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1368.42	
11	0.7242	1138.0	1158.1	0.465	6.621	68.902	20.265	3.369	0.130	0.229	0.007	0.005	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1365.33	
12	0.7192	1136.5	1156.6	0.448	6.273	69.861	19.730	3.335	0.121	0.210	0.006	0.004	0.012	0.012	0.000	0.000	0.000	0.000	0.000	1360.94	
13	0.7271	1145.0	1165.3	0.469	6.465	68.415	20.816	3.455	0.130	0.228	0.007	0.004	0.004	0.011	0.000	0.000	0.000	0.000	0.000	1363.81	
14	0.7241	1142.9	1163.1	0.437	6.354	68.996	20.415	3.412	0.132	0.231	0.007	0.005	0.012	0.012	0.000	0.000	0.000	0.000	0.000	1366.54	
15	0.7247	1145.9	1166.2	0.478	6.170	69.033	20.421	3.513	0.130	0.231	0.008	0.005	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1366.91	
16	0.7307	1145.2	1165.5	0.489	6.761	67.947	20.697	3.699	0.140	0.245	0.008	0.006	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1369.86	
17	0.7283	1135.9	1156.0	0.476	7.123	68.127	20.359	3.551	0.130	0.219	0.005	0.001	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1363.39	
18	0.7279	1138.5	1158.7	0.477	6.919	68.043	20.850	3.355	0.127	0.214	0.005	0.002	0.002	0.009	0.000	0.000	0.000	0.000	0.000	1354.55	
19	0.7329	1144.4	1164.7	0.495	7.001	67.359	21.153	3.586	0.139	0.244	0.008	0.007	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1358.13	
20	0.7307	1144.4	1164.7	0.484	6.903	67.885	20.690	3.608	0.147	0.260	0.009	0.007	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1360.48	
21	0.7309	1145.0	1165.3	0.475	6.806	68.005	20.558	3.691	0.153	0.281	0.012	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1360.75	
22	0.7313	1147.4	1167.7	0.478	6.693	67.870	20.871	3.628	0.150	0.279	0.012	0.011	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1363.06	
23	0.7286	1144.9	1165.1	0.474	6.605	68.269	20.671	3.566	0.139	0.251	0.010	0.008	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1365.52	
24	0.7296	1146.6	1166.9	0.478	6.582	68.231	20.578	3.713	0.143	0.252	0.008	0.006	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1364.97	
25	0.7271	1148.0	1168.3	0.468	6.285	68.737	20.418	3.670	0.141	0.255	0.009	0.007	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1366.17	
26	0.7248	1148.1	1168.5	0.468	6.056	69.133	20.357	3.575	0.137	0.249	0.009	0.007	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1370.07	
27	0.7241	1145.7	1166.0	0.475	6.130	69.171	20.302	3.541	0.129	0.229	0.008	0.006	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1372.46	
28	0.7193	1139.0	1159.1	0.458	6.116	69.973	19.685	3.398	0.128	0.221	0.007	0.004	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1370.20	
29	0.7291	1149.7	1170.0	0.490	6.324	68.812	20.042	3.732	0.177	0.364	0.024	0.027	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1366.70	
30	0.7299	1148.7	1169.1	0.507	6.436	68.300	20.740	3.441	0.168	0.351	0.024	0.027	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1370.29	
31	0.7264	1144.0	1164.7	0.480	6.416	68.657	20.559	3.481	0.136	0.245	0.009	0.007	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1368.41	
Avg																					1366.51

*Zone 262*

## Williston Basin Interstate Pipeline Co. GQ Source Analysis

<b>GQ Source Number:</b>	2501030	<b>Specific Gravity:</b>	0.6680
<b>GQ Source Name:</b>	LIGNITE PLANT	<b>BTU Base:</b>	Dry
<b>Effective Date:</b>	8/1/2009 9:00:00 AM	<b>Dry Heat Value:</b>	1140.83
<b>Effective End Date:</b>	1/18/2038 9:14:07 PM	<b>Wet Heat Value:</b>	1120.97
<b>Pressure Base:</b>	14.730	<b>As Deliv. Heat Value:</b>	1140.83
<b>Viscosity:</b>			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	77.769		
C2	Ethane	17.813		4.750
C3	Propane	1.377	0.378	0.378
IC4	Iso-Butane	0.002	0.001	0.001
NC4	N-Butane	0.001	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	0.031	0.014	0.013
CO2	Carbon Dioxide	0.111		
N2	Nitrogen	2.892		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
<b>Totals</b>		99.995	0.393	5.141

**Sample Date:** 8/31/2009 12:00:00 AM  
**Sample Type:** Composite  
**Sample Tech:** sampler  
**Sample Remarks:** Zone 263  
**Analysis Remarks:** \_\_\_\_\_

# GQ Source Daily Summary

August 2009

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

Day	Relative Density		Heating Value		CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
	Wet	Dry	Wet	Dry																
1	0.7228	1140.6	1160.8	0.494	6.282	69.261	20.274	3.287	0.130	0.240	0.010	0.008	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1365.39
2	0.7270	1147.1	1167.4	0.492	6.278	68.831	20.413	3.480	0.153	0.303	0.016	0.016	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1369.23
3	0.7220	1139.2	1159.4	0.482	6.307	69.315	20.298	3.211	0.126	0.229	0.009	0.008	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1364.53
4	0.7209	1141.2	1161.4	0.481	6.084	69.510	20.373	3.180	0.120	0.221	0.009	0.008	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1367.96
5	0.7239	1144.6	1164.8	0.499	6.139	69.254	20.260	3.418	0.134	0.256	0.012	0.012	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1369.03
6	0.7215	1143.6	1163.8	0.500	5.974	69.523	20.332	3.302	0.121	0.220	0.008	0.007	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1370.13
7	0.7237	1142.6	1162.9	0.508	6.219	69.310	20.056	3.519	0.128	0.230	0.009	0.007	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1366.96
8	0.7280	1143.6	1163.8	0.533	6.533	68.521	20.394	3.616	0.134	0.241	0.009	0.007	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1364.03
9	0.7242	1136.1	1156.2	0.478	6.714	68.906	20.179	3.339	0.127	0.228	0.008	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1358.66
10	0.7153	1130.5	1150.5	0.429	6.297	70.566	19.140	3.199	0.120	0.216	0.008	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1360.33
11	0.7219	1139.4	1159.5	0.483	6.288	69.418	20.115	3.328	0.120	0.215	0.008	0.006	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1364.80
12	0.7231	1139.0	1159.1	0.454	6.472	69.277	19.957	3.440	0.132	0.236	0.009	0.007	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1363.14
13	0.7175	1137.4	1157.5	0.447	6.057	70.376	19.373	3.361	0.126	0.228	0.009	0.007	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1366.50
14	0.7229	1146.0	1166.3	0.512	5.937	69.387	20.373	3.418	0.123	0.221	0.008	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1371.73
15	0.7301	1143.3	1163.5	0.502	6.790	68.147	20.451	3.693	0.137	0.248	0.009	0.008	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1361.75
16	0.7306	1141.8	1162.0	0.503	6.935	67.846	20.742	3.582	0.129	0.232	0.009	0.007	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1359.47
17	0.7247	1134.1	1154.2	0.469	6.894	68.718	20.226	3.331	0.122	0.211	0.007	0.005	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1355.88
18	0.7273	1138.8	1159.0	0.486	6.825	68.353	20.551	3.388	0.130	0.235	0.009	0.008	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1359.05
19	0.7297	1139.5	1159.7	0.491	7.000	68.174	20.251	3.644	0.145	0.260	0.010	0.008	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1357.63
20	0.7295	1142.3	1162.5	0.490	6.810	68.207	20.463	3.585	0.144	0.263	0.011	0.009	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1361.15
21	0.7298	1144.8	1165.1	0.481	6.699	68.257	20.472	3.614	0.149	0.284	0.014	0.013	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1363.86
22	0.7268	1141.9	1162.1	0.478	6.610	68.661	20.294	3.537	0.135	0.249	0.011	0.009	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1363.06
23	0.7278	1144.0	1164.3	0.486	6.554	68.705	20.088	3.732	0.143	0.260	0.010	0.008	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1364.76
24	0.7253	1145.1	1165.4	0.473	6.267	69.163	20.019	3.649	0.138	0.256	0.011	0.009	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1368.47
25	0.7230	1144.6	1164.9	0.478	6.078	69.515	19.974	3.554	0.130	0.239	0.009	0.007	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1370.00
26	0.7222	1139.7	1159.9	0.497	6.276	69.534	19.827	3.497	0.122	0.219	0.008	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1364.86
27	0.7192	1137.9	1158.0	0.463	6.156	70.017	19.617	3.373	0.125	0.220	0.008	0.006	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1365.55
28	0.7127	1133.6	1153.7	0.438	5.839	71.290	18.808	3.225	0.131	0.233	0.009	0.008	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1366.62
29	0.7292	1149.6	1170.0	0.514	6.298	68.773	20.228	3.551	0.174	0.380	0.028	0.031	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1370.17
30	0.7290	1150.4	1170.8	0.507	6.252	68.487	20.803	3.377	0.159	0.343	0.023	0.026	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1371.19
31	0.7274	1148.1	1168.5	0.519	6.213	68.733	20.675	3.314	0.151	0.322	0.023	0.027	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1370.09
Av9	0.7245	1142.0	1161.8	0.486	6.390	69.098	20.162	3.443	0.134	0.250	0.011	0.010	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1365.03

Zone 271

# GQ Source Daily Summary

August 2009

Number: 063      Pressure Base: 14.730      Contract Day: 1

Name: CLEVELAND PLANT MAPLETON      Temperature Base:      Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	ICS	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7244	1142.1	1162.3	0.502	6.335	68.915	20.486	3.389	0.128	0.224	0.008	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1365.58
2	0.7252	1144.8	1165.0	0.492	6.258	68.842	20.611	3.378	0.138	0.254	0.011	0.010	0.007	0.000	0.000	0.000	0.000	0.000	1368.05
3	0.7279	1148.5	1168.8	0.490	6.290	68.511	20.766	3.467	0.150	0.287	0.015	0.015	0.009	0.000	0.000	0.000	0.000	0.000	1369.93
4	0.7231	1141.1	1161.3	0.484	6.301	69.046	20.554	3.229	0.129	0.232	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1365.62
5	0.7243	1145.7	1166.0	0.488	6.117	69.069	20.520	3.394	0.134	0.247	0.011	0.011	0.009	0.000	0.000	0.000	0.000	0.000	1370.10
6	0.7232	1144.7	1164.9	0.491	6.080	69.216	20.459	3.345	0.133	0.245	0.011	0.011	0.008	0.000	0.000	0.000	0.000	0.000	1369.79
7	0.7230	1144.3	1164.6	0.502	6.063	69.327	20.278	3.449	0.128	0.230	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1369.64
8	0.7241	1144.4	1164.7	0.503	6.154	69.125	20.348	3.494	0.127	0.227	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1368.75
9	0.7246	1142.3	1162.5	0.517	6.309	69.086	20.162	3.534	0.133	0.236	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1365.73
10	0.7277	1140.5	1160.7	0.498	6.740	68.275	20.643	3.457	0.131	0.233	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1360.71
11	0.7158	1131.6	1151.6	0.429	6.274	70.423	19.297	3.216	0.122	0.217	0.008	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1361.18
12	0.7239	1141.3	1161.5	0.478	6.366	69.037	20.331	3.412	0.126	0.224	0.008	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1365.17
13	0.7217	1139.8	1160.0	0.439	6.307	69.394	20.136	3.345	0.128	0.226	0.009	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1370.17
14	0.7208	1143.0	1163.3	0.487	5.957	69.777	19.966	3.435	0.126	0.226	0.009	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1365.57
15	0.7291	1147.4	1167.7	0.508	6.438	68.252	20.779	3.630	0.133	0.235	0.009	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1370.17
16	0.7295	1141.9	1162.1	0.492	6.837	68.140	20.453	3.664	0.138	0.249	0.010	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1360.63
17	0.7294	1137.7	1157.8	0.491	7.086	67.973	20.494	3.580	0.131	0.224	0.008	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1355.71
18	0.7243	1135.0	1155.1	0.472	6.800	68.684	20.416	3.272	0.123	0.213	0.007	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1357.26
19	0.7311	1142.0	1162.2	0.490	6.975	67.747	20.807	3.565	0.140	0.249	0.010	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1359.30
20	0.7300	1141.5	1161.7	0.495	6.899	68.038	20.513	3.622	0.146	0.261	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1359.70
21	0.7308	1143.7	1163.9	0.490	6.852	67.990	20.536	3.679	0.149	0.272	0.012	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1361.53
22	0.7290	1144.7	1164.9	0.473	6.651	68.324	20.494	3.586	0.150	0.283	0.014	0.013	0.011	0.000	0.000	0.000	0.000	0.000	1364.36
23	0.7281	1143.9	1164.1	0.482	6.591	68.390	20.546	3.596	0.133	0.237	0.009	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1364.26
24	0.7287	1145.4	1165.6	0.487	6.557	68.429	20.388	3.710	0.143	0.260	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1365.49
25	0.7266	1147.6	1168.0	0.471	6.242	68.865	20.315	3.674	0.143	0.262	0.011	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1370.19
26	0.7237	1145.4	1165.7	0.481	6.092	69.306	20.155	3.579	0.130	0.232	0.009	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1370.27
27	0.7231	1140.7	1160.9	0.491	6.311	69.283	20.044	3.506	0.124	0.218	0.008	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1365.16
28	0.7161	1136.3	1156.4	0.457	5.971	70.573	19.306	3.318	0.129	0.223	0.008	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1366.55
29	0.7126	1133.8	1153.9	0.429	5.832	71.187	18.965	3.210	0.130	0.222	0.008	0.006	0.011	0.000	0.000	0.000	0.000	0.000	1366.90
30	0.7287	1151.0	1171.4	0.498	6.191	68.971	19.996	3.705	0.180	0.383	0.028	0.031	0.018	0.000	0.000	0.000	0.000	0.000	1372.28
31	0.7298	1150.3	1170.7	0.513	6.315	68.327	20.834	3.442	0.163	0.344	0.023	0.026	0.013	0.000	0.000	0.000	0.000	0.000	1370.43
Avg	0.7252	1143.0	1162.9	0.485	6.393	68.920	20.310	3.480	0.136	0.247	0.011	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1365.60

*Zone 272*

# GQ Source Daily Summary

August 2009

Number: 061

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND PLANT GRAFTON

Temperature Base:

Contract Hour: 9

Day	Relative Density		Heating Value		CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
	Wet	Dry	Wet	Dry																
1	0.7252	1143.5	1163.8	1163.8	0.505	6.316	68.773	20.639	3.390	0.129	0.227	0.008	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1366.55
2	0.7250	1144.7	1165.0	1165.0	0.487	6.248	68.872	20.607	3.365	0.138	0.255	0.011	0.010	0.007	0.000	0.000	0.000	0.000	0.000	1368.23
3	0.7281	1148.7	1169.0	1169.0	0.490	6.292	68.469	20.801	3.471	0.150	0.288	0.015	0.015	0.009	0.000	0.000	0.000	0.000	0.000	1370.04
4	0.7228	1140.7	1160.9	1160.9	0.484	6.299	69.076	20.529	3.224	0.128	0.232	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1365.40
5	0.7239	1145.4	1165.7	1165.7	0.489	6.112	69.106	20.502	3.380	0.134	0.247	0.012	0.011	0.009	0.000	0.000	0.000	0.000	0.000	1370.07
6	0.7227	1143.5	1163.7	1163.7	0.493	6.099	69.323	20.343	3.339	0.131	0.242	0.011	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1368.89
7	0.7230	1144.2	1164.5	1164.5	0.502	6.069	69.351	20.243	3.449	0.129	0.232	0.009	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1369.50
8	0.7242	1144.4	1164.7	1164.7	0.504	6.166	69.102	20.349	3.502	0.127	0.227	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1368.62
9	0.7244	1142.0	1162.2	1162.2	0.516	6.311	69.117	20.145	3.520	0.131	0.235	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1365.51
10	0.7277	1140.6	1160.8	1160.8	0.497	6.736	68.298	20.615	3.465	0.132	0.234	0.009	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1360.79
11	0.7168	1132.0	1152.0	1152.0	0.424	6.337	70.265	19.360	3.253	0.123	0.215	0.008	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1360.74
12	0.7237	1141.5	1161.7	1161.7	0.476	6.343	69.060	20.336	3.412	0.126	0.223	0.008	0.007	0.011	0.000	0.000	0.000	0.000	0.000	1365.61
13	0.7221	1140.5	1160.7	1160.7	0.441	6.320	69.280	20.219	3.359	0.129	0.227	0.008	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1365.92
14	0.7210	1143.5	1163.7	1163.7	0.486	5.950	69.753	19.973	3.455	0.128	0.230	0.008	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1370.55
15	0.7294	1147.9	1168.2	1168.2	0.509	6.434	68.201	20.822	3.641	0.134	0.236	0.009	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1367.86
16	0.7299	1142.4	1162.6	1162.6	0.492	6.845	68.091	20.468	3.689	0.139	0.248	0.010	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1360.84
17	0.7290	1137.7	1157.8	1157.8	0.494	7.047	68.033	20.493	3.558	0.130	0.224	0.008	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1356.05
18	0.7244	1135.0	1155.1	1155.1	0.475	6.804	68.679	20.419	3.267	0.122	0.211	0.007	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1357.16
19	0.7313	1142.8	1163.0	1163.0	0.493	6.949	67.686	20.880	3.575	0.140	0.250	0.010	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1360.01
20	0.7301	1141.5	1161.8	1161.8	0.492	6.916	68.026	20.499	3.633	0.146	0.261	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1359.63
21	0.7305	1143.4	1163.6	1163.6	0.489	6.847	68.042	20.492	3.675	0.150	0.274	0.012	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1361.41
22	0.7292	1144.8	1165.0	1165.0	0.474	6.660	68.296	20.500	3.597	0.150	0.285	0.014	0.013	0.011	0.000	0.000	0.000	0.000	0.000	1364.31
23	0.7284	1144.1	1164.4	1164.4	0.484	6.514	68.309	20.587	3.609	0.134	0.238	0.009	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1364.26
24	0.7289	1145.8	1166.1	1166.1	0.487	6.553	68.406	20.409	3.717	0.143	0.258	0.011	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1365.83
25	0.7264	1147.0	1167.3	1167.3	0.472	6.261	68.909	20.254	3.672	0.142	0.261	0.011	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1369.62
26	0.7235	1145.1	1165.3	1165.3	0.481	6.092	69.329	20.148	3.564	0.129	0.231	0.009	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1370.07
27	0.7230	1140.7	1160.9	1160.9	0.490	6.304	69.292	20.054	3.494	0.123	0.219	0.008	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1365.25
28	0.7159	1136.2	1156.3	1156.3	0.455	5.965	70.596	19.298	3.309	0.129	0.224	0.008	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1366.58
29	0.7128	1134.8	1154.9	1154.9	0.430	5.795	71.152	19.030	3.217	0.130	0.221	0.008	0.005	0.012	0.000	0.000	0.000	0.000	0.000	1367.88
30	0.7287	1151.2	1171.6	1171.6	0.498	6.177	68.986	20.006	3.690	0.179	0.386	0.028	0.031	0.018	0.000	0.000	0.000	0.000	0.000	1372.49
31	0.7297	1150.3	1170.7	1170.7	0.512	6.316	68.323	20.845	3.434	0.163	0.345	0.023	0.026	0.013	0.000	0.000	0.000	0.000	0.000	1370.45
Avg	0.7252	1143.0	1163.0	1163.0	0.485	6.393	68.909	20.318	3.482	0.136	0.248	0.011	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1365.68

Zone 273

# GQ Source Daily Summary

## August 2009

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

Day	Heating Value		Heating Value																CCT
	Relative Density	Wet	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe		
1	0.7243	1142.6	1162.8	0.498	6.301	68.969	20.519	3.315	0.131	0.238	0.009	0.008	0.013	0.000	0.000	0.000	0.000	1366.29	
2	0.7279	1148.7	1169.0	0.493	6.264	68.680	20.560	3.491	0.154	0.307	0.017	0.017	0.018	0.000	0.000	0.000	0.000	1370.27	
3	0.7231	1141.4	1161.6	0.484	6.280	69.106	20.520	3.215	0.127	0.233	0.010	0.008	0.015	0.000	0.000	0.000	0.000	1366.02	
4	0.7217	1142.4	1162.7	0.481	6.090	69.357	20.501	3.193	0.122	0.224	0.009	0.008	0.014	0.000	0.000	0.000	0.000	1368.59	
5	0.7257	1146.4	1166.7	0.502	6.190	68.980	20.404	3.483	0.139	0.263	0.012	0.012	0.016	0.000	0.000	0.000	0.000	1369.52	
6	0.7214	1144.2	1164.5	0.500	5.917	69.564	20.352	3.295	0.121	0.222	0.008	0.007	0.014	0.000	0.000	0.000	0.000	1371.08	
7	0.7237	1142.6	1162.8	0.508	6.224	69.307	20.050	3.523	0.128	0.231	0.009	0.007	0.014	0.000	0.000	0.000	0.000	1366.92	
8	0.7277	1143.8	1164.0	0.532	6.493	68.584	20.384	3.601	0.133	0.242	0.009	0.008	0.014	0.000	0.000	0.000	0.000	1364.54	
9	0.7242	1135.8	1155.9	0.480	6.731	68.910	20.152	3.345	0.126	0.226	0.008	0.007	0.015	0.000	0.000	0.000	0.000	1358.27	
10	0.7162	1131.7	1151.8	0.433	6.299	70.399	19.294	3.206	0.121	0.218	0.008	0.006	0.017	0.000	0.000	0.000	0.000	1360.99	
11	0.7214	1139.4	1159.5	0.484	6.239	69.503	20.105	3.306	0.118	0.213	0.008	0.006	0.019	0.000	0.000	0.000	0.000	1365.29	
12	0.7239	1140.1	1160.3	0.458	6.470	69.144	20.072	3.456	0.132	0.236	0.009	0.007	0.016	0.000	0.000	0.000	0.000	1363.75	
13	0.7169	1137.0	1157.1	0.443	6.025	70.485	19.323	3.338	0.125	0.228	0.009	0.007	0.018	0.000	0.000	0.000	0.000	1366.68	
14	0.7241	1148.0	1168.3	0.516	5.921	69.223	20.486	3.471	0.126	0.226	0.008	0.007	0.015	0.000	0.000	0.000	0.000	1372.99	
15	0.7310	1144.5	1164.7	0.504	6.803	68.006	20.533	3.731	0.139	0.250	0.010	0.009	0.016	0.000	0.000	0.000	0.000	1362.30	
16	0.7316	1143.0	1163.3	0.505	6.950	67.694	20.830	3.623	0.131	0.235	0.009	0.008	0.016	0.000	0.000	0.000	0.000	1360.01	
17	0.7249	1134.0	1154.1	0.471	6.919	68.686	20.212	3.351	0.122	0.211	0.007	0.005	0.016	0.000	0.000	0.000	0.000	1355.55	
18	0.7270	1136.5	1156.6	0.493	6.930	68.483	20.230	3.463	0.132	0.236	0.009	0.008	0.016	0.000	0.000	0.000	0.000	1356.52	
19	0.7302	1140.6	1160.8	0.491	6.979	68.099	20.335	3.652	0.146	0.263	0.010	0.009	0.017	0.000	0.000	0.000	0.000	1358.47	
20	0.7298	1142.5	1162.8	0.492	6.829	68.147	20.485	3.601	0.144	0.264	0.011	0.009	0.018	0.000	0.000	0.000	0.000	1361.08	
21	0.7302	1145.2	1165.5	0.482	6.711	68.191	20.511	3.625	0.150	0.285	0.014	0.013	0.018	0.000	0.000	0.000	0.000	1363.95	
22	0.7269	1141.7	1161.9	0.479	6.619	68.655	20.292	3.534	0.135	0.249	0.011	0.010	0.016	0.000	0.000	0.000	0.000	1362.87	
23	0.7278	1143.7	1164.0	0.486	6.573	68.686	20.101	3.722	0.142	0.258	0.010	0.008	0.015	0.000	0.000	0.000	0.000	1364.40	
24	0.7254	1145.5	1165.8	0.472	6.257	69.143	20.046	3.649	0.139	0.258	0.011	0.009	0.016	0.000	0.000	0.000	0.000	1368.82	
25	0.7232	1145.3	1165.5	0.478	6.058	69.463	20.056	3.543	0.130	0.237	0.010	0.008	0.017	0.000	0.000	0.000	0.000	1370.57	
26	0.7226	1140.4	1160.6	0.498	6.269	69.471	19.883	3.508	0.122	0.219	0.008	0.007	0.015	0.000	0.000	0.000	0.000	1365.30	
27	0.7194	1138.8	1158.9	0.464	6.124	69.968	19.705	3.367	0.124	0.219	0.008	0.006	0.016	0.000	0.000	0.000	0.000	1366.36	
28	0.7133	1135.0	1155.1	0.441	5.809	71.185	18.933	3.228	0.133	0.237	0.009	0.008	0.018	0.000	0.000	0.000	0.000	1367.68	
29	0.7304	1151.4	1171.8	0.515	6.300	68.626	20.280	3.635	0.174	0.387	0.028	0.031	0.025	0.000	0.000	0.000	0.000	1371.15	
30	0.7287	1150.0	1170.4	0.507	6.246	68.554	20.740	3.376	0.160	0.345	0.023	0.026	0.023	0.000	0.000	0.000	0.000	1371.03	
31	0.7271	1147.9	1168.3	0.518	6.198	68.795	20.631	3.312	0.151	0.322	0.023	0.027	0.023	0.000	0.000	0.000	0.000	1370.16	
Avg	0.7249	1142.0	1162.5	0.487	6.388	69.034	20.211	3.457	0.135	0.251	0.011	0.010	0.017	0.000	0.000	0.000	0.000	1365.40	

*Zone 28*

# GQ Source Daily Summary

## August 2009

**Number:** 271

**Pressure Base:** 14.730

**Contract Day:** 1

**Name:** DICKINSON BORDER

**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	Dry																
1	0.6027	1008.0	1025.9	0.963	2.352	90.937	5.562	0.185	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1321.40
2	0.6071	1010.7	1028.6	1.026	2.507	90.086	6.193	0.188	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1320.19
3	0.6060	1008.1	1025.9	1.024	2.567	90.288	5.937	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1317.89
4	0.6013	1002.9	1020.7	1.011	2.459	91.242	5.115	0.174	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1316.30
5	0.6157	1029.4	1047.6	0.831	2.476	88.212	8.210	0.269	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1334.84
6	0.6098	1015.9	1033.9	0.936	2.579	89.486	6.748	0.248	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1323.97
7	0.6193	1033.5	1051.8	0.598	2.579	88.152	7.181	0.148	0.034	0.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1337.12
8	0.6225	1037.3	1055.6	0.562	3.043	87.542	7.598	0.145	0.038	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1337.96
9	0.6305	1044.5	1063.0	0.661	3.202	86.236	8.416	0.132	0.048	0.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1338.73
10	0.6258	1039.8	1058.2	0.667	3.035	87.037	7.966	0.175	0.042	0.075	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1337.70
11	0.6128	1028.1	1046.3	0.684	2.507	89.450	6.366	0.906	0.031	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1336.51
12	0.6159	1030.5	1048.8	0.648	2.700	88.849	6.727	0.983	0.032	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1336.37
13	0.6204	1035.6	1053.9	0.634	2.835	88.077	7.225	1.104	0.045	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1338.06
14	0.6150	1029.8	1048.0	0.649	2.655	89.057	6.556	0.983	0.035	0.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1336.45
15	0.6119	1026.8	1044.9	0.670	2.518	89.653	6.144	0.926	0.032	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1335.84
16	0.5965	1009.6	1027.4	0.682	2.096	92.438	4.181	0.558	0.016	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1330.37
17	0.5779	990.0	1007.5	0.688	1.531	95.817	1.838	0.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1325.38
18	0.6270	1069.0	1087.9	0.305	1.932	85.493	11.960	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1373.60
19	0.6096	1041.0	1059.4	0.441	1.791	89.153	8.369	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1356.54
20	0.5861	998.9	1016.6	0.681	1.764	94.321	2.898	0.324	0.003	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1327.99
21	0.6608	1072.6	1091.6	0.574	4.473	80.595	12.119	2.027	0.074	0.134	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1343.75
22	0.6213	1033.3	1051.6	0.629	3.063	87.906	7.133	1.141	0.044	0.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1334.20
23	0.6249	1037.9	1056.3	0.636	3.117	87.242	7.641	1.231	0.046	0.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1336.18
24	0.6337	1046.7	1065.2	0.637	3.401	85.706	8.636	1.463	0.055	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1338.26
25	0.6306	1046.7	1065.3	0.636	3.117	86.278	8.432	1.387	0.051	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1341.42
26	0.6224	1038.3	1056.7	0.633	2.860	87.752	7.436	1.197	0.042	0.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1339.41
27	0.6132	1027.7	1045.9	0.695	2.548	89.427	6.284	0.956	0.032	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1335.54
28	0.6254	1040.4	1058.8	0.648	2.989	87.168	7.860	1.207	0.046	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1338.92
29	0.6309	1047.1	1065.7	0.602	3.171	86.227	8.444	1.377	0.058	0.112	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1341.63
30	0.6444	1059.5	1078.2	0.561	3.755	83.674	10.173	1.593	0.075	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1343.14
31	0.6739	1090.0	1109.3	0.554	4.675	78.337	13.842	2.258	0.104	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1351.44
Avg	0.6192	1033.0	1051.5	0.663	2.795	88.124	7.393	0.912	0.032	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1336.36

*Zone 31*

# GQ Source Daily Summary

August 2009

Number: 051

Pressure Base: 14.730

Contract Day: 1

Name: CABIN CREEK DICKINSON PLANT

Temperature Base:

Contract Hour: 9

Day	Heating Value		Heating Value		CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
	Relative Density	Wet	Dry	Dry																
1	0.5847	964.9	982.0	1.384	2.657	94.998	0.838	0.090	0.010	0.014	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1284.18	
2	0.5822	963.5	980.5	1.274	2.674	95.317	0.671	0.050	0.003	0.006	0.001	0.001	0.001	0.002	0.000	0.000	0.000	0.000	1285.05	
3	0.5803	964.0	981.0	1.154	2.645	95.580	0.567	0.043	0.003	0.005	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1287.84	
4	0.5810	969.8	986.9	1.091	2.459	95.449	0.904	0.075	0.006	0.010	0.002	0.001	0.003	0.000	0.000	0.000	0.000	0.000	1294.73	
5	0.5797	968.8	986.0	1.069	2.423	95.660	0.789	0.051	0.003	0.004	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1294.98	
6	0.5954	991.9	1009.4	1.028	2.563	92.510	3.713	0.166	0.006	0.010	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1307.46	
7	0.6237	1038.8	1057.2	0.681	2.888	87.125	8.392	0.824	0.029	0.053	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1339.03	
8	0.6098	1024.5	1042.7	0.591	2.586	89.884	6.057	0.799	0.028	0.050	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1335.26	
9	0.6321	1047.1	1065.7	0.625	3.247	85.907	8.758	1.320	0.048	0.085	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1340.45	
10	0.6293	1044.9	1063.4	0.661	3.063	86.372	8.598	1.177	0.043	0.076	0.003	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1340.62	
11	0.6214	1037.7	1056.1	0.677	2.739	87.859	7.599	1.012	0.038	0.066	0.003	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1339.76	
12	0.6179	1034.1	1052.4	0.644	2.681	88.485	7.119	0.969	0.034	0.059	0.002	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1338.83	
13	0.6205	1036.6	1055.0	0.620	2.811	88.025	7.374	1.044	0.042	0.071	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1339.26	
14	0.6219	1040.0	1058.4	0.609	2.552	87.726	7.753	1.029	0.043	0.072	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1342.10	
15	0.6161	1033.8	1052.1	0.631	2.552	88.783	7.031	0.900	0.034	0.059	0.003	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1340.39	
16	0.6139	1031.2	1049.5	0.637	2.492	89.175	6.754	0.851	0.031	0.052	0.002	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1339.45	
17	0.5830	972.1	989.3	1.074	2.527	95.031	1.255	0.099	0.005	0.007	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1295.63	
18	0.5793	968.8	986.0	1.021	2.457	95.679	0.785	0.050	0.002	0.004	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1298.15	
19	0.5825	973.6	990.8	1.059	2.413	95.159	1.242	0.102	0.016	0.007	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1298.15	
20	0.6040	1019.3	1037.4	0.678	2.224	90.964	5.479	0.593	0.021	0.036	0.002	0.001	0.003	0.000	0.000	0.000	0.000	0.000	1334.79	
21	0.6101	1038.7	1057.1	0.493	1.905	89.262	7.968	0.345	0.010	0.015	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1352.98	
22	0.6532	1066.6	1085.5	0.577	4.118	82.025	11.268	1.804	0.069	0.125	0.005	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1343.62	
23	0.6221	1036.9	1055.3	0.624	2.937	87.758	7.451	1.092	0.044	0.082	0.004	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1337.91	
24	0.6328	1047.9	1066.5	0.595	3.317	85.766	8.818	1.350	0.051	0.091	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1340.64	
25	0.6333	1050.9	1069.5	0.606	3.164	85.747	8.939	1.386	0.052	0.094	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1343.89	
26	0.6277	1046.5	1065.1	0.619	2.886	86.737	8.403	1.215	0.046	0.082	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1344.29	
27	0.6210	1038.4	1056.8	0.649	2.703	87.964	7.513	1.054	0.039	0.067	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1341.05	
28	0.6232	1040.9	1059.3	0.631	2.788	87.473	7.938	1.050	0.040	0.067	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.89	
29	0.6264	1044.7	1063.2	0.605	2.895	86.886	8.356	1.129	0.044	0.075	0.003	0.002	0.005	0.000	0.000	0.000	0.000	0.000	1343.31	
30	0.6470	1066.8	1085.7	0.528	3.598	83.270	10.719	1.626	0.074	0.156	0.010	0.011	0.008	0.000	0.000	0.000	0.000	0.000	1349.77	
31	0.6493	1067.9	1086.8	0.545	3.726	82.755	11.124	1.585	0.074	0.159	0.011	0.012	0.008	0.000	0.000	0.000	0.000	0.000	1348.75	
Avg	0.6131	1022.0	1039.8	0.764	2.803	89.398	6.135	0.803	0.032	0.057	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1327.79	

Zone 3d

# GQ Source Daily Summary

## August 2009

**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	NG4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6751	1144.2	1164.5	0.000	2.349	75.623	21.411	0.595	0.009	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.24
2	0.6744	1143.6	1163.8	0.000	2.321	75.790	21.259	0.607	0.009	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.20
3	0.6732	1142.1	1162.3	0.000	2.300	76.102	20.905	0.665	0.012	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.57
4	0.6729	1141.6	1161.9	0.000	2.297	76.343	20.498	0.820	0.017	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.35
5	0.6728	1141.2	1161.5	0.000	2.310	76.335	20.525	0.792	0.016	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.99
6	0.6710	1138.6	1158.7	0.000	2.302	76.414	20.732	0.532	0.008	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.60
7	0.6699	1137.2	1157.4	0.000	2.282	76.582	20.639	0.482	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.07
8	0.6714	1139.4	1159.6	0.000	2.290	76.278	20.930	0.486	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.22
9	0.6722	1140.6	1160.8	0.000	2.293	76.112	21.093	0.486	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.83
10	0.6708	1138.3	1158.4	0.000	2.308	76.390	20.797	0.490	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.37
11	0.6693	1136.2	1156.3	0.000	2.297	76.719	20.466	0.496	0.007	0.011	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1413.31
12	0.6712	1139.0	1159.2	0.000	2.297	76.321	20.867	0.499	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.92
13	0.6717	1139.3	1159.5	0.000	2.325	76.211	20.964	0.485	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.76
14	0.6731	1141.4	1161.6	0.000	2.331	75.916	21.255	0.483	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.88
15	0.6721	1141.0	1161.2	0.000	2.264	76.123	21.117	0.481	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.40
16	0.6723	1141.5	1161.7	0.000	2.248	76.087	21.180	0.469	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.83
17	0.6715	1140.1	1160.3	0.000	2.259	76.256	20.986	0.483	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.96
18	0.6697	1137.5	1157.6	0.000	2.247	76.637	20.608	0.492	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.61
19	0.6716	1140.8	1161.0	0.000	2.229	76.229	21.042	0.484	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.69
20	0.6708	1138.7	1158.9	0.000	2.279	76.404	20.797	0.503	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.96
21	0.6705	1138.2	1158.3	0.000	2.287	76.458	20.748	0.491	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.54
22	0.6705	1138.2	1158.4	0.000	2.283	76.442	20.780	0.480	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.62
23	0.6719	1140.4	1160.6	0.000	2.280	76.180	21.026	0.498	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.87
24	0.6710	1139.3	1159.4	0.000	2.265	76.345	20.900	0.475	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.42
25	0.6701	1137.8	1158.0	0.000	2.265	76.570	20.637	0.513	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.61
26	0.6721	1139.7	1159.8	0.000	2.342	76.141	21.003	0.499	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.77
27	0.6724	1140.2	1160.4	0.000	2.338	76.079	21.060	0.507	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.12
28	0.6752	1145.6	1165.9	0.000	2.276	75.549	21.617	0.543	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.83
29	0.6716	1140.1	1160.3	0.000	2.267	76.239	20.988	0.490	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.87
30	0.6711	1139.5	1159.7	0.000	2.260	76.343	20.883	0.497	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.60
31	0.6719	1140.8	1161.0	0.000	2.259	76.187	21.034	0.503	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.31
Avg	0.6718	1140.0	1160.3	0.000	2.289	76.239	20.927	0.527	0.008	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.59

*Zone 33*

# GQ Source Daily Summary

August 2009

**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	0.8071	1157.1	1177.6	2.423	10.292	53.405	30.083	3.408	0.083	0.261	0.012	0.030	0.004	0.000	0.000	0.000	0.000	0.000	1310.81
2	0.8073	1157.8	1178.3	2.357	10.374	53.433	29.912	3.514	0.087	0.274	0.012	0.033	0.004	0.000	0.000	0.000	0.000	0.000	1311.34
3	0.8084	1161.1	1181.7	2.372	10.250	53.262	30.169	3.537	0.088	0.275	0.012	0.032	0.004	0.000	0.000	0.000	0.000	0.000	1314.25
4	0.8061	1156.3	1176.8	2.383	10.306	53.398	30.250	3.312	0.076	0.235	0.010	0.027	0.003	0.000	0.000	0.000	0.000	0.000	1310.72
5	0.8005	1150.2	1170.6	2.209	10.425	53.908	30.196	2.936	0.070	0.218	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1308.32
6	0.8010	1151.1	1171.5	2.358	10.187	54.147	29.924	3.036	0.075	0.232	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1308.94
7	0.8004	1150.1	1170.5	2.256	10.351	54.137	29.855	3.058	0.074	0.232	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1308.25
8	0.8020	1150.6	1171.0	2.244	10.487	53.762	30.125	3.041	0.073	0.228	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1307.55
9	0.8033	1147.9	1168.2	2.312	10.483	53.914	29.965	2.991	0.072	0.224	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1305.04
10	0.8033	1148.8	1169.1	2.427	10.435	53.816	29.824	3.154	0.074	0.230	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1304.49
11	0.8051	1149.2	1169.6	2.521	10.437	53.734	29.630	3.321	0.077	0.238	0.010	0.029	0.004	0.000	0.000	0.000	0.000	0.000	1303.63
12	0.8044	1148.8	1169.2	2.489	10.441	53.916	29.425	3.355	0.080	0.249	0.011	0.029	0.004	0.000	0.000	0.000	0.000	0.000	1301.71
13	0.8025	1145.8	1166.1	2.396	10.593	54.044	29.364	3.233	0.079	0.246	0.011	0.029	0.004	0.000	0.000	0.000	0.000	0.000	1305.99
14	0.8041	1150.2	1170.5	2.382	10.501	53.729	29.765	3.261	0.078	0.242	0.010	0.027	0.003	0.000	0.000	0.000	0.000	0.000	1305.31
15	0.8069	1152.7	1173.1	2.539	10.366	53.286	30.216	3.248	0.075	0.232	0.010	0.025	0.002	0.000	0.000	0.000	0.000	0.000	1305.99
16	0.8052	1154.3	1174.8	2.311	10.452	53.457	30.145	3.280	0.077	0.238	0.010	0.027	0.003	0.000	0.000	0.000	0.000	0.000	1309.22
17	0.8043	1152.4	1172.9	2.290	10.514	53.697	29.802	3.326	0.080	0.249	0.011	0.029	0.004	0.000	0.000	0.000	0.000	0.000	1307.81
18	0.8026	1151.5	1171.9	2.245	10.486	53.878	29.791	3.248	0.076	0.234	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1308.05
19	0.8014	1147.9	1168.3	2.237	10.603	53.965	29.709	3.142	0.074	0.229	0.010	0.026	0.004	0.000	0.000	0.000	0.000	0.000	1305.00
20	0.8026	1152.7	1173.1	2.209	10.471	53.804	29.953	3.203	0.078	0.241	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1309.39
21	0.8015	1152.4	1172.8	2.089	10.566	53.820	30.038	3.139	0.075	0.233	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1309.97
22	0.8021	1153.8	1174.2	2.077	10.557	53.872	29.850	3.269	0.080	0.251	0.011	0.030	0.004	0.000	0.000	0.000	0.000	0.000	1311.04
23	0.8004	1151.1	1171.5	2.084	10.542	54.073	29.791	3.158	0.076	0.234	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1309.48
24	0.8040	1153.0	1173.4	2.251	10.513	53.510	30.207	3.173	0.075	0.232	0.010	0.025	0.003	0.000	0.000	0.000	0.000	0.000	1308.65
25	0.8041	1153.0	1173.4	2.288	10.469	53.538	30.166	3.198	0.074	0.228	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1308.57
26	0.8029	1147.8	1168.1	2.312	10.634	53.744	29.858	3.175	0.073	0.228	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1303.60
27	0.8027	1149.1	1169.4	2.250	10.634	53.744	29.858	3.175	0.073	0.228	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1305.25
28	0.8025	1151.1	1171.5	2.225	10.528	53.725	30.064	3.116	0.074	0.230	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1307.75
29	0.8034	1152.4	1172.8	2.197	10.576	53.525	30.222	3.140	0.073	0.227	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1308.45
30	0.8038	1154.1	1174.5	2.196	10.510	53.378	30.509	3.069	0.072	0.225	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1310.10
31	0.7994	1151.9	1172.3	1.946	10.614	53.824	30.388	2.901	0.070	0.218	0.010	0.025	0.004	0.000	0.000	0.000	0.000	0.000	1311.18
Avg	0.8033	1152.0	1172.2	2.286	10.471	53.726	29.965	3.198	0.076	0.237	0.010	0.027	0.004	0.000	0.000	0.000	0.000	0.000	1307.85

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

Zone 34

## Williston Basin Interstate Pipeline Co. GQ Source Analysis

<b>GQ Source Number:</b>	1201140	<b>Specific Gravity:</b>	0.5730
<b>GQ Source Name:</b>	EAGLE 8B ND	<b>BTU Base:</b>	Dry
<b>Effective Date:</b>	6/19/2009 9:00:00 AM	<b>Dry Heat Value:</b>	977.72
<b>Effective End Date:</b>	1/18/2038 9:14:07 PM	<b>Wet Heat Value:</b>	960.70
<b>Pressure Base:</b>	14.730	<b>As Deliv. Heat Value:</b>	977.72
<b>Viscosity:</b>			

		<u>Mol %</u>	<u>Imported GPM</u>	<u>Calculated GPM</u>
C1	Methane	95.826		
C2	Ethane	0.305		0.081
C3	Propane	0.009	0.002	0.002
IC4	Iso-Butane	0.007	0.002	0.002
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	0.000	0.000	0.000
CO2	Carbon Dioxide	0.096		
N2	Nitrogen	3.757		
O2	Oxygen	0.000		
HE	Helium			
H2	Hydrogen			
H2S	Hydrogen Sulfide			
<b>Totals</b>		100.000	0.005	0.086

**Sample Date:** 6/12/2009 12:00:00 AM  
**Sample Type:** Spot  
**Sample Tech:** MG

**Sample Remarks:** Zone 35

**Analysis Remarks:**

<b>NORTH DAKOTA HEATING VALUE ZONES</b>		
<b>ZONES</b>	<b>MEASURING DEVICE</b>	<b>LOCATION</b>
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



**THERMAL ZONE VARIANCE  
DOCUMENTATION**

**August 2009**

<b><i>ZONE</i></b>	<b><i>BTU VARIANCE</i></b>	<b><i>REASON</i></b>
24	32	Receipt from Tioga Plant
264	32	Receipt from Tioga Plant
31	54	Receipt from Minot & Bismarck Area, going West
32	60	Receipt from Minot & Bismarck Area, going West