

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

September 20, 2010

RECEIVED

SEP 21 2010

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 – July 2010

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 August 2010.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of July 2010. 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 July.

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
AUG 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.1511
12	327	BISMARCK	28	1.1511
12	343	CARRINGTON	273	1.1511
12	344	CLEVELAND	272	1.1430
12	364	CAVALIER	273	1.1753
12	365	DAWSON	271	1.1430
12	374	FT TOTTEN	273	1.1592
12	375	DEVILS LAKE	273	1.1592
12	379	BARLOW	273	1.1511
12	387	ELDRIDGE	272	1.1511
12	411	GLEN ULLIN	31	.9662
12	417	GRAFTON	273	1.1835
12	439	HANKINSON	600	1.0719
12	449	JAMESTOWN	272	1.1592
12	463	LANGDON	273	1.1511
12	475	LINTON	802	.9736
12	478	LINCOLN	28	1.1511
12	494	MEDINA	271	1.1430
12	498	MANDAN	28	1.1511
12	524	NEW SALEM	28	1.1268
12	532	NEW ROCKFORD	273	1.1511
12	539	PARK RIVER	273	1.1753
12	574	SANBORN	272	1.1592
12	593	STEELE	271	1.1430
12	598	SHEYENNE	273	1.1592
12	610	TAPPEN	271	1.1430
12	625	VALLEY CITY	272	1.1672
12	629	WALHALLA	273	1.1753
12	647	WILTON	262	1.1268
12	717	SPIRITWOOD	272	1.1592
12	718	FAIRMOUNT	600	1.0697
12	732	MSR SITE	273	1.1511
12	733	PAR SITE	273	1.1511
15	303	ALEXANDER	25	1.0673
15	308	ARNEGARD	25	1.0673

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
AUG 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	318	BEACH	32	.9112
15	319	BELFIELD	32	.9179
15	323	BERTHOLD	262	1.1268
15	330	BOWMAN	34	1.0604
15	337	BURLINGTON	262	1.1511
15	368	DES LACS	262	1.1349
15	369	DICKINSON	31	.9593
15	384	EPPING	264	1.1410
15	407	GLADSTONE	31	.9593
15	413	GOLVA	32	.8979
15	416	GARRISON	262	1.1349
15	429	HEBRON	31	.9662
15	459	KILLDEER	33	1.1117
15	469	LEFOR	31	.9593
15	474	LIGNITE	263	1.0693
15	500	MARMARTH	34	1.0683
15	505	MINOT	262	1.1511
15	510	MOTT	31	.9593
15	512	MAX	262	1.1268
15	522	NEW ENGLAND	31	.9523
15	540	PALERMO	262	1.1268
15	558	RAY	264	1.1410
15	561	REGENT	31	.9593
15	563	RHAME	34	1.0527
15	564	RICHARDTON	31	.9523
15	568	ROSS	261	1.0877
15	572	RUTHVILLE	262	1.1511
15	583	SENTINEL BUTTE	32	.9112
15	588	SOUTH HEART	31	.9523
15	590	SPRINGBROOK	264	1.1410
15	591	STANLEY	261	1.0956
15	605	SURREY	262	1.1511
15	611	TAYLOR	31	.9523
15	616	TIOGA	261	1.0877
15	619	TURTLE LAKE	262	1.1349

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
AUG 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	620	TRENTON	24	1.1492
15	624	UNDERWOOD	262	1.1349
15	632	WATFORD CITY	25	1.0673
15	636	WHEELLOCK	264	1.1327
15	637	WHITE EARTH	261	1.0956
15	642	WILLISTON	24	1.1492
15	646	WASHBURN	262	1.1430
15	664	RIVERDALE	262	1.1349
15	691	FAIRVIEW	24	1.1492
15	712	MINOT AFB	262	1.1511
15	743	BAKER FIELD	35	.8980

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

GQ Source Daily Summary

July 2010

Number: 251 **Pressure Base:** 14.730 **Contract Day:** 1
Name: SIDNEY AREA **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	0.7441	1193.3	1214.4	1215.4	1.157	4.060	67.974	20.928	5.570	0.103	0.188	0.010	0.008	0.001	0.000	0.000	0.000	0.000	0.000	1407.82	
2	0.7444	1194.3	1215.4	1215.4	1.156	4.030	68.130	20.578	5.797	0.104	0.187	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000	1408.71	
3	0.7444	1194.3	1215.4	1215.4	1.156	4.030	68.130	20.578	5.797	0.104	0.187	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000	1408.71	
4	0.7444	1194.3	1215.4	1215.4	1.156	4.030	68.130	20.578	5.797	0.104	0.187	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000	1408.71	
5	0.7444	1194.3	1215.4	1215.4	1.156	4.030	68.130	20.578	5.797	0.104	0.187	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000	1408.71	
6	0.7466	1197.1	1218.3	1218.3	1.155	4.061	67.895	20.768	5.630	0.104	0.187	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000	1408.71	
7	0.7071	1173.5	1194.3	1194.3	0.251	3.178	71.726	21.875	2.799	0.063	0.099	0.005	0.004	0.002	0.000	0.000	0.000	0.000	0.000	1410.01	
8	0.7220	1182.7	1203.7	1203.7	0.600	3.482	70.316	21.519	3.695	0.124	0.234	0.015	0.013	0.002	0.000	0.000	0.000	0.000	0.000	1420.48	
9	0.7009	1173.2	1194.0	1194.0	0.039	2.941	72.171	22.448	2.303	0.039	0.053	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1416.88	
10	0.6998	1171.7	1192.4	1192.4	0.039	2.930	72.177	22.659	2.111	0.034	0.046	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1426.17	
11	0.6991	1171.2	1191.9	1191.9	0.039	2.895	72.388	22.425	2.168	0.035	0.047	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1425.46	
12	0.7373	1190.4	1211.4	1211.4	0.958	3.899	68.944	20.911	4.671	0.189	0.377	0.026	0.022	0.004	0.000	0.000	0.000	0.000	0.000	1425.46	
13	0.7362	1179.9	1200.8	1200.8	1.162	4.135	68.698	21.100	4.501	0.129	0.246	0.015	0.012	0.001	0.000	0.000	0.000	0.000	0.000	1411.02	
14	0.7396	1185.9	1206.9	1206.9	1.149	4.108	68.263	21.296	4.789	0.126	0.241	0.015	0.012	0.001	0.000	0.000	0.000	0.000	0.000	1399.43	
15	0.7407	1187.3	1208.3	1208.3	1.151	4.119	68.398	20.802	5.122	0.133	0.247	0.015	0.012	0.001	0.000	0.000	0.000	0.000	0.000	1403.29	
16	0.7361	1179.1	1200.0	1200.0	1.160	4.165	68.977	20.542	4.751	0.130	0.245	0.015	0.013	0.002	0.000	0.000	0.000	0.000	0.000	1403.95	
17	0.7383	1182.8	1203.8	1203.8	1.173	4.127	68.627	20.857	4.793	0.136	0.257	0.015	0.013	0.002	0.000	0.000	0.000	0.000	0.000	1398.71	
18	0.7327	1173.3	1194.1	1194.1	1.177	4.178	69.277	20.644	4.300	0.135	0.258	0.016	0.014	0.002	0.000	0.000	0.000	0.000	0.000	1400.99	
19	0.7339	1175.0	1195.8	1195.8	1.186	4.177	69.162	20.623	4.430	0.134	0.256	0.017	0.014	0.001	0.000	0.000	0.000	0.000	0.000	1395.03	
20	0.7379	1181.8	1202.7	1202.7	1.178	4.148	68.823	20.580	4.786	0.153	0.295	0.019	0.016	0.002	0.000	0.000	0.000	0.000	0.000	1395.84	
21	0.7029	1168.5	1189.2	1189.2	0.241	3.108	72.146	21.939	2.422	0.052	0.083	0.004	0.004	0.001	0.000	0.000	0.000	0.000	0.000	1400.10	
22	0.6995	1169.7	1190.4	1190.4	0.041	3.019	72.248	22.481	2.129	0.034	0.045	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1418.61	
23	0.7028	1174.0	1194.8	1194.8	0.047	3.059	71.852	22.553	2.397	0.038	0.051	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1423.36	
24	0.7087	1184.4	1205.4	1205.4	0.047	2.973	71.216	22.769	2.861	0.054	0.075	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1425.22	
25	0.7070	1181.9	1202.9	1202.9	0.038	2.981	71.425	22.667	2.766	0.051	0.067	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1431.89	
26	0.7051	1177.7	1198.5	1198.5	0.044	3.055	71.578	22.661	2.546	0.050	0.063	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1430.57	
27	0.7065	1180.1	1201.0	1201.0	0.042	3.037	71.367	22.837	2.589	0.049	0.073	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1427.34	
28	0.7118	1187.9	1208.9	1208.9	0.038	3.070	70.797	22.904	3.006	0.068	0.108	0.004	0.003	0.001	0.000	0.000	0.000	0.000	0.000	1432.89	
29	0.7130	1187.9	1209.0	1209.0	0.037	3.184	70.471	23.144	3.008	0.061	0.089	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1431.73	
30	0.7085	1183.2	1204.2	1204.2	0.037	3.048	71.024	23.081	2.689	0.048	0.068	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1430.60	
31	0.7239	1183.0	1203.7	1203.7	0.644	3.590	69.954	21.610	3.930	0.092	0.163	0.009	0.007	0.001	0.000	0.000	0.000	0.000	0.000	1415.01	

Zone 211

GQ Source Analysis

GQ Source Number:	0602330	Specific Gravity:	0.7164
GQ Source Name:	WILLISTON BORDER	BTU Base:	Dry
Effective Date:	7/1/2010 9:00:00 AM	Measured Heat Value:	1211.13
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1208.26
Pressure Base:	14.730	Wet Heat Value:	1187.23
Viscosity:		As Deliv. Heat Value:	1208.26

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	72.690		CO2	Carbon Dioxide	0.681
C2	Ethane	19.317	5.151	N2	Nitrogen	2.505
C3	Propane	3.940	1.082	O2	Oxygen	0.000
IC4	Iso-Butane	0.220	0.072	HE	Helium	
NC4	N-Butane	0.514	0.162	H2	Hydrogen	
IC5	Iso-Pentane	0.049	0.018	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.060	0.022	AR	Argon	
C6	Hexane	0.017	0.008	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane					
C9	Nonane					
C10	Decane					

Totals 99.994% 6.514 GPM

Sample Date: 7/31/2010 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Remarks:

Zone 24, 264

GQ Source Analysis

GQ Source Number:	0602230	Specific Gravity:	0.7271
GQ Source Name:	WATFORD CITY BORDER	BTU Base:	Dry
Effective Date:	7/1/2010 9:00:00 AM	Measured Heat Value:	1132.75
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1130.12
Pressure Base:	14.730	Wet Heat Value:	1110.46
Viscosity:		As Deliv. Heat Value:	1130.12

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	68.910		CO2	Carbon Dioxide	0.705
C2	Ethane	17.810	4.749	N2	Nitrogen	8.190
C3	Propane	3.759	1.033	O2	Oxygen	0.000
IC4	Iso-Butane	0.195	0.064	HE	Helium	
NC4	N-Butane	0.361	0.113	H2	Hydrogen	
IC5	Iso-Pentane	0.030	0.011	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.030	0.011	AR	Argon	
C6	Hexane	0.008	0.004	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane					
C9	Nonane					
C10	Decane					
Totals			99.998 %		5.984 GPM	

Sample Date: 7/31/2010 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Remarks:

Zone 25

GQ Source Daily Summary

July 2010

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	0.6837	1130.0	1150.0	0.317	3.530	75.693	18.415	1.801	0.064	0.143	0.011	0.012	0.013						1390.81	
2	0.6864	1131.6	1151.6	0.316	3.690	75.335	18.433	1.944	0.075	0.167	0.013	0.014	0.013						1390.00	
3	0.6839	1132.6	1152.6	0.343	3.359	75.463	18.979	1.648	0.056	0.123	0.008	0.010	0.011						1393.73	
4	0.6998	1157.2	1177.7	0.349	3.323	74.180	18.990	2.461	0.146	0.400	0.048	0.064	0.039						1407.84	
5	0.7026	1162.8	1183.4	0.296	3.318	74.510	18.128	2.798	0.188	0.527	0.072	0.098	0.066						1411.87	
6	0.6858	1134.0	1154.1	0.374	3.401	75.137	19.190	1.707	0.052	0.109	0.007	0.007	0.016						1393.57	
7	0.6832	1130.4	1150.5	0.341	3.424	75.455	19.013	1.601	0.046	0.099	0.006	0.007	0.008						1391.85	
8	0.6863	1135.8	1155.9	0.334	3.403	75.099	19.137	1.842	0.051	0.109	0.007	0.008	0.010						1395.22	
9	0.6926	1144.6	1164.9	0.369	3.396	74.406	19.338	2.225	0.073	0.160	0.011	0.013	0.010						1399.72	
10	0.6898	1141.1	1161.4	0.356	3.366	74.759	19.214	2.061	0.067	0.146	0.010	0.012	0.010						1398.29	
11	0.6886	1139.5	1159.6	0.345	3.367	74.992	19.020	2.024	0.067	0.150	0.011	0.014	0.010						1397.51	
12	0.6883	1138.6	1158.8	0.359	3.368	75.001	19.025	2.016	0.065	0.138	0.009	0.010	0.009						1396.79	
13	0.6893	1140.7	1160.9	0.353	3.350	74.828	19.194	2.031	0.067	0.147	0.010	0.011	0.008						1398.24	
14	0.6816	1129.1	1149.1	0.291	3.423	75.921	18.509	1.629	0.055	0.128	0.012	0.016	0.015						1391.94	
15	0.6887	1139.7	1159.9	0.333	3.387	75.021	18.927	2.056	0.073	0.163	0.013	0.015	0.012						1397.62	
16	0.6935	1146.3	1166.6	0.345	3.406	74.539	18.985	2.383	0.090	0.204	0.016	0.019	0.014						1400.94	
17	0.6906	1143.1	1163.3	0.326	3.371	74.850	18.917	2.237	0.082	0.180	0.012	0.014	0.011						1399.80	
18	0.6924	1145.9	1166.2	0.338	3.342	74.574	19.175	2.258	0.083	0.185	0.014	0.016	0.015						1401.50	
19	0.6718	1116.7	1136.4	0.178	3.436	77.398	17.493	1.307	0.050	0.111	0.008	0.008	0.012						1386.55	
20	0.6608	1100.8	1120.3	0.086	3.509	78.852	16.670	0.776	0.025	0.057	0.004	0.005	0.015						1378.21	
21	0.6570	1093.7	1113.1	0.070	3.614	79.266	16.439	0.555	0.013	0.027	0.001	0.002	0.014						1373.24	
22	0.6826	1144.3	1164.6	0.389	3.381	74.438	19.299	2.226	0.075	0.161	0.010	0.012	0.009						1399.37	
23	0.6932	1146.1	1166.4	0.360	3.375	74.436	19.221	2.303	0.084	0.183	0.012	0.014	0.011						1400.88	
24	0.6991	1155.3	1175.7	0.371	3.344	73.877	19.313	2.681	0.110	0.249	0.018	0.022	0.015						1406.22	
25	0.7014	1157.2	1177.7	0.379	3.428	73.673	19.200	2.865	0.121	0.275	0.020	0.024	0.016						1406.30	
26	0.7038	1159.2	1179.7	0.365	3.562	73.588	18.869	3.036	0.145	0.347	0.030	0.036	0.023						1406.14	
27	0.6941	1145.9	1166.2	0.368	3.460	74.529	18.871	2.375	0.099	0.235	0.021	0.025	0.017						1399.75	
28	0.6914	1141.1	1161.3	0.369	3.490	75.149	18.110	2.512	0.102	0.224	0.016	0.018	0.010						1396.65	
29	0.6990	1154.2	1174.7	0.374	3.397	74.220	18.653	2.866	0.131	0.298	0.022	0.026	0.014						1404.98	
30	0.6999	1152.8	1173.3	0.397	3.527	74.100	18.560	2.932	0.129	0.294	0.022	0.025	0.014						1402.44	
31	0.6917	1138.9	1159.1	0.357	3.677	74.832	18.419	2.386	0.088	0.193	0.015	0.017	0.016						1393.65	
Avg	0.6891	1140.0	1159.8	0.327	3.433	75.101	18.700	2.114	0.083	0.191	0.016	0.019	0.015						1397.15	

Zone 261

GQ Source Daily Summary

July 2010

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	0.7250	1163.4	1184.0	0.550	5.013	69.874	20.161	3.883	0.151	0.326	0.018	0.019	0.005	0.000	0.000	0.000	0.000	0.000	1390.52
2	0.7254	1163.7	1184.3	0.552	5.032	69.421	20.849	3.729	0.124	0.262	0.014	0.015	0.003	0.000	0.000	0.000	0.000	0.000	1390.54
3	0.7253	1161.5	1182.1	0.543	5.167	69.598	20.407	3.829	0.136	0.286	0.015	0.015	0.004	0.000	0.000	0.000	0.000	0.000	1388.02
4	0.7301	1170.9	1191.6	0.546	5.043	68.948	20.958	3.966	0.153	0.338	0.020	0.021	0.006	0.000	0.000	0.000	0.000	0.000	1394.57
5	0.7300	1168.8	1189.5	0.520	5.197	69.029	20.653	4.047	0.159	0.349	0.020	0.021	0.006	0.000	0.000	0.000	0.000	0.000	1392.23
6	0.7320	1173.2	1193.9	0.532	5.099	68.734	20.959	4.117	0.162	0.353	0.019	0.020	0.005	0.000	0.000	0.000	0.000	0.000	1395.51
7	0.7384	1182.8	1203.7	0.536	5.108	68.242	20.879	4.468	0.201	0.473	0.036	0.042	0.014	0.000	0.000	0.000	0.000	0.000	1400.79
8	0.7286	1167.4	1188.1	0.512	5.150	68.537	20.464	4.509	0.209	0.500	0.044	0.055	0.021	0.000	0.000	0.000	0.000	0.000	1400.10
9	0.7302	1169.5	1190.2	0.538	5.148	68.772	21.114	3.944	0.143	0.305	0.016	0.016	0.004	0.000	0.000	0.000	0.000	0.000	1391.88
10	0.7314	1170.9	1191.6	0.519	5.202	69.103	20.339	4.182	0.178	0.411	0.027	0.029	0.007	0.000	0.000	0.000	0.000	0.000	1392.83
11	0.7303	1169.3	1190.1	0.530	5.172	69.190	20.356	4.164	0.166	0.370	0.022	0.024	0.007	0.000	0.000	0.000	0.000	0.000	1393.33
12	0.7323	1173.4	1194.2	0.536	5.108	68.895	20.621	4.233	0.171	0.381	0.023	0.025	0.007	0.000	0.000	0.000	0.000	0.000	1392.61
13	0.7333	1175.0	1195.8	0.533	5.107	68.791	20.647	4.297	0.176	0.392	0.024	0.026	0.007	0.000	0.000	0.000	0.000	0.000	1395.48
14	0.7351	1177.3	1198.2	0.527	5.143	68.774	20.398	4.432	0.196	0.454	0.031	0.035	0.011	0.000	0.000	0.000	0.000	0.000	1396.45
15	0.7341	1176.2	1197.1	0.526	5.120	68.936	20.302	4.383	0.197	0.458	0.032	0.035	0.011	0.000	0.000	0.000	0.000	0.000	1397.48
16	0.7364	1177.0	1197.8	0.519	5.298	68.774	20.090	4.484	0.215	0.516	0.041	0.046	0.017	0.000	0.000	0.000	0.000	0.000	1397.09
17	0.7332	1171.2	1192.0	0.514	5.356	69.088	19.925	4.379	0.197	0.458	0.033	0.037	0.014	0.000	0.000	0.000	0.000	0.000	1395.83
18	0.7304	1167.7	1188.3	0.533	5.284	69.239	20.114	4.226	0.170	0.379	0.023	0.025	0.007	0.000	0.000	0.000	0.000	0.000	1392.04
19	0.7328	1171.1	1191.8	0.534	5.300	68.989	20.163	4.360	0.182	0.410	0.026	0.028	0.008	0.000	0.000	0.000	0.000	0.000	1390.46
20	0.7335	1172.6	1193.3	0.530	5.279	68.947	20.154	4.415	0.188	0.423	0.027	0.029	0.008	0.000	0.000	0.000	0.000	0.000	1392.22
21	0.7407	1176.4	1197.3	0.554	5.686	67.616	20.812	4.697	0.186	0.396	0.023	0.024	0.006	0.000	0.000	0.000	0.000	0.000	1393.33
22	0.7356	1168.0	1188.7	0.529	5.755	68.181	20.560	4.426	0.166	0.345	0.017	0.017	0.004	0.000	0.000	0.000	0.000	0.000	1391.13
23	0.7255	1161.2	1181.8	0.479	5.304	69.691	20.075	3.935	0.153	0.324	0.017	0.017	0.005	0.000	0.000	0.000	0.000	0.000	1385.96
24	0.7326	1173.1	1193.8	0.552	5.129	68.792	20.702	4.251	0.167	0.363	0.019	0.020	0.005	0.000	0.000	0.000	0.000	0.000	1387.42
25	0.7332	1173.4	1194.2	0.557	5.158	68.764	20.613	4.318	0.171	0.372	0.021	0.021	0.005	0.000	0.000	0.000	0.000	0.000	1394.82
26	0.7329	1172.2	1193.0	0.542	5.225	68.832	20.481	4.320	0.173	0.377	0.021	0.022	0.005	0.000	0.000	0.000	0.000	0.000	1394.68
27	0.7357	1176.2	1197.1	0.538	5.246	68.809	20.105	4.556	0.204	0.467	0.031	0.034	0.010	0.000	0.000	0.000	0.000	0.000	1393.52
28	0.7352	1176.7	1197.5	0.552	5.155	68.624	20.595	4.399	0.187	0.423	0.027	0.030	0.008	0.000	0.000	0.000	0.000	0.000	1395.63
29	0.7362	1176.5	1197.3	0.546	5.269	68.582	20.382	4.516	0.195	0.441	0.029	0.032	0.010	0.000	0.000	0.000	0.000	0.000	1396.62
30	0.7324	1171.6	1192.3	0.551	5.205	68.782	20.650	4.260	0.161	0.345	0.020	0.021	0.006	0.000	0.000	0.000	0.000	0.000	1395.43
31	0.7324	1171.6	1192.3	0.551	5.212	68.891	20.498	4.246	0.173	0.387	0.024	0.026	0.008	0.000	0.000	0.000	0.000	0.000	1393.25
AVG	0.7324	1172.0	1192.7	0.534	5.212	68.891	20.498	4.246	0.173	0.387	0.024	0.026	0.008	0.000	0.000	0.000	0.000	0.000	1393.61

Zone 262

GQ Source Analysis

GQ Source Number:	2501030	Specific Gravity:	0.6588
GQ Source Name:	LIGNITE PLANT	BTU Base:	Dry
Effective Date:	7/1/2010 9:00:00 AM	Measured Heat Value:	1125.93
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1124.29
Pressure Base:	14.730	Wet Heat Value:	1104.73
Viscosity:		As Deliv. Heat Value:	1124.29

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	78.992		CO2	Carbon Dioxide	0.132
C2	Ethane	17.210	0.000	N2	Nitrogen	2.984
C3	Propane	0.637	0.175	O2	Oxygen	0.000
IC4	Iso-Butane	0.000	0.000	HE	Helium	
NC4	N-Butane	0.001	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	0.038	0.017	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane					
C9	Nonane					
C10	Decane					

Totals 99.993% 0.192 GPM

Sample Date: 7/31/2010 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Remarks:

*** End of Report ***

Zone 263

GQ Source Daily Summary

July 2010

Number: 043 Pressure Base: 14.730 Contract Day: 1

Name: BISMARCK-CLEVELAND 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	0.7289	1169.5	1190.2	0.564	4.991	69.223	20.758	3.912	0.150	0.341	0.021	0.023	0.018	0.000	0.000	0.000	0.000	0.000	1394.09
2	0.7325	1172.8	1193.6	0.530	5.173	68.929	20.487	4.254	0.171	0.390	0.023	0.024	0.018	0.000	0.000	0.000	0.000	0.000	1394.56
3	0.7288	1166.8	1187.5	0.538	5.188	69.187	20.603	3.940	0.151	0.337	0.019	0.020	0.016	0.000	0.000	0.000	0.000	0.000	1390.91
4	0.7310	1172.3	1193.1	0.541	5.048	68.913	20.887	4.054	0.156	0.347	0.019	0.019	0.016	0.000	0.000	0.000	0.000	0.000	1395.46
5	0.7392	1184.2	1205.2	0.545	5.082	68.266	20.796	4.492	0.205	0.499	0.039	0.047	0.029	0.000	0.000	0.000	0.000	0.000	1401.76
6	0.7348	1176.9	1197.8	0.523	5.143	68.886	20.366	4.311	0.189	0.459	0.038	0.048	0.037	0.000	0.000	0.000	0.000	0.000	1397.33
7	0.7288	1167.5	1188.1	0.556	5.119	69.007	20.943	3.924	0.132	0.276	0.014	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1391.74
8	0.7279	1165.9	1186.5	0.543	5.145	69.231	20.731	3.839	0.142	0.318	0.018	0.019	0.015	0.000	0.000	0.000	0.000	0.000	1390.76
9	0.7295	1168.4	1189.0	0.528	5.169	69.504	20.013	4.116	0.175	0.413	0.028	0.030	0.024	0.000	0.000	0.000	0.000	0.000	1392.12
10	0.7315	1172.0	1192.8	0.544	5.102	69.161	20.323	4.244	0.169	0.387	0.024	0.026	0.021	0.000	0.000	0.000	0.000	0.000	1394.64
11	0.7331	1174.3	1195.1	0.542	5.122	68.895	20.527	4.261	0.174	0.404	0.026	0.028	0.021	0.000	0.000	0.000	0.000	0.000	1395.77
12	0.7343	1176.3	1197.2	0.534	5.118	68.988	20.211	4.407	0.193	0.457	0.031	0.034	0.026	0.000	0.000	0.000	0.000	0.000	1397.08
13	0.7322	1173.1	1193.9	0.534	5.115	69.341	19.955	4.310	0.193	0.459	0.032	0.035	0.027	0.000	0.000	0.000	0.000	0.000	1395.27
14	0.7336	1175.6	1196.4	0.538	5.091	69.047	20.261	4.333	0.191	0.451	0.031	0.034	0.025	0.000	0.000	0.000	0.000	0.000	1396.88
15	0.7360	1175.5	1196.3	0.521	5.353	68.945	19.845	4.465	0.214	0.529	0.043	0.049	0.036	0.000	0.000	0.000	0.000	0.000	1394.38
16	0.7301	1167.1	1187.7	0.536	5.291	69.477	19.780	4.261	0.177	0.404	0.025	0.027	0.022	0.000	0.000	0.000	0.000	0.000	1390.01
17	0.7312	1168.7	1189.4	0.546	5.276	69.255	20.011	4.270	0.173	0.397	0.025	0.027	0.020	0.000	0.000	0.000	0.000	0.000	1390.94
18	0.7329	1172.0	1192.8	0.538	5.247	69.122	20.010	4.390	0.186	0.430	0.027	0.029	0.022	0.000	0.000	0.000	0.000	0.000	1393.28
19	0.7360	1175.6	1196.4	0.550	5.301	68.717	20.176	4.521	0.196	0.455	0.029	0.032	0.024	0.000	0.000	0.000	0.000	0.000	1394.59
20	0.7365	1170.3	1191.0	0.539	5.694	68.534	19.946	4.569	0.196	0.449	0.026	0.027	0.020	0.000	0.000	0.000	0.000	0.000	1387.73
21	0.7395	1173.8	1194.6	0.561	5.728	67.860	20.561	4.645	0.183	0.401	0.022	0.022	0.018	0.000	0.000	0.000	0.000	0.000	1389.12
22	0.7336	1166.2	1186.9	0.544	5.657	68.526	20.423	4.291	0.161	0.348	0.018	0.018	0.015	0.000	0.000	0.000	0.000	0.000	1385.78
23	0.7333	1174.3	1195.1	0.567	5.102	68.806	20.629	4.281	0.171	0.382	0.022	0.022	0.018	0.000	0.000	0.000	0.000	0.000	1395.62
24	0.7329	1172.2	1193.0	0.550	5.216	68.980	20.277	4.329	0.178	0.400	0.024	0.026	0.020	0.000	0.000	0.000	0.000	0.000	1393.51
25	0.7346	1174.8	1195.6	0.551	5.216	69.085	19.861	4.521	0.201	0.472	0.032	0.035	0.026	0.000	0.000	0.000	0.000	0.000	1394.95
26	0.7341	1175.5	1196.3	0.556	5.122	68.760	20.594	4.310	0.177	0.408	0.026	0.028	0.021	0.000	0.000	0.000	0.000	0.000	1396.26
27	0.7353	1174.5	1195.3	0.557	5.296	68.817	20.126	4.471	0.192	0.450	0.031	0.035	0.025	0.000	0.000	0.000	0.000	0.000	1393.85
28	0.7298	1168.5	1189.2	0.542	5.163	69.181	20.446	4.134	0.152	0.327	0.018	0.019	0.017	0.000	0.000	0.000	0.000	0.000	1392.08
29	0.7284	1166.7	1187.4	0.551	5.132	69.499	20.122	4.161	0.154	0.329	0.018	0.019	0.016	0.000	0.000	0.000	0.000	0.000	1391.24
30	0.7300	1173.1	1193.9	0.551	4.892	69.222	20.654	4.123	0.155	0.341	0.021	0.022	0.018	0.000	0.000	0.000	0.000	0.000	1397.32
31	0.7297	1170.0	1190.7	0.563	5.039	69.245	20.472	4.151	0.148	0.324	0.020	0.022	0.017	0.000	0.000	0.000	0.000	0.000	1393.84
AVG	0.7326	1172.0	1192.8	0.545	5.204	68.987	20.348	4.267	0.174	0.399	0.025	0.028	0.021	0.000	0.000	0.000	0.000	0.000	1393.64

Zone 271

GQ Source Daily Summary

July 2010

Number: 063 **Pressure Base:** 14.730 **Contract Day:** 1
Name: CLEVELAND-MAPLETON **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	CGT
	Wet	Dry	Wet	Dry																
1	0.7235	1161.0	1181.6	1181.6	0.547	5.024	69.756	20.608	3.629	0.124	0.280	0.015	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1389.14
2	0.7349	1177.8	1198.6	1198.6	0.554	5.064	68.550	20.885	4.294	0.175	0.415	0.025	0.026	0.011	0.000	0.000	0.000	0.000	0.000	1398.19
3	0.7259	1161.9	1182.5	1182.5	0.520	5.235	69.512	20.445	3.784	0.139	0.322	0.018	0.018	0.007	0.000	0.000	0.000	0.000	0.000	1387.91
4	0.7325	1174.2	1195.0	1195.0	0.540	5.077	68.719	20.933	4.160	0.162	0.361	0.021	0.021	0.007	0.000	0.000	0.000	0.000	0.000	1396.22
5	0.7329	1174.9	1195.7	1195.7	0.538	5.074	68.792	20.799	4.153	0.172	0.402	0.027	0.030	0.012	0.000	0.000	0.000	0.000	0.000	1396.69
6	0.7416	1187.7	1208.7	1208.7	0.531	5.111	68.176	20.591	4.668	0.224	0.560	0.049	0.060	0.029	0.000	0.000	0.000	0.000	0.000	1403.62
7	0.7296	1169.3	1190.0	1190.0	0.540	5.104	69.115	20.713	3.987	0.148	0.322	0.023	0.027	0.021	0.000	0.000	0.000	0.000	0.000	1393.15
8	0.7286	1167.3	1188.0	1188.0	0.545	5.121	68.941	21.097	3.847	0.134	0.282	0.015	0.016	0.001	0.000	0.000	0.000	0.000	0.000	1391.82
9	0.7293	1168.0	1188.7	1188.7	0.530	5.169	69.292	20.387	4.019	0.165	0.378	0.025	0.027	0.009	0.000	0.000	0.000	0.000	0.000	1391.90
10	0.7293	1168.0	1188.7	1188.7	0.537	5.161	69.364	20.225	4.127	0.164	0.367	0.023	0.024	0.010	0.000	0.000	0.000	0.000	0.000	1391.86
11	0.7324	1173.8	1194.6	1194.6	0.541	5.083	68.912	20.629	4.220	0.170	0.384	0.025	0.027	0.010	0.000	0.000	0.000	0.000	0.000	1395.91
12	0.7353	1177.8	1198.7	1198.7	0.536	5.123	68.794	20.377	4.424	0.197	0.462	0.032	0.036	0.019	0.000	0.000	0.000	0.000	0.000	1397.84
13	0.7335	1175.0	1195.8	1195.8	0.534	5.127	69.087	20.145	4.374	0.194	0.452	0.032	0.036	0.020	0.000	0.000	0.000	0.000	0.000	1396.23
14	0.7305	1171.5	1192.3	1192.3	0.530	5.058	69.438	20.084	4.206	0.183	0.424	0.029	0.032	0.017	0.000	0.000	0.000	0.000	0.000	1395.02
15	0.7354	1176.1	1196.9	1196.9	0.532	5.244	68.959	19.999	4.434	0.211	0.510	0.041	0.047	0.024	0.000	0.000	0.000	0.000	0.000	1395.69
16	0.7331	1171.4	1192.1	1192.1	0.510	5.348	69.152	19.878	4.352	0.192	0.469	0.035	0.039	0.025	0.000	0.000	0.000	0.000	0.000	1392.27
17	0.7292	1166.5	1187.1	1187.1	0.521	5.268	69.387	20.063	4.173	0.162	0.374	0.023	0.025	0.004	0.000	0.000	0.000	0.000	0.000	1390.15
18	0.7337	1172.7	1193.5	1193.5	0.543	5.271	69.016	20.040	4.420	0.189	0.445	0.029	0.032	0.015	0.000	0.000	0.000	0.000	0.000	1393.32
19	0.7332	1173.0	1193.8	1193.8	0.537	5.218	68.986	20.215	4.370	0.184	0.423	0.027	0.029	0.012	0.000	0.000	0.000	0.000	0.000	1394.11
20	0.7386	1175.5	1196.3	1196.3	0.551	5.551	68.297	20.198	4.650	0.202	0.473	0.030	0.032	0.016	0.000	0.000	0.000	0.000	0.000	1391.97
21	0.7352	1167.7	1188.4	1188.4	0.546	5.716	68.642	19.929	4.476	0.191	0.436	0.026	0.027	0.011	0.000	0.000	0.000	0.000	0.000	1385.93
22	0.7415	1173.2	1193.9	1193.9	0.589	5.907	67.295	20.970	4.671	0.171	0.358	0.019	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1386.57
23	0.7289	1166.9	1187.5	1187.5	0.513	5.227	69.289	20.321	4.101	0.160	0.346	0.019	0.020	0.004	0.000	0.000	0.000	0.000	0.000	1390.94
24	0.7325	1172.1	1192.8	1192.8	0.572	5.160	68.894	20.494	4.289	0.170	0.371	0.022	0.023	0.004	0.000	0.000	0.000	0.000	0.000	1393.67
25	0.7351	1175.4	1196.2	1196.2	0.544	5.237	68.902	20.060	4.516	0.200	0.462	0.031	0.034	0.013	0.000	0.000	0.000	0.000	0.000	1395.16
26	0.7342	1175.6	1196.5	1196.5	0.561	5.115	68.737	20.621	4.303	0.179	0.414	0.028	0.031	0.011	0.000	0.000	0.000	0.000	0.000	1396.32
27	0.7360	1176.7	1197.5	1197.5	0.552	5.230	68.665	20.324	4.521	0.192	0.440	0.030	0.033	0.014	0.000	0.000	0.000	0.000	0.000	1395.88
28	0.7347	1173.9	1194.7	1194.7	0.558	5.269	68.866	20.164	4.420	0.193	0.444	0.032	0.036	0.018	0.000	0.000	0.000	0.000	0.000	1393.79
29	0.7286	1167.0	1187.7	1187.7	0.551	5.135	69.338	20.324	4.152	0.150	0.313	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1391.36
30	0.7290	1169.3	1190.0	1190.0	0.553	5.030	69.202	20.657	4.042	0.150	0.325	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1393.73
31	0.7301	1173.0	1193.8	1193.8	0.558	4.896	69.274	20.514	4.190	0.160	0.357	0.024	0.026	0.002	0.000	0.000	0.000	0.000	0.000	1397.11
Avg	0.7325	1172.0	1192.8	1192.8	0.542	5.205	68.947	20.409	4.257	0.174	0.399	0.026	0.029	0.011	0.000	0.000	0.000	0.000	0.000	1393.66

Zone 272

GQ Source Daily Summary

July 2010

Number: 061 **Pressure Base:** 14.730 **Contract Day:** 1
Name: CLEVELAND-GRAFTON **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	0.7238	1161.6	1182.1	0.548	5.019	69.698	20.662	3.640	0.124	0.277	0.015	0.016	0.001	0.000	0.000	0.000	0.000	0.000	1389.51
2	0.7352	1178.2	1199.0	0.553	5.069	68.518	20.887	4.317	0.177	0.417	0.025	0.027	0.010	0.000	0.000	0.000	0.000	0.000	1398.35
3	0.7259	1162.1	1182.7	0.520	5.227	69.497	20.474	3.780	0.139	0.319	0.018	0.018	0.007	0.000	0.000	0.000	0.000	0.000	1388.09
4	0.7329	1174.9	1195.7	0.539	5.072	68.661	20.973	4.183	0.162	0.362	0.020	0.021	0.007	0.000	0.000	0.000	0.000	0.000	1396.71
5	0.7331	1175.2	1196.1	0.538	5.073	68.760	20.821	4.165	0.172	0.401	0.027	0.030	0.012	0.000	0.000	0.000	0.000	0.000	1396.88
6	0.7418	1188.1	1209.1	0.533	5.110	68.136	20.616	4.684	0.224	0.559	0.049	0.060	0.029	0.000	0.000	0.000	0.000	0.000	1403.83
7	0.7292	1168.7	1189.4	0.535	5.106	69.160	20.714	3.944	0.146	0.319	0.023	0.028	0.025	0.000	0.000	0.000	0.000	0.000	1392.87
8	0.7285	1167.1	1187.8	0.546	5.126	68.968	21.063	3.847	0.134	0.284	0.015	0.016	0.002	0.000	0.000	0.000	0.000	0.000	1391.62
9	0.7275	1166.0	1186.6	0.523	5.132	69.406	20.530	3.843	0.154	0.354	0.024	0.026	0.009	0.000	0.000	0.000	0.000	0.000	1391.23
10	0.7293	1168.1	1188.8	0.536	5.156	69.358	20.234	4.132	0.163	0.364	0.023	0.024	0.010	0.000	0.000	0.000	0.000	0.000	1391.98
11	0.7325	1174.1	1194.8	0.543	5.083	68.880	20.651	4.230	0.170	0.383	0.025	0.027	0.009	0.000	0.000	0.000	0.000	0.000	1396.03
12	0.7354	1177.9	1198.8	0.536	5.126	68.774	20.388	4.432	0.197	0.460	0.032	0.036	0.019	0.000	0.000	0.000	0.000	0.000	1397.89
13	0.7336	1175.1	1195.9	0.535	5.125	69.079	20.148	4.381	0.193	0.452	0.032	0.036	0.020	0.000	0.000	0.000	0.000	0.000	1396.31
14	0.7306	1171.8	1192.6	0.531	5.053	69.413	20.111	4.210	0.183	0.423	0.029	0.031	0.017	0.000	0.000	0.000	0.000	0.000	1395.25
15	0.7356	1176.5	1197.3	0.527	5.243	68.934	20.016	4.448	0.211	0.510	0.041	0.046	0.024	0.000	0.000	0.000	0.000	0.000	1395.98
16	0.7332	1171.4	1192.1	0.516	5.347	69.160	19.855	4.358	0.193	0.474	0.034	0.039	0.025	0.000	0.000	0.000	0.000	0.000	1392.21
17	0.7300	1166.5	1187.2	0.572	5.265	69.303	20.074	4.193	0.163	0.377	0.023	0.024	0.005	0.000	0.000	0.000	0.000	0.000	1389.42
18	0.7338	1173.3	1194.0	0.527	5.274	68.997	20.053	4.438	0.190	0.448	0.029	0.032	0.014	0.000	0.000	0.000	0.000	0.000	1393.86
19	0.7334	1173.3	1194.1	0.538	5.219	68.954	20.229	4.387	0.184	0.423	0.026	0.028	0.012	0.000	0.000	0.000	0.000	0.000	1394.28
20	0.7391	1175.8	1196.6	0.575	5.540	68.247	20.216	4.667	0.203	0.474	0.030	0.032	0.016	0.000	0.000	0.000	0.000	0.000	1391.88
21	0.7323	1164.3	1184.9	0.518	5.689	68.960	19.873	4.325	0.177	0.399	0.023	0.024	0.012	0.000	0.000	0.000	0.000	0.000	1384.69
22	0.7415	1173.0	1193.8	0.625	5.865	67.333	20.942	4.664	0.172	0.361	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1386.35
23	0.7292	1166.9	1187.6	0.527	5.224	69.261	20.332	4.107	0.160	0.345	0.019	0.020	0.004	0.000	0.000	0.000	0.000	0.000	1390.79
24	0.7327	1173.5	1194.3	0.546	5.127	68.811	20.646	4.295	0.168	0.362	0.021	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1395.24
25	0.7353	1175.4	1196.2	0.560	5.233	68.882	20.055	4.527	0.201	0.464	0.031	0.034	0.014	0.000	0.000	0.000	0.000	0.000	1390.79
26	0.7348	1176.8	1197.7	0.563	5.097	68.652	20.677	4.352	0.180	0.411	0.027	0.030	0.010	0.000	0.000	0.000	0.000	0.000	1397.15
27	0.7370	1178.8	1199.7	0.559	5.186	68.477	20.499	4.590	0.191	0.432	0.028	0.031	0.007	0.000	0.000	0.000	0.000	0.000	1394.99
28	0.7352	1174.8	1195.7	0.552	5.667	68.795	20.211	4.450	0.194	0.447	0.032	0.036	0.017	0.000	0.000	0.000	0.000	0.000	1397.43
29	0.7283	1166.0	1186.7	0.564	5.147	69.347	20.348	4.103	0.147	0.309	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1394.45
30	0.7295	1169.7	1190.4	0.569	5.028	69.138	20.692	4.056	0.151	0.325	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1390.48
31	0.7305	1173.5	1194.3	0.558	4.896	69.219	20.556	4.203	0.160	0.357	0.024	0.026	0.002	0.000	0.000	0.000	0.000	0.000	1393.70
Avg	0.7326	1172.0	1193.0	0.545	5.197	68.928	20.437	4.256	0.174	0.397	0.026	0.028	0.011	0.000	0.000	0.000	0.000	0.000	1393.77

Zone 273

GQ Source Daily Summary

July 2010

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

Day	Heating Value		CO2	Heating Value																	CCT
	Wet	Dry		N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe				
1	0.7279	1168.0	1188.7	0.564	4.987	69.334	20.741	3.839	0.145	0.329	0.021	0.023	0.018	0.000	0.000	0.000	0.000	0.000	1393.23		
2	0.7324	1172.5	1193.2	0.533	5.180	68.963	20.443	4.243	0.173	0.398	0.023	0.025	0.019	0.000	0.000	0.000	0.000	0.000	1394.25		
3	0.7282	1165.7	1186.4	0.536	5.194	69.262	20.576	3.896	0.148	0.332	0.019	0.020	0.016	0.000	0.000	0.000	0.000	0.000	1390.25		
4	0.7302	1171.0	1191.7	0.541	5.059	69.020	20.811	4.014	0.155	0.345	0.019	0.019	0.016	0.000	0.000	0.000	0.000	0.000	1394.56		
5	0.7389	1184.0	1205.0	0.546	5.069	68.275	20.836	4.469	0.202	0.491	0.038	0.046	0.029	0.000	0.000	0.000	0.000	0.000	1401.75		
6	0.7362	1178.5	1199.4	0.517	5.189	68.803	20.292	4.375	0.186	0.470	0.040	0.084	0.045	0.000	0.000	0.000	0.000	0.000	1397.88		
7	0.7282	1166.4	1187.1	0.556	5.123	69.108	20.873	3.887	0.132	0.277	0.014	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1391.10		
8	0.7280	1166.2	1186.8	0.543	5.139	69.193	20.784	3.834	0.141	0.314	0.018	0.018	0.015	0.000	0.000	0.000	0.000	0.000	1390.97		
9	0.7295	1168.3	1189.0	0.527	5.170	69.508	20.014	4.109	0.175	0.414	0.028	0.031	0.025	0.000	0.000	0.000	0.000	0.000	1392.10		
10	0.7313	1171.7	1192.5	0.544	5.108	69.194	20.279	4.247	0.170	0.388	0.024	0.026	0.021	0.000	0.000	0.000	0.000	0.000	1394.42		
11	0.7328	1173.9	1194.7	0.542	5.119	68.906	20.552	4.241	0.171	0.395	0.025	0.027	0.021	0.000	0.000	0.000	0.000	0.000	1395.58		
12	0.7342	1176.1	1196.9	0.534	5.120	68.993	20.223	4.389	0.192	0.456	0.031	0.035	0.026	0.000	0.000	0.000	0.000	0.000	1396.94		
13	0.7321	1173.0	1193.8	0.534	5.112	69.354	19.949	4.306	0.192	0.459	0.032	0.035	0.028	0.000	0.000	0.000	0.000	0.000	1395.26		
14	0.7332	1175.0	1195.8	0.538	5.089	69.102	20.236	4.304	0.189	0.451	0.031	0.034	0.025	0.000	0.000	0.000	0.000	0.000	1396.53		
15	0.7358	1175.1	1195.9	0.522	5.354	68.978	19.828	4.450	0.213	0.528	0.043	0.049	0.036	0.000	0.000	0.000	0.000	0.000	1394.13		
16	0.7300	1166.9	1187.6	0.536	5.294	69.500	19.754	4.257	0.177	0.406	0.026	0.028	0.023	0.000	0.000	0.000	0.000	0.000	1389.89		
17	0.7306	1167.8	1188.5	0.546	5.277	69.316	19.989	4.236	0.171	0.393	0.025	0.027	0.020	0.000	0.000	0.000	0.000	0.000	1390.44		
18	0.7330	1172.2	1192.9	0.538	5.246	69.115	20.009	4.397	0.187	0.430	0.027	0.029	0.022	0.000	0.000	0.000	0.000	0.000	1393.34		
19	0.7360	1175.6	1196.4	0.549	5.295	68.728	20.174	4.519	0.195	0.454	0.029	0.032	0.024	0.000	0.000	0.000	0.000	0.000	1394.66		
20	0.7369	1170.9	1191.7	0.539	5.683	68.470	20.021	4.573	0.196	0.446	0.026	0.027	0.020	0.000	0.000	0.000	0.000	0.000	1388.23		
21	0.7347	1173.3	1194.1	0.537	5.335	68.808	20.179	4.443	0.189	0.432	0.026	0.028	0.022	0.000	0.000	0.000	0.000	0.000	1393.12		
22	0.7336	1167.0	1187.7	0.537	5.619	68.570	20.394	4.316	0.162	0.350	0.018	0.019	0.016	0.000	0.000	0.000	0.000	0.000	1386.70		
23	0.7329	1173.6	1194.3	0.567	5.105	68.873	20.585	4.257	0.170	0.381	0.022	0.022	0.018	0.000	0.000	0.000	0.000	0.000	1395.15		
24	0.7326	1171.7	1192.4	0.551	5.216	69.016	20.272	4.301	0.176	0.398	0.024	0.026	0.020	0.000	0.000	0.000	0.000	0.000	1393.18		
25	0.7346	1174.8	1195.6	0.551	5.221	69.100	19.833	4.520	0.202	0.478	0.032	0.035	0.026	0.000	0.000	0.000	0.000	0.000	1394.86		
26	0.7337	1174.8	1195.6	0.558	5.126	68.818	20.558	4.284	0.176	0.408	0.026	0.028	0.021	0.000	0.000	0.000	0.000	0.000	1395.84		
27	0.7353	1174.4	1195.2	0.558	5.296	68.810	20.141	4.464	0.191	0.448	0.031	0.034	0.025	0.000	0.000	0.000	0.000	0.000	1393.78		
28	0.7307	1169.3	1190.0	0.561	5.171	69.083	20.454	4.188	0.155	0.332	0.018	0.019	0.018	0.000	0.000	0.000	0.000	0.000	1392.17		
29	0.7287	1167.2	1187.9	0.552	5.123	69.466	20.150	4.171	0.155	0.330	0.018	0.019	0.016	0.000	0.000	0.000	0.000	0.000	1391.59		
30	0.7297	1172.5	1193.2	0.551	4.905	69.255	20.633	4.101	0.154	0.339	0.021	0.023	0.018	0.000	0.000	0.000	0.000	0.000	1396.82		
31	0.7293	1169.5	1190.2	0.563	5.032	69.286	20.473	4.120	0.146	0.320	0.020	0.022	0.017	0.000	0.000	0.000	0.000	0.000	1393.64		
Avg	0.7323	1172.0	1192.6	0.544	5.192	69.039	20.324	4.250	0.174	0.400	0.026	0.029	0.022	0.000	0.000	0.000	0.000	0.000	1393.62		

Zone 28

GQ Source Daily Summary

July 2010

Number: 271

Pressure Base: 14.730

Contract Day: 1

Name: DICKINSON AREA

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value		C02	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
		Value Wet	Value Dry																
1	0.5972	1002.8	1020.6	0.828	2.354	92.489	3.752	0.440	0.061	0.055	0.011	0.000	0.012	0.000	0.000	0.000	0.000	0.000	1320.56
2	0.5875	976.6	993.9	0.749	3.166	93.624	2.360	0.102	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1296.70
3	0.5866	975.3	992.6	0.723	3.198	93.773	2.216	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1295.96
4	0.5922	986.2	1003.6	0.660	3.164	92.554	3.537	0.086	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1304.13
5	0.5904	983.3	1000.8	0.676	3.141	92.935	3.169	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1302.40
6	0.5891	979.4	996.7	0.715	3.196	93.245	2.766	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1298.63
7	0.5986	1005.1	1022.9	0.683	2.568	91.814	4.480	0.385	0.043	0.026	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1322.08
8	0.5950	992.1	1009.7	0.658	3.064	92.238	3.755	0.244	0.024	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1308.95
9	0.5961	993.7	1011.3	0.597	3.165	91.723	4.399	0.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1309.81
10	0.5985	997.1	1014.8	0.636	3.125	91.330	4.740	0.169	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1311.67
11	0.5982	996.7	1014.4	0.632	3.124	91.342	4.780	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1311.53
12	0.5988	998.3	1016.0	0.612	3.116	91.204	4.943	0.125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1312.92
13	0.5961	993.1	1010.7	0.616	3.175	91.734	4.369	0.106	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1308.99
14	0.5997	999.5	1017.2	0.623	3.109	91.058	5.061	0.144	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1313.55
15	0.6014	1005.2	1023.0	0.562	3.016	90.660	5.617	0.145	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1319.15
16	0.6098	1019.7	1037.7	0.495	3.021	88.917	7.387	0.180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1328.87
17	0.6270	1053.4	1072.1	0.358	2.800	85.409	11.119	0.314	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1353.88
18	0.6405	1077.7	1096.8	0.273	2.719	82.641	13.989	0.379	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1370.32
19	0.6290	1057.3	1076.0	0.370	2.732	85.057	11.511	0.319	0.006	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1356.31
20	0.5984	1001.7	1019.4	0.625	2.851	91.527	4.721	0.242	0.020	0.013	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1317.75
21	0.6016	1013.9	1031.8	0.748	2.215	91.479	4.969	0.493	0.057	0.036	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1330.27
22	0.6081	1034.7	1053.1	0.644	1.711	90.397	6.434	0.669	0.083	0.056	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	1350.41
23	0.5980	1000.3	1018.0	0.621	2.909	91.505	4.759	0.187	0.012	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1316.34
24	0.5957	991.9	1009.4	0.695	3.089	91.924	4.176	0.114	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1307.86
25	0.5976	990.7	1008.2	0.783	3.203	91.600	4.306	0.107	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1304.29
26	0.5950	987.0	1004.5	0.744	3.249	92.057	3.858	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1302.24
27	0.5983	1000.9	1018.7	0.788	2.636	91.825	4.410	0.293	0.029	0.018	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1316.91
28	0.5941	991.6	1009.1	0.769	2.846	92.510	3.629	0.221	0.019	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1309.17
29	0.6020	1014.3	1032.3	0.697	2.306	91.408	4.924	0.555	0.065	0.042	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1330.44
30	0.6099	1035.4	1053.8	0.565	1.964	90.020	6.527	0.763	0.094	0.063	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	1349.24
31	0.6020	1008.2	1026.0	0.816	2.497	91.251	4.981	0.386	0.041	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1322.43
Avg	0.6011	1005.0	1023.1	0.644	2.852	91.008	5.214	0.250	0.018	0.012	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1319.48

Zone 31

GQ Source Daily Summary

July 2010

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	C02	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.5777	957.2	974.2	0.844	3.292	95.662	0.174	0.018	0.004	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1281.71
2	0.5774	957.3	974.2	0.820	3.296	95.701	0.159	0.015	0.004	0.002	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1282.11
3	0.5773	957.2	974.1	0.790	3.339	95.686	0.159	0.015	0.004	0.002	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1282.07
4	0.5770	957.7	974.7	0.781	3.294	95.738	0.161	0.016	0.005	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1283.11
5	0.5776	956.9	973.8	0.816	3.344	95.652	0.162	0.016	0.004	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1281.38
6	0.5855	978.1	995.4	0.783	2.843	94.485	1.537	0.272	0.038	0.025	0.007	0.003	0.006	0.000	0.000	0.000	0.000	0.000	1300.85
7	0.5846	976.0	993.3	0.734	2.961	94.588	1.381	0.250	0.039	0.029	0.008	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1299.10
8	0.5783	960.1	977.1	0.746	3.326	95.504	0.347	0.053	0.011	0.008	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	1284.81
9	0.5778	956.9	973.8	0.832	3.346	95.619	0.175	0.017	0.005	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1281.05
10	0.5773	957.1	974.0	0.782	3.362	95.663	0.168	0.016	0.005	0.002	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1281.05
11	0.5775	957.3	974.2	0.791	3.345	95.660	0.175	0.017	0.005	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1282.05
12	0.5773	957.2	974.1	0.757	3.388	95.653	0.175	0.017	0.005	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1282.10
13	0.5784	960.0	977.0	0.774	3.292	95.515	0.349	0.050	0.009	0.006	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1284.64
14	0.5773	957.6	974.5	0.762	3.357	95.648	0.203	0.021	0.005	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1282.67
15	0.5788	962.1	979.2	0.756	3.234	95.450	0.461	0.071	0.014	0.008	0.003	0.001	0.003	0.000	0.000	0.000	0.000	0.000	1286.97
16	0.5784	960.2	977.2	0.782	3.271	95.524	0.352	0.051	0.010	0.006	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1284.83
17	0.5770	957.4	974.3	0.734	3.382	95.692	0.168	0.015	0.005	0.002	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1282.69
18	0.5774	958.6	975.6	0.730	3.352	95.629	0.245	0.030	0.007	0.004	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1283.86
19	0.5858	980.9	998.3	0.749	2.745	94.488	1.615	0.306	0.046	0.031	0.009	0.004	0.007	0.000	0.000	0.000	0.000	0.000	1304.26
20	0.5874	984.6	1002.1	0.809	2.580	94.296	1.866	0.348	0.049	0.033	0.009	0.004	0.008	0.000	0.000	0.000	0.000	0.000	1307.46
21	0.5988	1017.5	1035.5	0.848	1.588	92.785	3.828	0.734	0.104	0.071	0.018	0.009	0.015	0.000	0.000	0.000	0.000	0.000	1338.09
22	0.5805	968.5	985.6	0.754	2.999	95.258	0.805	0.137	0.022	0.014	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1293.64
23	0.5777	958.4	975.3	0.839	3.228	95.685	0.211	0.024	0.006	0.003	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1283.25
24	0.5781	956.4	973.3	0.917	3.270	95.643	0.153	0.010	0.004	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1280.13
25	0.5778	956.4	973.4	0.860	3.325	95.639	0.158	0.011	0.004	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1280.52
26	0.5861	978.6	995.9	0.943	2.623	94.581	1.489	0.277	0.042	0.027	0.008	0.003	0.006	0.000	0.000	0.000	0.000	0.000	1300.84
27	0.5820	968.0	985.2	0.888	2.975	95.074	0.870	0.148	0.023	0.014	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1291.28
28	0.5918	994.7	1012.3	0.807	2.378	93.663	2.521	0.482	0.073	0.048	0.013	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1315.98
29	0.5990	1015.5	1033.5	0.671	2.001	92.500	3.866	0.753	0.104	0.069	0.017	0.008	0.012	0.000	0.000	0.000	0.000	0.000	1335.25
30	0.5890	984.2	1001.6	0.968	2.515	94.184	1.848	0.368	0.054	0.039	0.010	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1305.16
31	0.5919	994.0	1011.6	0.822	2.420	93.576	2.578	0.477	0.061	0.042	0.011	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1314.79
AVG	0.5819	969.0	986.3	0.803	3.022	95.046	0.915	0.162	0.025	0.016	0.005	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1292.86

Zone 32

GQ Source Daily Summary

July 2010

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	0.6845	1157.5	1178.0	0.000	2.421	73.945	22.769	0.850	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.82
2	0.6855	1160.4	1180.9	0.000	2.340	73.753	23.035	0.856	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1426.32
3	0.6824	1155.1	1175.6	0.000	2.368	74.070	23.008	0.539	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.13
4	0.6811	1154.0	1174.4	0.000	2.315	74.321	22.834	0.516	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.09
5	0.6832	1157.1	1177.6	0.000	2.328	73.965	23.089	0.603	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1424.66
6	0.6810	1153.8	1174.3	0.000	2.320	74.327	22.825	0.514	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.95
7	0.6804	1151.6	1172.0	0.000	2.393	74.446	22.631	0.515	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.91
8	0.6826	1155.9	1176.4	0.000	2.343	74.064	23.001	0.577	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.83
9	0.6851	1159.3	1179.8	0.000	2.368	73.759	23.079	0.779	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.40
10	0.6837	1157.0	1177.5	0.000	2.379	73.814	23.238	0.555	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.05
11	0.6830	1156.8	1177.3	0.000	2.326	73.983	23.099	0.576	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.51
12	0.6826	1155.0	1175.5	0.000	2.400	73.986	23.085	0.515	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.72
13	0.6815	1154.4	1174.8	0.000	2.337	74.206	22.937	0.505	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.05
14	0.6827	1155.8	1176.2	0.000	2.364	74.002	23.078	0.542	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.14
15	0.6826	1156.1	1176.6	0.000	2.341	73.708	23.318	0.618	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.52
16	0.6845	1158.9	1179.4	0.000	2.329	74.205	22.909	0.543	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.38
17	0.6817	1154.8	1175.3	0.000	2.340	73.914	23.153	0.579	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.78
18	0.6833	1157.1	1177.6	0.000	2.340	74.039	23.082	0.524	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1424.52
19	0.6825	1155.7	1176.2	0.000	2.375	74.085	22.993	0.532	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.78
20	0.6822	1154.8	1175.3	0.000	2.329	74.179	22.949	0.528	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.88
21	0.6818	1154.9	1175.3	0.000	2.353	73.823	23.274	0.536	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.42
22	0.6836	1157.2	1177.7	0.000	2.363	73.666	23.385	0.570	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1424.47
23	0.6845	1158.5	1179.0	0.000	2.373	73.804	23.238	0.571	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1425.06
24	0.6838	1157.3	1177.8	0.000	2.331	74.203	22.911	0.541	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1424.28
25	0.6817	1154.8	1175.2	0.000	2.338	73.714	23.299	0.634	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.34
26	0.6846	1159.1	1179.6	0.000	2.340	74.058	22.954	0.631	0.007	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1425.65
27	0.6829	1156.4	1176.9	0.000	2.366	74.096	22.681	0.837	0.007	0.011	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1424.13
28	0.6838	1157.3	1177.8	0.000	2.339	73.989	22.999	0.656	0.007	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1424.31
29	0.6834	1157.2	1177.7	0.000	2.385	73.974	23.033	0.592	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1424.57
30	0.6831	1156.0	1176.4	0.000	2.347	74.419	22.608	0.611	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.42
31	0.6810	1153.4	1173.8	0.000	2.352	74.017	23.019	0.596	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.38
Avg	0.6829	1156.0	1176.7	0.000	2.352	74.017	23.019	0.596	0.006	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1423.91

Zone 33

GQ Source Daily Summary

July 2010

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	0.7956	1137.6	1157.8	2.154	10.819	54.620	29.263	2.862	0.063	0.188	0.008	0.020	0.003	0.000	0.000	0.000	0.000	0.000	1297.97
2	0.8017	1136.3	1156.4	2.266	11.297	53.511	29.700	2.935	0.065	0.195	0.008	0.021	0.003	0.000	0.000	0.000	0.000	0.000	1291.61
3	0.7977	1132.3	1152.3	2.163	11.324	54.040	29.417	2.777	0.062	0.187	0.008	0.020	0.002	0.000	0.000	0.000	0.000	0.000	1290.19
4	0.7982	1133.7	1153.8	2.333	11.033	54.124	29.463	2.773	0.061	0.183	0.007	0.020	0.003	0.000	0.000	0.000	0.000	0.000	1291.37
5	0.7998	1136.5	1156.6	2.269	11.104	54.015	29.317	2.983	0.069	0.209	0.008	0.022	0.003	0.000	0.000	0.000	0.000	0.000	1293.33
6	0.7990	1134.0	1154.1	2.300	11.136	54.017	29.407	2.853	0.064	0.194	0.008	0.020	0.002	0.000	0.000	0.000	0.000	0.000	1291.13
7	0.8002	1132.6	1152.7	2.274	11.373	53.744	29.438	2.879	0.064	0.196	0.008	0.021	0.002	0.000	0.000	0.000	0.000	0.000	1288.57
8	0.8019	1136.8	1156.9	2.208	11.384	53.365	29.821	2.942	0.062	0.188	0.008	0.020	0.002	0.000	0.000	0.000	0.000	0.000	1291.87
9	0.8021	1127.5	1147.4	2.231	11.934	53.302	29.290	2.946	0.066	0.199	0.008	0.021	0.003	0.000	0.000	0.000	0.000	0.000	1281.17
10	0.7961	1131.2	1151.3	2.164	11.235	54.446	29.057	2.801	0.066	0.197	0.008	0.022	0.004	0.000	0.000	0.000	0.000	0.000	1290.34
11	0.8030	1139.6	1159.8	2.400	11.016	53.667	29.865	2.933	0.071	0.215	0.008	0.022	0.003	0.000	0.000	0.000	0.000	0.000	1294.28
12	0.8009	1132.9	1152.9	2.424	11.195	53.917	29.185	2.963	0.069	0.211	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1288.28
13	0.8028	1143.3	1163.6	2.333	10.871	53.557	29.901	3.019	0.071	0.214	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1298.66
14	0.8028	1147.4	1167.7	2.151	10.900	53.332	30.319	2.983	0.069	0.211	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1303.28
15	0.8008	1135.4	1155.5	2.190	11.389	53.694	29.430	2.976	0.071	0.218	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1291.22
16	0.8002	1126.0	1145.9	2.234	11.834	53.829	28.795	2.982	0.072	0.218	0.009	0.024	0.004	0.000	0.000	0.000	0.000	0.000	1281.05
17	0.8029	1142.0	1162.2	2.321	10.988	53.525	29.808	3.031	0.072	0.219	0.009	0.024	0.003	0.000	0.000	0.000	0.000	0.000	1296.97
18	0.8023	1137.5	1157.6	2.424	11.044	53.758	29.415	3.025	0.073	0.223	0.009	0.024	0.003	0.000	0.000	0.000	0.000	0.000	1292.41
19	0.8026	1140.5	1160.7	2.469	10.819	53.732	29.674	2.969	0.074	0.227	0.009	0.024	0.003	0.000	0.000	0.000	0.000	0.000	1295.56
20	0.8023	1137.6	1157.8	2.347	11.154	53.687	29.441	3.022	0.076	0.234	0.010	0.026	0.003	0.000	0.000	0.000	0.000	0.000	1292.54
21	0.8001	1137.1	1157.3	2.433	10.842	54.084	29.435	2.891	0.070	0.212	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1293.80
22	0.8021	1135.0	1155.1	2.459	11.128	53.702	29.449	2.935	0.072	0.218	0.009	0.024	0.003	0.000	0.000	0.000	0.000	0.000	1289.67
23	0.7959	1136.5	1156.6	2.158	10.907	54.495	29.372	2.771	0.066	0.198	0.008	0.021	0.003	0.000	0.000	0.000	0.000	0.000	1296.47
24	0.7926	1133.7	1153.8	1.757	11.379	54.651	29.194	2.719	0.067	0.200	0.008	0.021	0.003	0.000	0.000	0.000	0.000	0.000	1295.96
25	0.7868	1128.6	1148.6	1.743	11.165	55.873	28.189	2.724	0.068	0.202	0.009	0.023	0.004	0.000	0.000	0.000	0.000	0.000	1294.89
26	0.7886	1136.9	1157.1	1.804	10.735	55.612	28.823	2.735	0.067	0.195	0.008	0.020	0.004	0.000	0.000	0.000	0.000	0.000	1302.94
27	0.7970	1143.5	1163.8	1.951	10.897	54.155	29.846	2.845	0.069	0.206	0.008	0.021	0.003	0.000	0.000	0.000	0.000	0.000	1303.59
28	0.7981	1140.0	1160.2	2.029	11.097	54.149	29.418	2.981	0.072	0.219	0.009	0.023	0.003	0.000	0.000	0.000	0.000	0.000	1298.67
29	0.7965	1132.8	1152.9	2.077	11.313	54.345	29.068	2.900	0.066	0.197	0.008	0.022	0.003	0.000	0.000	0.000	0.000	0.000	1291.77
30	0.7972	1129.8	1149.8	2.046	11.611	54.135	29.019	2.885	0.068	0.203	0.008	0.022	0.003	0.000	0.000	0.000	0.000	0.000	1287.76
31	0.7987	1134.0	1154.1	2.117	11.386	53.926	29.385	2.886	0.066	0.200	0.008	0.021	0.003	0.000	0.000	0.000	0.000	0.000	1291.32
Avg	0.7989	1136.0	1155.9	2.201	11.171	54.026	29.394	2.901	0.068	0.206	0.008	0.022	0.003	0.000	0.000	0.000	0.000	0.000	1293.18

*** End of Report***

Zone 34

GQ Source Analysis

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

		Mol %	GPM			Mol %
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					
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 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	Yearly Sampler	Baker Field – North Dakota

THERMAL ZONE VARIANCE DOCUMENTATION		
July 2010		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
24	37	Mix of High BTU gas in the area
263	20	Mix of High BTU gas in the area
264	37	Mix of High BTU gas in the area
31	-30	Lower BTU gas from West
32	-57	Lower BTU gas from West