



MONTANA-DAKOTA

UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

May 3, 2010

RECEIVED

MAY 04 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 – March 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 April 2010.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of March 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 March.

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
APR 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.1231
12	327	BISMARCK	28	1.0180
12	343	CARRINGTON	273	1.1222
12	344	CLEVELAND	272	1.1143
12	364	CAVALIER	273	1.1458
12	365	DAWSON	271	1.1152
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	.9719
12	417	GRAFTON	273	1.1537
12	439	HANKINSON	600	1.0650
12	449	JAMESTOWN	272	1.1301
12	463	LANGDON	273	1.1222
12	475	LINTON	802	.9688
12	478	LINCOLN	28	1.0180
12	494	MEDINA	271	1.1152
12	498	MANDAN	28	1.0180
12	524	NEW SALEM	28	.9964
12	532	NEW ROCKFORD	273	1.1222
12	539	PARK RIVER	273	1.1458
12	574	SANBORN	272	1.1301
12	593	STEELE	271	1.1152
12	598	SHEYENNE	273	1.1301
12	610	TAPPEN	271	1.1152
12	625	VALLEY CITY	272	1.1379
12	629	WALHALLA	273	1.1458
12	647	WILTON	262	1.1098
12	717	SPIRITWOOD	272	1.1301
12	718	FAIRMOUNT	600	1.0628
12	732	MSR SITE	273	1.1222
12	733	PAR SITE	273	1.1222
15	303	ALEXANDER	25	1.0692
15	308	ARNEGARD	25	1.0692

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
APR 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	318	BEACH	32	.9444
15	319	BELFIELD	32	.9514
15	323	BERTHOLD	262	1.1098
15	330	BOWMAN	34	1.0723
15	337	BURLINGTON	262	1.1338
15	368	DES LACS	262	1.1178
15	369	DICKINSON	31	.9649
15	384	EPPING	264	1.1334
15	407	GLADSTONE	31	.9649
15	413	GOLVA	32	.9306
15	416	GARRISON	262	1.1178
15	429	HEBRON	31	.9719
15	459	KILLDEER	33	1.1041
15	469	LEFOR	31	.9649
15	474	LIGNITE	263	1.0369
15	500	MARMARTH	34	1.0803
15	505	MINOT	262	1.1338
15	510	MOTT	31	.9649
15	512	MAX	262	1.1098
15	522	NEW ENGLAND	31	.9579
15	540	PALERMO	262	1.1098
15	558	RAY	264	1.1334
15	561	REGENT	31	.9649
15	563	RHAME	34	1.0645
15	564	RICHARDTON	31	.9579
15	568	ROSS	261	1.0840
15	572	RUTHVILLE	262	1.1338
15	583	SENTINEL BUTTE	32	.9444
15	588	SOUTH HEART	31	.9579
15	590	SPRINGBROOK	264	1.1334
15	591	STANLEY	261	1.0918
15	605	SURREY	262	1.1338
15	611	TAYLOR	31	.9579
15	616	TIOGA	261	1.0840
15	619	TURTLE LAKE	262	1.1178

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
APR 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	620	TRENTON	24	1.1416
15	624	UNDERWOOD	262	1.1178
15	632	WATFORD CITY	25	1.0692
15	636	WHEELLOCK	264	1.1252
15	637	WHITE EARTH	261	1.0918
15	642	WILLISTON	24	1.1416
15	646	WASHBURN	262	1.1258
15	664	RIVERDALE	262	1.1178
15	691	FAIRVIEW	24	1.1416
15	712	MINOT AFB	262	1.1338
15	743	BAKER FIELD	35	.8971
* * * E N D O F R E P O R T * * *				

GQ Source Daily Summary

March 2010

Number: 251

Pressure Base: 14.730

Contract Day: 1

Name: SIDNEY AREA

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6965	1164.0	1184.6	0.033	3.099	72.651	22.166	1.988	0.028	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.40	
2	0.6976	1165.4	1186.0	0.034	3.117	72.446	22.332	2.004	0.028	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.97	
3	0.6955	1164.0	1184.6	0.033	3.006	72.856	22.071	1.968	0.028	0.036	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1420.41	
4	0.6976	1165.0	1185.7	0.050	3.115	72.458	22.303	2.009	0.028	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.53	
5	0.6970	1164.7	1185.3	0.039	3.091	72.581	22.225	1.995	0.029	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.77	
6	0.6984	1166.1	1186.8	0.038	3.142	72.385	22.263	2.096	0.032	0.042	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.05	
7	0.6965	1163.2	1183.8	0.036	3.141	72.601	22.224	1.929	0.028	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1418.45	
8	0.7027	1174.4	1195.2	0.037	3.031	71.881	22.592	2.334	0.048	0.072	0.003	0.002	0.000	0.000	0.000	0.000	0.000	1425.88	
9	0.6974	1165.1	1185.7	0.038	3.112	72.382	22.494	1.916	0.026	0.031	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1419.83	
10	0.6960	1163.6	1184.2	0.036	3.069	72.663	22.281	1.889	0.026	0.034	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.49	
11	0.6981	1167.1	1187.8	0.035	3.049	72.404	22.410	2.027	0.031	0.042	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1421.67	
12	0.6961	1162.7	1183.3	0.036	3.130	72.721	22.096	1.941	0.032	0.044	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1418.33	
13	0.7010	1169.5	1190.2	0.059	3.143	72.304	21.959	2.401	0.052	0.078	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1421.57	
14	0.7174	1179.6	1200.5	0.452	3.462	70.498	21.937	3.434	0.075	0.130	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1417.56	
15	0.6977	1165.8	1186.5	0.036	3.099	72.384	22.451	1.962	0.028	0.038	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.40	
16	0.7211	1165.9	1186.5	0.869	4.017	70.580	20.420	3.840	0.096	0.165	0.008	0.006	0.000	0.000	0.000	0.000	0.000	1397.33	
17	0.7356	1186.5	1207.6	0.982	3.943	68.570	21.594	4.615	0.103	0.179	0.009	0.007	0.001	0.000	0.000	0.000	0.000	1408.02	
18	0.7003	1167.2	1187.8	0.130	3.111	72.275	22.162	2.223	0.039	0.057	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1419.53	
19	0.7057	1168.2	1188.9	0.305	3.292	71.609	22.198	2.474	0.046	0.070	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1415.37	
20	0.7361	1179.6	1200.5	1.184	4.099	68.709	21.075	4.599	0.113	0.202	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1399.27	
21	0.7382	1183.0	1203.9	1.173	4.111	68.502	21.044	4.830	0.115	0.206	0.010	0.008	0.001	0.000	0.000	0.000	0.000	1401.21	
22	0.7125	1169.9	1190.7	0.523	3.486	71.186	21.496	3.128	0.067	0.105	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1410.85	
23	0.7262	1178.2	1199.1	0.833	3.797	69.618	21.537	3.959	0.089	0.154	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1407.29	
24	0.7362	1179.7	1200.6	1.173	4.126	68.699	21.032	4.640	0.113	0.200	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1399.21	
25	0.7325	1176.5	1197.3	1.103	4.080	69.111	20.993	4.400	0.107	0.190	0.009	0.007	0.000	0.000	0.000	0.000	0.000	1398.99	
26	0.7372	1181.6	1202.5	1.164	4.114	68.618	21.015	4.749	0.116	0.206	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1400.55	
27	0.7375	1181.7	1202.7	1.173	4.116	68.595	21.009	4.764	0.116	0.208	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1400.48	
28	0.7348	1177.1	1197.9	1.166	4.163	69.021	20.647	4.653	0.118	0.212	0.010	0.008	0.001	0.000	0.000	0.000	0.000	1397.43	
29	0.7377	1182.0	1202.9	1.189	4.104	68.552	21.059	4.746	0.118	0.213	0.011	0.008	0.001	0.000	0.000	0.000	0.000	1400.49	
30	0.7361	1179.5	1200.4	1.173	4.126	68.735	21.000	4.616	0.119	0.213	0.010	0.008	0.001	0.000	0.000	0.000	0.000	1399.11	
31	0.7360	1179.7	1200.6	1.157	4.128	68.775	20.949	4.635	0.121	0.216	0.011	0.008	0.001	0.000	0.000	0.000	0.000	1399.44	
Avg	0.7145	1172.0	1192.9	0.526	3.536	70.851	21.711	3.186	0.068	0.114	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1411.51	

Zone 211

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	0602330	Specific Gravity:	0.7325
GQ Source Name:	WILLISTON BORDER	BTU Base:	Dry
Effective Date:	3/1/2010 9:00:00 AM	Measured Heat Value:	1203.69
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1200.38
Pressure Base:	14.730	Wet Heat Value:	1179.49
Viscosity:		As Deliv. Heat Value:	1200.38

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	68.869		CO2	Carbon Dioxide	1.024
C2	Ethane	21.267	0.000	N2	Nitrogen	3.985
C3	Propane	4.513	1.240	O2	Oxygen	0.000
IC4	Iso-Butane	0.116	0.038	HE	Helium	
NC4	N-Butane	0.207	0.065	H2	Hydrogen	
IC5	Iso-Pentane	0.011	0.004	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.009	0.003	AR	Argon	
C6	Hexane	0.000	0.000	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane					
C9	Nonane					
C10	Decane					

Totals	100.000 %	1.350 GPM
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Sample Date: 3/31/2010 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Remarks:

Zone 24, 264

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	0602230	Specific Gravity:	0.7278
GQ Source Name:	WATFORD CITY BORDER	BTU Base:	Dry
Effective Date:	3/1/2010 9:00:00 AM	Measured Heat Value:	1134.94
Effective End Date	1/18/2038 9:14:07 PM	Dry Heat Value:	1132.28
Pressure Base:	14.730	Wet Heat Value:	1112.57
Viscosity:		As Deliv. Heat Value:	1132.28

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	68.865		CO2	Carbon Dioxide	0.730
C2	Ethane	17.879	4.767	N2	Nitrogen	8.090
C3	Propane	3.800	1.044	O2	Oxygen	0.000
IC4	Iso-Butane	0.200	0.065	HE	Helium	
NC4	N-Butane	0.366	0.115	H2	Hydrogen	
IC5	Iso-Pentane	0.029	0.010	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.028	0.010	AR	Argon	
C6	Hexane	0.012	0.005	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane					
C9	Nonane					
C10	Decane					

Totals	99.998%	6.018 GPM
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Sample Date: 3/31/2010 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Remarks:

Zone 25

GQ Source Daily Summary

March 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	0.6923	1139.4	1159.5	0.474	3.532	74.507	18.962	2.309	0.071	0.129	0.006	0.006	0.005					1393.56	
2	0.6934	1141.4	1161.6	0.470	3.513	74.471	18.874	2.419	0.082	0.151	0.007	0.007	0.005					1394.96	
3	0.6959	1139.3	1159.5	0.603	3.678	74.196	18.729	2.522	0.090	0.162	0.008	0.006	0.005					1389.84	
4	0.6990	1142.0	1162.3	0.657	3.709	73.876	18.753	2.703	0.099	0.182	0.009	0.008	0.005					1390.22	
5	0.6984	1142.1	1162.3	0.633	3.689	73.920	18.798	2.661	0.097	0.179	0.009	0.008	0.005					1390.84	
6	0.7000	1141.8	1162.0	0.697	3.761	73.598	19.000	2.675	0.088	0.161	0.008	0.007	0.005					1388.89	
7	0.6934	1133.3	1153.4	0.607	3.798	74.299	18.818	2.293	0.063	0.109	0.005	0.004	0.005					1385.13	
8	0.6925	1130.9	1151.0	0.643	3.808	74.526	18.524	2.313	0.062	0.109	0.005	0.004	0.005					1383.05	
9	0.6929	1132.5	1152.6	0.612	3.791	74.499	18.545	2.347	0.069	0.122	0.006	0.004	0.005					1384.66	
10	0.6914	1131.0	1151.0	0.535	3.853	74.711	18.370	2.296	0.072	0.134	0.008	0.007	0.006					1384.23	
11	0.6918	1133.9	1154.0	0.518	3.746	74.557	18.684	2.316	0.060	0.106	0.005	0.004	0.005					1387.46	
12	0.6921	1135.1	1155.3	0.520	3.696	74.521	18.765	2.306	0.063	0.114	0.005	0.004	0.005					1388.66	
13	0.6907	1133.5	1153.6	0.506	3.682	74.797	18.526	2.294	0.064	0.115	0.005	0.005	0.006					1388.09	
14	0.6958	1137.3	1157.5	0.594	3.796	74.189	18.581	2.624	0.071	0.129	0.006	0.005	0.005					1387.63	
15	0.7045	1148.8	1169.1	0.668	3.803	72.931	19.340	3.010	0.082	0.148	0.007	0.006	0.005					1392.90	
16	0.6827	1123.8	1143.7	0.448	3.615	76.022	17.778	1.955	0.058	0.109	0.005	0.004	0.006					1384.18	
17	0.6731	1113.4	1133.1	0.354	3.493	77.357	17.177	1.471	0.046	0.088	0.003	0.003	0.009					1381.10	
18	0.7002	1146.2	1166.5	0.584	3.683	73.436	19.325	2.745	0.076	0.136	0.006	0.005	0.004					1394.08	
19	0.6958	1141.6	1161.8	0.524	3.650	73.928	19.240	2.462	0.066	0.118	0.005	0.004	0.003					1392.74	
20	0.6898	1132.7	1152.7	0.516	3.641	74.801	18.723	2.139	0.059	0.107	0.005	0.004	0.006					1387.90	
21	0.6945	1136.4	1156.5	0.606	3.711	74.304	18.742	2.405	0.073	0.140	0.007	0.006	0.006					1387.80	
22	0.6921	1132.4	1152.4	0.576	3.775	74.697	18.364	2.364	0.071	0.135	0.007	0.006	0.005					1385.31	
23	0.6934	1134.4	1154.5	0.585	3.760	74.490	18.522	2.425	0.070	0.131	0.006	0.006	0.006					1386.49	
24	0.6901	1133.0	1153.1	0.544	3.605	74.928	18.460	2.267	0.064	0.116	0.005	0.005	0.005					1388.01	
25	0.6901	1133.0	1153.1	0.544	3.605	74.928	18.460	2.267	0.064	0.116	0.005	0.005	0.005					1388.01	
26	0.6924	1135.0	1155.1	0.599	3.618	74.650	18.552	2.368	0.068	0.126	0.006	0.006	0.007					1388.10	
27	0.6898	1131.4	1151.4	0.578	3.621	74.944	18.476	2.192	0.062	0.112	0.005	0.004	0.006					1386.35	
28	0.6912	1133.3	1153.4	0.575	3.644	74.854	18.368	2.339	0.071	0.131	0.006	0.006	0.006					1387.25	
29	0.6912	1133.3	1153.4	0.575	3.644	74.854	18.368	2.339	0.071	0.131	0.006	0.006	0.006					1387.25	
30	0.6942	1137.7	1157.9	0.587	3.628	74.422	18.677	2.446	0.077	0.144	0.007	0.007	0.006					1389.76	
31	0.6962	1137.7	1157.9	0.609	3.787	74.027	18.856	2.487	0.075	0.139	0.007	0.007	0.006					1387.73	
Avg	0.6929	1135.0	1155.5	0.566	3.689	74.524	18.624	2.379	0.071	0.130	0.006	0.005	0.005					1388.14	

Zone 261

GQ Source Daily Summary

March 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	0.7105	1151.8	1172.2	0.547	4.367	71.367	20.559	2.948	0.069	0.131	0.004	0.002	0.006	0.000	0.000	0.000	0.000	1390.68	
2	0.7130	1155.2	1175.7	0.554	4.383	71.026	20.723	3.084	0.075	0.141	0.005	0.003	0.006	0.000	0.000	0.000	0.000	1392.36	
3	0.7157	1155.6	1176.1	0.603	4.543	70.637	20.773	3.197	0.080	0.152	0.006	0.004	0.005	0.000	0.000	0.000	0.000	1390.16	
4	0.7176	1156.8	1177.3	0.670	4.541	70.574	20.560	3.377	0.094	0.168	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1389.77	
5	0.7209	1161.2	1181.7	0.666	4.596	70.219	20.584	3.593	0.115	0.208	0.008	0.007	0.005	0.000	0.000	0.000	0.000	1391.75	
6	0.7194	1160.1	1180.7	0.695	4.466	70.546	20.397	3.558	0.113	0.204	0.009	0.007	0.005	0.000	0.000	0.000	0.000	1392.04	
7	0.7159	1153.3	1173.7	0.683	4.582	70.600	20.764	3.129	0.080	0.149	0.005	0.003	0.005	0.000	0.000	0.000	0.000	1387.15	
8	0.7140	1149.4	1169.8	0.658	4.677	70.698	20.795	2.976	0.065	0.122	0.003	0.000	0.005	0.000	0.000	0.000	0.000	1384.96	
9	0.7157	1151.3	1171.7	0.684	4.683	70.543	20.751	3.139	0.067	0.124	0.003	0.000	0.006	0.000	0.000	0.000	0.000	1384.36	
10	0.7153	1152.3	1172.7	0.610	4.688	70.662	20.633	3.180	0.075	0.139	0.005	0.003	0.005	0.000	0.000	0.000	0.000	1386.67	
11	0.7150	1151.2	1171.6	0.613	4.728	70.586	20.765	3.107	0.065	0.124	0.004	0.002	0.005	0.000	0.000	0.000	0.000	1385.56	
12	0.7166	1154.8	1175.2	0.590	4.692	70.390	20.895	3.214	0.074	0.134	0.004	0.001	0.006	0.000	0.000	0.000	0.000	1388.35	
13	0.7181	1156.8	1177.3	0.602	4.691	70.284	20.829	3.347	0.083	0.152	0.005	0.003	0.006	0.000	0.000	0.000	0.000	1389.34	
14	0.7157	1152.6	1173.0	0.611	4.714	70.602	20.634	3.211	0.076	0.140	0.004	0.002	0.006	0.000	0.000	0.000	0.000	1386.50	
15	0.7065	1147.8	1168.1	0.660	4.063	72.465	19.547	3.034	0.076	0.140	0.005	0.002	0.007	0.000	0.000	0.000	0.000	1389.75	
16	0.6982	1143.6	1163.8	0.584	3.660	73.655	19.312	2.572	0.071	0.131	0.004	0.002	0.008	0.000	0.000	0.000	0.000	1392.81	
17	0.6772	1117.9	1137.7	0.395	3.538	76.880	17.266	1.739	0.056	0.111	0.002	0.001	0.011	0.000	0.000	0.000	0.000	1382.53	
18	0.6875	1131.2	1151.3	0.490	3.547	75.288	18.347	2.135	0.063	0.116	0.002	0.001	0.011	0.000	0.000	0.000	0.000	1388.52	
19	0.7176	1160.6	1181.2	0.614	4.390	70.643	20.684	3.328	0.100	0.207	0.013	0.014	0.008	0.000	0.000	0.000	0.000	1394.41	
20	0.7175	1157.2	1177.7	0.587	4.632	70.384	20.850	3.268	0.090	0.174	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1390.39	
21	0.7164	1154.3	1174.7	0.606	4.680	70.581	20.618	3.245	0.089	0.167	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1387.92	
22	0.7187	1155.5	1176.0	0.648	4.754	70.280	20.688	3.342	0.092	0.179	0.007	0.006	0.005	0.000	0.000	0.000	0.000	1387.22	
23	0.7158	1150.3	1170.6	0.647	4.809	70.629	20.480	3.182	0.082	0.156	0.005	0.004	0.006	0.000	0.000	0.000	0.000	1383.64	
24	0.7232	1163.7	1184.3	0.619	4.727	69.832	20.764	3.695	0.115	0.226	0.009	0.008	0.004	0.000	0.000	0.000	0.000	1392.55	
25	0.7235	1163.7	1184.3	0.640	4.722	69.953	20.503	3.791	0.123	0.244	0.010	0.009	0.006	0.000	0.000	0.000	0.000	1392.28	
26	0.7276	1169.4	1190.1	0.662	4.723	69.475	20.704	3.973	0.140	0.290	0.015	0.015	0.005	0.000	0.000	0.000	0.000	1395.18	
27	0.7268	1169.6	1190.3	0.634	4.680	69.455	20.916	3.875	0.134	0.277	0.013	0.013	0.004	0.000	0.000	0.000	0.000	1396.20	
28	0.7255	1167.1	1187.7	0.626	4.720	69.581	20.877	3.775	0.130	0.265	0.012	0.011	0.003	0.000	0.000	0.000	0.000	1394.46	
29	0.7288	1172.3	1193.1	0.629	4.702	69.346	20.794	4.018	0.150	0.321	0.017	0.017	0.005	0.000	0.000	0.000	0.000	1397.58	
30	0.7250	1165.0	1185.7	0.625	4.786	69.725	20.602	3.796	0.134	0.290	0.018	0.019	0.006	0.000	0.000	0.000	0.000	1392.50	
31	0.7136	1151.3	1171.7	0.636	4.549	71.002	20.500	3.058	0.078	0.155	0.007	0.006	0.008	0.000	0.000	0.000	0.000	1387.11	
Avg	0.7152	1155.0	1175.4	0.616	4.517	70.900	20.423	3.254	0.092	0.179	0.007	0.006	0.006	0.000	0.000	0.000	0.000	1389.83	

Zone 262

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	2501030	Specific Gravity:	0.6393
GQ Source Name:	LIGNITE PLANT	BTU Base:	Dry
Effective Date:	3/1/2010 9:00:00 AM	Measured Heat Value:	1091.38
Effective End Date	1/18/2038 9:14:07 PM	Dry Heat Value:	1090.13
Pressure Base:	14.730	Wet Heat Value:	1071.16
Viscosity:		As Deliv. Heat Value:	1090.13

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	82.648		CO2	Carbon Dioxide	0.139
C2	Ethane	13.659	3.642	N2	Nitrogen	3.195
C3	Propane	0.317	0.087	O2	Oxygen	0.000
IC4	Iso-Butane	0.001	0.000	HE	Helium	
NC4	N-Butane	0.001	0.000	H2	Hydrogen	
IC5	Iso-Pentane	0.001	0.000	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.001	0.000	AR	Argon	
C6	Hexane	0.031	0.014	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane					
C9	Nonane					
C10	Decane					

Totals	99.994 %	3.745 GPM
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Sample Date: 3/31/2010 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
Sample Remarks:

Analysis Remarks:

*** End of Report ***

Zone 263

GQ Source Daily Summary

March 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	0.6921	1126.9	1146.9	0.621	4.038	74.935	17.600	2.586	0.069	0.126	0.008	0.006	0.011	0.000	0.000	0.000	0.000	1378.58	
2	0.6969	1133.5	1153.6	0.604	4.117	73.974	18.443	2.650	0.067	0.123	0.007	0.006	0.010	0.000	0.000	0.000	0.000	1381.82	
3	0.7091	1148.3	1168.6	0.607	4.359	71.929	19.793	3.061	0.078	0.147	0.008	0.007	0.010	0.000	0.000	0.000	0.000	1387.72	
4	0.7107	1148.2	1168.5	0.675	4.406	71.778	19.743	3.132	0.085	0.156	0.008	0.007	0.010	0.000	0.000	0.000	0.000	1386.11	
5	0.7190	1159.2	1179.8	0.684	4.498	70.698	20.188	3.572	0.118	0.212	0.010	0.009	0.011	0.000	0.000	0.000	0.000	1391.32	
6	0.7145	1154.1	1174.5	0.691	4.381	71.312	19.957	3.358	0.100	0.175	0.009	0.007	0.010	0.000	0.000	0.000	0.000	1389.48	
7	0.7174	1155.4	1175.9	0.714	4.534	70.663	20.498	3.285	0.095	0.182	0.009	0.008	0.011	0.000	0.000	0.000	0.000	1388.31	
8	0.7137	1149.6	1170.0	0.655	4.638	70.839	20.677	2.976	0.067	0.128	0.006	0.005	0.010	0.000	0.000	0.000	0.000	1384.88	
9	0.7161	1152.3	1172.7	0.692	4.643	70.571	20.711	3.172	0.066	0.124	0.006	0.005	0.010	0.000	0.000	0.000	0.000	1385.75	
10	0.7152	1151.8	1172.2	0.647	4.660	70.680	20.676	3.110	0.070	0.136	0.007	0.006	0.010	0.000	0.000	0.000	0.000	1386.02	
11	0.7155	1152.4	1172.8	0.615	4.693	70.638	20.667	3.164	0.069	0.130	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1386.50	
12	0.7159	1154.5	1174.9	0.601	4.628	70.529	20.863	3.161	0.069	0.129	0.006	0.005	0.010	0.000	0.000	0.000	0.000	1388.62	
13	0.7181	1156.6	1177.1	0.611	4.684	70.348	20.757	3.343	0.082	0.153	0.006	0.006	0.010	0.000	0.000	0.000	0.000	1389.09	
14	0.7156	1153.2	1173.6	0.602	4.676	70.662	20.619	3.202	0.075	0.141	0.006	0.006	0.010	0.000	0.000	0.000	0.000	1387.36	
15	0.7066	1145.4	1165.7	0.668	4.200	72.430	19.475	2.997	0.072	0.135	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1386.83	
16	0.6675	1097.7	1117.1	0.748	3.309	79.713	13.923	2.094	0.073	0.113	0.009	0.006	0.011	0.000	0.000	0.000	0.000	1367.23	
17	0.6218	1034.5	1052.8	0.972	2.522	88.174	7.200	0.973	0.060	0.068	0.012	0.007	0.011	0.000	0.000	0.000	0.000	1335.17	
18	0.6428	1067.5	1086.4	0.731	2.859	83.799	11.267	1.177	0.058	0.083	0.009	0.006	0.012	0.000	0.000	0.000	0.000	1355.01	
19	0.6875	1122.1	1142.0	0.753	3.699	76.211	16.479	2.537	0.088	0.169	0.014	0.013	0.016	0.000	0.000	0.000	0.000	1377.24	
20	0.7162	1156.5	1177.0	0.619	4.504	70.854	20.384	3.344	0.094	0.172	0.008	0.007	0.014	0.000	0.000	0.000	0.000	1390.72	
21	0.7149	1151.5	1171.9	0.623	4.677	70.809	20.497	3.138	0.082	0.151	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1386.04	
22	0.7192	1156.4	1176.9	0.661	4.727	70.322	20.574	3.416	0.095	0.177	0.008	0.007	0.011	0.000	0.000	0.000	0.000	1387.71	
23	0.7145	1149.5	1169.9	0.646	4.729	70.803	20.517	3.061	0.076	0.144	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1384.00	
24	0.7229	1162.8	1183.4	0.642	4.715	69.891	20.748	3.653	0.111	0.211	0.009	0.009	0.012	0.000	0.000	0.000	0.000	1391.78	
25	0.7109	1148.9	1169.2	0.609	4.481	72.153	18.975	3.408	0.113	0.227	0.011	0.011	0.012	0.000	0.000	0.000	0.000	1386.70	
26	0.7183	1156.7	1177.1	0.694	4.569	71.091	19.544	3.681	0.125	0.257	0.014	0.013	0.012	0.000	0.000	0.000	0.000	1388.92	
27	0.7254	1167.7	1188.4	0.653	4.629	69.794	20.641	3.830	0.131	0.278	0.014	0.015	0.014	0.000	0.000	0.000	0.000	1395.30	
28	0.7272	1169.8	1190.5	0.641	4.683	69.476	20.879	3.852	0.137	0.291	0.014	0.014	0.013	0.000	0.000	0.000	0.000	1396.13	
29	0.7246	1166.1	1186.8	0.636	4.673	69.944	20.480	3.798	0.134	0.289	0.016	0.016	0.014	0.000	0.000	0.000	0.000	1394.20	
30	0.7200	1159.9	1180.5	0.612	4.661	70.297	20.623	3.436	0.104	0.225	0.014	0.014	0.014	0.000	0.000	0.000	0.000	1391.19	
31	0.7145	1152.3	1172.7	0.653	4.544	70.844	20.668	3.034	0.076	0.153	0.008	0.007	0.012	0.000	0.000	0.000	0.000	1387.43	
Avg	0.7072	1144.0	1164.2	0.664	4.359	72.457	19.163	3.072	0.088	0.168	0.009	0.008	0.011	0.000	0.000	0.000	0.000	1384.30	

Zone 271

GQ Source Daily Summary

March 2010

Number: 063

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND-MAPLETON

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6880	1121.1	1141.0	0.629	3.996	75.619	17.066	2.477	0.068	0.123	0.008	0.007	0.007	0.000	0.000	0.000	0.000	1375.51	
2	0.6944	1129.5	1149.5	0.609	4.109	74.405	18.061	2.611	0.067	0.120	0.007	0.006	0.006	0.000	0.000	0.000	0.000	1379.53	
3	0.7054	1144.4	1164.6	0.585	4.275	72.522	19.415	2.966	0.076	0.141	0.008	0.007	0.006	0.000	0.000	0.000	0.000	1386.68	
4	0.7096	1146.3	1166.6	0.652	4.455	71.806	19.784	3.059	0.079	0.146	0.008	0.006	0.005	0.000	0.000	0.000	0.000	1384.91	
5	0.7154	1154.4	1174.8	0.680	4.465	71.172	19.926	3.443	0.108	0.185	0.009	0.007	0.005	0.000	0.000	0.000	0.000	1388.95	
6	0.7169	1155.3	1175.8	0.681	4.539	70.928	20.040	3.487	0.108	0.193	0.010	0.008	0.005	0.000	0.000	0.000	0.000	1388.71	
7	0.7149	1154.4	1174.9	0.715	4.361	71.204	20.085	3.311	0.104	0.196	0.010	0.009	0.006	0.000	0.000	0.000	0.000	1389.53	
8	0.7154	1152.1	1172.5	0.659	4.636	70.574	20.825	3.078	0.073	0.138	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1386.25	
9	0.7142	1149.3	1169.7	0.676	4.667	70.757	20.643	3.054	0.065	0.122	0.005	0.005	0.005	0.000	0.000	0.000	0.000	1384.06	
10	0.7146	1150.3	1170.6	0.665	4.665	70.705	20.677	3.085	0.065	0.123	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1384.81	
11	0.7151	1151.4	1171.7	0.614	4.719	70.743	20.477	3.209	0.076	0.142	0.008	0.007	0.005	0.000	0.000	0.000	0.000	1385.67	
12	0.7150	1152.2	1172.6	0.606	4.674	70.615	20.767	3.130	0.066	0.125	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1386.77	
13	0.7165	1154.1	1174.6	0.605	4.699	70.513	20.667	3.272	0.080	0.147	0.006	0.006	0.005	0.000	0.000	0.000	0.000	1387.60	
14	0.7159	1153.8	1174.2	0.593	4.683	70.598	20.635	3.248	0.079	0.146	0.006	0.006	0.005	0.000	0.000	0.000	0.000	1387.74	
15	0.7115	1148.2	1168.5	0.634	4.544	71.371	20.141	3.087	0.071	0.134	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1385.36	
16	0.6885	1126.2	1146.1	0.720	3.586	75.943	16.830	2.684	0.080	0.137	0.008	0.006	0.006	0.000	0.000	0.000	0.000	1381.29	
17	0.6281	1043.7	1062.2	0.888	2.673	86.864	8.324	1.093	0.061	0.071	0.011	0.007	0.008	0.000	0.000	0.000	0.000	1340.34	
18	0.6327	1051.5	1070.1	0.841	2.706	85.867	9.342	1.083	0.060	0.077	0.010	0.006	0.008	0.000	0.000	0.000	0.000	1345.30	
19	0.6676	1098.4	1117.8	0.742	3.283	79.513	14.291	1.965	0.069	0.114	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1368.16	
20	0.7139	1153.8	1174.3	0.645	4.407	71.460	19.783	3.347	0.105	0.213	0.014	0.015	0.011	0.000	0.000	0.000	0.000	1389.76	
21	0.7153	1153.3	1173.7	0.595	4.650	70.686	20.642	3.179	0.081	0.149	0.006	0.006	0.006	0.000	0.000	0.000	0.000	1387.79	
22	0.7170	1153.0	1173.4	0.657	4.738	70.478	20.616	3.235	0.088	0.168	0.008	0.007	0.005	0.000	0.000	0.000	0.000	1385.72	
23	0.7158	1151.0	1171.3	0.645	4.766	70.634	20.498	3.200	0.082	0.156	0.007	0.007	0.005	0.000	0.000	0.000	0.000	1385.47	
24	0.7192	1156.3	1176.8	0.646	4.754	70.290	20.553	3.461	0.095	0.180	0.008	0.007	0.006	0.000	0.000	0.000	0.000	1387.64	
25	0.7144	1153.4	1173.9	0.591	4.559	71.424	19.570	3.491	0.114	0.225	0.011	0.010	0.006	0.000	0.000	0.000	0.000	1388.82	
26	0.7129	1148.6	1168.9	0.690	4.562	71.886	18.957	3.531	0.116	0.229	0.011	0.011	0.007	0.000	0.000	0.000	0.000	1384.42	
27	0.7233	1164.1	1184.8	0.658	4.642	70.202	20.217	3.811	0.137	0.291	0.017	0.018	0.008	0.000	0.000	0.000	0.000	1393.04	
28	0.7254	1167.1	1187.8	0.636	4.686	69.680	20.763	3.793	0.133	0.274	0.014	0.013	0.008	0.000	0.000	0.000	0.000	1394.66	
29	0.7286	1171.6	1192.4	0.635	4.714	69.436	20.656	4.032	0.152	0.329	0.019	0.019	0.008	0.000	0.000	0.000	0.000	1396.91	
30	0.7214	1161.1	1181.7	0.633	4.683	70.215	20.474	3.598	0.117	0.244	0.014	0.014	0.007	0.000	0.000	0.000	0.000	1391.30	
31	0.7139	1152.3	1172.8	0.610	4.558	71.012	20.401	3.147	0.082	0.165	0.009	0.009	0.008	0.000	0.000	0.000	0.000	1387.98	
Avg	0.7065	1143.0	1162.9	0.659	4.370	72.552	19.069	3.070	0.089	0.168	0.009	0.008	0.006	0.000	0.000	0.000	0.000	1383.54	

Zone 272

GQ Source Daily Summary

March 2010

Number: 061

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND-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																
1	0.6882	1121.6	1141.4	0.630	3.986	75.587	17.100	2.483	0.069	0.124	0.008	0.007	0.007	0.000	0.000	0.000	0.000	1375.87	
2	0.6946	1130.0	1150.0	0.610	4.095	74.378	18.093	2.618	0.067	0.120	0.007	0.006	0.006	0.000	0.000	0.000	0.000	1379.93	
3	0.7056	1144.7	1165.0	0.588	4.269	72.482	19.454	2.968	0.077	0.143	0.008	0.007	0.006	0.000	0.000	0.000	0.000	1386.93	
4	0.7100	1147.1	1167.4	0.653	4.441	71.744	19.842	3.074	0.080	0.147	0.008	0.006	0.005	0.000	0.000	0.000	0.000	1385.46	
5	0.7155	1154.8	1175.2	0.681	4.448	71.157	19.948	3.449	0.108	0.186	0.009	0.007	0.006	0.000	0.000	0.000	0.000	1389.35	
6	0.7172	1156.0	1176.5	0.682	4.528	70.880	20.076	3.504	0.109	0.196	0.010	0.009	0.006	0.000	0.000	0.000	0.000	1389.21	
7	0.7146	1154.3	1174.7	0.717	4.334	71.279	20.050	3.291	0.105	0.199	0.010	0.009	0.006	0.000	0.000	0.000	0.000	1389.63	
8	0.7152	1151.9	1172.3	0.660	4.630	70.592	20.847	3.045	0.073	0.138	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1386.17	
9	0.7143	1149.6	1170.0	0.678	4.657	70.741	20.673	3.048	0.066	0.124	0.005	0.005	0.005	0.000	0.000	0.000	0.000	1384.32	
10	0.7149	1151.0	1171.3	0.665	4.650	70.657	20.721	3.102	0.065	0.124	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1385.35	
11	0.7154	1152.1	1172.5	0.614	4.706	70.695	20.519	3.226	0.076	0.143	0.008	0.007	0.005	0.000	0.000	0.000	0.000	1386.19	
12	0.7152	1152.7	1173.1	0.608	4.665	70.581	20.796	3.141	0.067	0.126	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1387.10	
13	0.7166	1154.6	1175.0	0.603	4.685	70.494	20.698	3.275	0.081	0.148	0.006	0.006	0.005	0.000	0.000	0.000	0.000	1388.05	
14	0.7162	1154.4	1174.9	0.594	4.668	70.554	20.684	3.257	0.080	0.147	0.006	0.006	0.005	0.000	0.000	0.000	0.000	1388.26	
15	0.7119	1148.9	1169.3	0.635	4.534	71.311	20.194	3.103	0.072	0.135	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1385.86	
16	0.6886	1126.5	1146.5	0.722	3.575	75.924	16.851	2.690	0.081	0.137	0.008	0.006	0.007	0.000	0.000	0.000	0.000	1381.58	
17	0.6279	1043.5	1062.0	0.887	2.678	86.891	8.292	1.092	0.061	0.072	0.011	0.007	0.008	0.000	0.000	0.000	0.000	1340.15	
18	0.6326	1051.4	1070.0	0.843	2.704	85.888	9.322	1.083	0.060	0.077	0.010	0.006	0.008	0.000	0.000	0.000	0.000	1345.29	
19	0.6679	1099.0	1118.5	0.742	3.271	79.468	14.338	1.974	0.070	0.114	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1368.63	
20	0.7140	1154.0	1174.5	0.647	4.396	71.450	19.821	3.322	0.107	0.216	0.014	0.015	0.012	0.000	0.000	0.000	0.000	1389.97	
21	0.7151	1153.2	1173.6	0.595	4.641	70.682	20.692	3.142	0.083	0.148	0.006	0.006	0.006	0.000	0.000	0.000	0.000	1387.83	
22	0.7167	1152.6	1173.0	0.658	4.733	70.523	20.616	3.191	0.090	0.168	0.008	0.007	0.005	0.000	0.000	0.000	0.000	1385.52	
23	0.7157	1150.9	1171.2	0.646	4.756	70.649	20.521	3.167	0.084	0.157	0.007	0.007	0.005	0.000	0.000	0.000	0.000	1384.50	
24	0.7193	1156.7	1177.1	0.648	4.745	70.271	20.592	3.446	0.097	0.180	0.008	0.007	0.006	0.000	0.000	0.000	0.000	1387.90	
25	0.7150	1154.5	1174.9	0.592	4.549	71.330	19.643	3.513	0.116	0.229	0.011	0.010	0.006	0.000	0.000	0.000	0.000	1389.51	
26	0.7132	1148.9	1169.3	0.693	4.562	71.845	18.991	3.532	0.117	0.231	0.011	0.011	0.007	0.000	0.000	0.000	0.000	1384.55	
27	0.7236	1164.7	1185.3	0.660	4.631	70.161	20.258	3.815	0.138	0.293	0.017	0.018	0.008	0.000	0.000	0.000	0.000	1393.42	
28	0.7257	1167.9	1188.5	0.636	4.671	69.580	20.813	3.802	0.134	0.277	0.014	0.014	0.009	0.000	0.000	0.000	0.000	1395.20	
29	0.7288	1172.0	1192.8	0.636	4.709	69.416	20.658	4.051	0.153	0.330	0.019	0.020	0.009	0.000	0.000	0.000	0.000	1397.18	
30	0.7210	1160.9	1181.5	0.633	4.663	70.243	20.491	3.575	0.117	0.243	0.014	0.015	0.007	0.000	0.000	0.000	0.000	1391.38	
31	0.7141	1152.7	1173.1	0.610	4.553	70.977	20.434	3.154	0.082	0.165	0.009	0.009	0.008	0.000	0.000	0.000	0.000	1388.21	
Avg	0.7066	1143.0	1163.2	0.660	4.359	72.530	19.098	3.069	0.090	0.169	0.009	0.008	0.008	0.000	0.000	0.000	0.000	1383.82	

Zone 273

GQ Source Daily Summary

March 2010

Number: 041		Pressure Base: 14,730										Contract Day: 1							
Name: BISMARCK-DICKINSON		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																
1	0.6020	1001.7	1019.5	0.934	2.716	91.713	3.946	0.552	0.051	0.052	0.013	0.008	0.015	0.000	0.000	0.000	0.000	0.000	1313.94
2	0.6022	1002.4	1020.2	0.941	2.687	91.674	4.012	0.549	0.050	0.052	0.013	0.008	0.015	0.000	0.000	0.000	0.000	0.000	1314.58
3	0.6068	1012.4	1030.3	0.850	2.646	90.813	4.860	0.679	0.058	0.056	0.014	0.008	0.015	0.000	0.000	0.000	0.000	0.000	1322.60
4	0.6170	1034.5	1052.9	0.739	2.423	89.001	6.733	0.883	0.089	0.081	0.021	0.012	0.017	0.000	0.000	0.000	0.000	0.000	1340.36
5	0.6202	1041.8	1060.3	0.756	2.249	88.750	6.917	1.008	0.121	0.120	0.033	0.020	0.025	0.000	0.000	0.000	0.000	0.000	1346.34
6	0.6105	1017.5	1035.6	1.107	2.294	90.368	5.391	0.679	0.065	0.060	0.015	0.008	0.013	0.000	0.000	0.000	0.000	0.000	1325.29
7	0.6062	1012.8	1030.7	1.069	2.233	91.112	4.839	0.602	0.061	0.054	0.013	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1323.80
8	0.6082	1014.4	1032.3	1.172	2.165	90.829	5.075	0.616	0.060	0.055	0.013	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1323.72
9	0.6109	1022.3	1040.4	0.884	2.380	90.036	5.852	0.708	0.057	0.054	0.013	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1331.05
10	0.6090	1022.0	1040.1	0.830	2.294	90.363	5.710	0.652	0.061	0.056	0.014	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1332.86
11	0.6211	1033.1	1051.4	0.726	2.916	87.717	7.757	0.773	0.047	0.043	0.009	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1334.14
12	0.6259	1037.7	1056.0	0.850	2.910	87.004	8.189	0.930	0.049	0.048	0.008	0.005	0.006	0.000	0.000	0.000	0.000	0.000	1334.77
13	0.6270	1039.0	1057.4	0.876	2.882	86.833	8.344	0.954	0.048	0.048	0.007	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1335.47
14	0.6312	1049.8	1068.3	0.766	2.789	86.036	9.225	1.043	0.059	0.058	0.011	0.005	0.007	0.000	0.000	0.000	0.000	0.000	1344.75
15	0.6184	1030.7	1048.9	0.974	2.434	88.693	6.953	0.797	0.061	0.059	0.013	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1333.85
16	0.6178	1030.5	1048.8	0.721	2.774	88.456	7.142	0.771	0.058	0.053	0.011	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1334.25
17	0.5978	1000.1	1017.8	1.091	2.180	92.708	3.435	0.443	0.058	0.052	0.013	0.008	0.012	0.000	0.000	0.000	0.000	0.000	1316.43
18	0.5945	995.6	1013.2	1.157	2.041	93.476	2.753	0.418	0.065	0.055	0.015	0.008	0.013	0.000	0.000	0.000	0.000	0.000	1314.15
19	0.5949	994.6	1012.2	1.192	2.096	93.354	2.823	0.395	0.057	0.051	0.014	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1312.27
20	0.5971	994.9	1012.6	1.217	2.238	92.907	3.094	0.416	0.051	0.047	0.013	0.007	0.011	0.000	0.000	0.000	0.000	0.000	1310.42
21	0.6314	1042.5	1060.9	0.722	3.325	85.872	8.870	1.082	0.048	0.061	0.008	0.004	0.008	0.000	0.000	0.000	0.000	0.000	1335.12
22	0.6174	1027.4	1045.6	0.730	2.913	88.345	7.227	0.696	0.037	0.034	0.007	0.004	0.007	0.000	0.000	0.000	0.000	0.000	1330.71
23	0.6286	1041.0	1059.4	0.549	3.419	85.951	9.103	0.906	0.029	0.032	0.004	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1336.19
24	0.6394	1056.0	1074.7	0.453	3.668	83.922	10.679	1.190	0.034	0.045	0.004	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1343.95
25	0.6225	1032.3	1050.6	0.541	3.385	87.024	8.261	0.714	0.032	0.032	0.005	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1331.45
26	0.5899	981.9	999.3	0.994	2.699	93.746	2.283	0.205	0.031	0.025	0.007	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1301.07
27	0.5896	980.6	997.9	1.033	2.695	93.845	2.141	0.217	0.030	0.025	0.006	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1299.62
28	0.6846	1111.0	1130.7	0.767	4.071	76.949	15.203	2.676	0.102	0.200	0.012	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1366.08
29	0.7157	1154.2	1174.6	0.659	4.532	71.474	19.361	3.541	0.126	0.264	0.015	0.015	0.013	0.000	0.000	0.000	0.000	0.000	1388.38
30	0.7201	1160.0	1180.5	0.612	4.665	70.280	20.638	3.436	0.104	0.223	0.014	0.014	0.014	0.000	0.000	0.000	0.000	0.000	1391.17
31	0.7145	1152.6	1173.0	0.653	4.536	70.834	20.684	3.038	0.076	0.152	0.008	0.007	0.012	0.000	0.000	0.000	0.000	0.000	1387.67
Avg	0.6249	1036.0	1054.7	0.857	2.879	87.422	7.661	1.018	0.060	0.073	0.012	0.007	0.010	0.000	0.000	0.000	0.000	0.000	1334.08

Zone 28

GQ Source Daily Summary

March 2010

Number: 271 Pressure Base: 14.730 Contract Day: 1
 Name: DICKINSON AREA Temperature Base: Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6012	1001.1	1018.9	0.929	2.682	91.747	3.981	0.558	0.047	0.049	0.000	0.000	0.008	0.000	0.000	0.000	0.000	1314.03	
2	0.6020	1003.9	1021.6	0.888	2.653	91.606	4.139	0.606	0.051	0.050	0.000	0.000	0.008	0.000	0.000	0.000	0.000	1316.72	
3	0.6136	1029.2	1047.4	0.754	2.406	89.428	6.445	0.815	0.074	0.065	0.001	0.000	0.011	0.000	0.000	0.000	0.000	1337.07	
4	0.6200	1042.7	1061.2	0.698	2.260	88.681	7.010	1.048	0.126	0.127	0.026	0.004	0.020	0.000	0.000	0.000	0.000	1347.69	
5	0.6111	1019.5	1037.5	1.077	2.272	90.121	5.694	0.708	0.065	0.059	0.000	0.000	0.006	0.000	0.000	0.000	0.000	1327.19	
6	0.6055	1011.8	1029.7	1.065	2.231	91.121	4.867	0.605	0.057	0.051	0.000	0.000	0.003	0.000	0.000	0.000	0.000	1323.24	
7	0.6080	1014.8	1032.8	1.120	2.192	90.711	5.231	0.635	0.057	0.052	0.000	0.000	0.003	0.000	0.000	0.000	0.000	1324.57	
8	0.6048	1015.1	1033.0	0.890	2.230	91.072	5.110	0.592	0.054	0.049	0.000	0.000	0.004	0.000	0.000	0.000	0.000	1328.32	
9	0.6082	1020.7	1038.8	0.809	2.333	90.362	5.718	0.662	0.058	0.053	0.000	0.000	0.004	0.000	0.000	0.000	0.000	1331.93	
10	0.6213	1032.1	1050.4	0.732	2.984	87.569	7.843	0.785	0.044	0.040	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1332.67	
11	0.6151	1023.6	1041.7	0.879	2.700	88.897	6.768	0.677	0.043	0.035	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1328.24	
12	0.6166	1027.0	1045.2	0.850	2.671	88.626	7.052	0.719	0.045	0.036	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1331.09	
13	0.6210	1037.2	1055.6	0.811	2.521	87.889	7.836	0.834	0.057	0.050	0.000	0.000	0.003	0.000	0.000	0.000	0.000	1339.56	
14	0.6174	1028.8	1047.0	0.982	2.434	88.779	6.896	0.796	0.056	0.055	0.000	0.000	0.003	0.000	0.000	0.000	0.000	1332.57	
15	0.6195	1034.0	1052.3	0.670	2.795	88.003	7.596	0.825	0.057	0.052	0.000	0.000	0.003	0.000	0.000	0.000	0.000	1336.90	
16	0.6028	1007.1	1025.0	0.975	2.394	91.503	4.477	0.542	0.055	0.048	0.000	0.000	0.005	0.000	0.000	0.000	0.000	1320.16	
17	0.5934	994.6	1012.2	1.145	2.015	93.527	2.793	0.408	0.059	0.049	0.000	0.000	0.004	0.000	0.000	0.000	0.000	1314.01	
18	0.5931	993.2	1010.8	1.143	2.080	93.546	2.724	0.400	0.056	0.048	0.000	0.000	0.004	0.000	0.000	0.000	0.000	1312.45	
19	0.5962	994.3	1011.9	1.189	2.227	92.939	3.131	0.417	0.049	0.044	0.000	0.000	0.003	0.000	0.000	0.000	0.000	1310.60	
20	0.6148	1023.5	1041.6	0.725	2.912	88.748	6.882	0.667	0.035	0.030	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1328.39	
21	0.6231	1033.5	1051.8	0.552	3.348	86.903	8.346	0.803	0.023	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1332.42	
22	0.6328	1046.9	1065.5	0.504	3.509	85.124	9.753	1.048	0.028	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1339.44	
23	0.6383	1057.2	1075.9	0.411	3.548	83.935	10.964	1.070	0.031	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1346.59	
24	0.6178	1025.1	1043.2	0.566	3.342	87.872	7.507	0.655	0.031	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1327.18	
25	0.5890	980.9	998.2	0.988	2.679	93.822	2.266	0.200	0.025	0.018	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1300.69	
26	0.5882	979.0	996.3	1.026	2.657	94.027	2.047	0.200	0.025	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1299.15	
27	0.5869	974.6	991.8	1.054	2.761	94.249	1.744	0.156	0.020	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.71	
28	0.5787	958.4	975.4	0.835	3.318	95.398	0.442	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1282.12	
29	0.5839	967.8	985.0	0.836	3.229	94.374	1.530	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1288.90	
30	0.5875	975.3	992.5	0.761	3.232	93.582	2.364	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.87	
31	0.5969	993.4	1011.0	0.967	2.686	92.344	3.611	0.337	0.029	0.025	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1308.56	
Av9	0.6067	1011.0	1029.1	0.866	2.687	90.532	5.251	0.576	0.044	0.040	0.001	0.000	0.003	0.000	0.000	0.000	0.000	1321.03	

GQ Source Daily Summary

March 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	0.6008	999.8	1017.5	0.948	2.697	91.976	3.692	0.550	0.050	0.052	0.013	0.008	0.015	0.000	0.000	0.000	0.000	1312.79	
2	0.6075	1015.0	1033.0	0.838	2.569	90.726	4.992	0.713	0.064	0.059	0.015	0.009	0.016	0.000	0.000	0.000	0.000	1325.31	
3	0.6197	1039.7	1058.2	0.684	2.438	88.736	6.801	1.043	0.115	0.113	0.030	0.018	0.021	0.000	0.000	0.000	0.000	1344.19	
4	0.6132	1026.9	1045.1	0.970	2.181	90.022	5.753	0.844	0.091	0.084	0.023	0.013	0.019	0.000	0.000	0.000	0.000	1334.59	
5	0.6055	1009.3	1027.2	1.155	2.243	91.383	4.448	0.617	0.064	0.057	0.014	0.008	0.010	0.000	0.000	0.000	0.000	1320.10	
6	0.6043	1009.0	1026.9	1.173	2.127	91.632	4.304	0.615	0.062	0.056	0.014	0.008	0.009	0.000	0.000	0.000	0.000	1320.94	
7	0.6060	1014.4	1032.4	0.958	2.286	91.074	4.893	0.646	0.060	0.054	0.014	0.007	0.010	0.000	0.000	0.000	0.000	1326.15	
8	0.6095	1019.3	1037.3	0.825	2.520	90.182	5.674	0.673	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.71	
9	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
10	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
11	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
12	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
13	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
14	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
15	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
16	0.6095	1019.3	1037.3	0.824	2.519	90.184	5.670	0.675	0.051	0.048	0.012	0.006	0.010	0.000	0.000	0.000	0.000	1328.73	
17	0.5946	995.0	1012.6	1.122	2.143	93.417	2.716	0.455	0.061	0.053	0.014	0.008	0.012	0.000	0.000	0.000	0.000	1313.20	
18	0.5916	988.8	1006.3	1.231	2.081	94.074	2.072	0.398	0.058	0.052	0.014	0.007	0.011	0.000	0.000	0.000	0.000	1308.22	
19	0.6036	1004.5	1022.3	0.995	2.607	91.374	4.383	0.528	0.046	0.042	0.011	0.006	0.009	0.000	0.000	0.000	0.000	1315.79	
20	0.6194	1027.0	1045.1	0.625	3.289	87.826	7.401	0.785	0.031	0.031	0.005	0.003	0.004	0.000	0.000	0.000	0.000	1327.99	
21	0.6311	1041.6	1060.0	0.536	3.633	85.630	9.008	1.109	0.033	0.041	0.004	0.002	0.003	0.000	0.000	0.000	0.000	1334.35	
22	0.6296	1038.5	1056.9	0.486	3.757	85.872	8.710	1.077	0.040	0.046	0.006	0.003	0.004	0.000	0.000	0.000	0.000	1331.94	
23	0.5884	976.9	994.2	0.914	2.987	93.972	1.794	0.265	0.029	0.025	0.006	0.003	0.005	0.000	0.000	0.000	0.000	1296.05	
24	0.5844	971.9	989.1	1.049	2.707	94.935	1.031	0.198	0.034	0.028	0.008	0.004	0.006	0.000	0.000	0.000	0.000	1293.87	
25	0.5839	970.5	987.7	1.082	2.691	95.040	0.940	0.178	0.030	0.024	0.007	0.004	0.005	0.000	0.000	0.000	0.000	1292.61	
26	0.5842	970.8	988.0	1.094	2.688	94.990	0.970	0.186	0.031	0.025	0.007	0.004	0.005	0.000	0.000	0.000	0.000	1292.60	
27	0.5796	959.0	976.0	0.946	3.201	95.462	0.318	0.050	0.010	0.007	0.003	0.001	0.002	0.000	0.000	0.000	0.000	1281.97	
28	0.5780	956.4	973.3	0.857	3.342	95.624	0.155	0.014	0.004	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	1280.28	
29	0.5782	956.2	973.1	0.868	3.359	95.588	0.161	0.016	0.004	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	1279.75	
30	0.5989	997.2	1014.9	1.114	2.428	92.505	3.283	0.550	0.053	0.045	0.010	0.005	0.007	0.000	0.000	0.000	0.000	1311.38	
31	0.5952	988.3	1005.8	0.932	2.901	92.754	2.942	0.398	0.033	0.026	0.006	0.003	0.004	0.000	0.000	0.000	0.000	1303.72	
Avg	0.6027	1004.0	1022.0	0.903	2.678	91.492	4.252	0.558	0.047	0.044	0.011	0.006	0.009	0.000	0.000	0.000	0.000	1316.33	

Zone 32

GQ Source Daily Summary

March 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	0.6779	1148.0	1168.4	0.000	2.377	74.993	22.071	0.543	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.07	
2	0.6789	1148.7	1169.1	0.000	2.431	74.645	22.496	0.414	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.86	
3	0.6766	1145.6	1165.9	0.000	2.400	75.092	22.110	0.385	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.48	
4	0.6752	1144.2	1164.5	0.000	2.361	75.370	21.872	0.384	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.14	
5	0.6767	1145.9	1166.2	0.000	2.396	75.075	22.116	0.398	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.69	
6	0.6785	1148.9	1169.2	0.000	2.382	74.778	22.367	0.460	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.50	
7	0.6777	1147.5	1167.8	0.000	2.397	74.878	22.306	0.406	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.55	
8	0.6759	1145.2	1165.5	0.000	2.358	75.247	21.994	0.388	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.74	
9	0.6749	1143.9	1164.1	0.000	2.350	75.447	21.803	0.387	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.05	
10	0.6746	1143.5	1163.7	0.000	2.346	75.500	21.759	0.381	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.87	
11	0.6759	1145.2	1165.5	0.000	2.363	75.236	22.007	0.380	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.64	
12	0.6787	1149.3	1169.7	0.000	2.376	74.715	22.462	0.434	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.80	
13	0.6772	1146.8	1167.1	0.000	2.388	75.007	22.165	0.427	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.11	
14	0.6770	1146.5	1166.8	0.000	2.386	75.052	22.125	0.422	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.87	
15	0.6762	1145.7	1166.0	0.000	2.366	75.205	21.992	0.423	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.53	
16	0.6777	1147.4	1167.8	0.000	2.396	74.918	22.238	0.435	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.39	
17	0.6787	1149.8	1170.2	0.000	2.349	74.737	22.438	0.462	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.85	
18	0.6790	1150.5	1170.9	0.000	2.334	74.658	22.555	0.439	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.30	
19	0.6775	1147.6	1167.9	0.000	2.374	74.939	22.251	0.422	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.19	
20	0.6764	1147.0	1167.3	0.000	2.305	75.178	22.074	0.429	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.90	
21	0.6811	1154.1	1174.6	0.000	2.313	74.306	22.848	0.519	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.20	
22	0.6798	1152.0	1172.4	0.000	2.320	74.581	22.558	0.527	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.08	
23	0.6790	1150.3	1170.7	0.000	2.347	74.704	22.440	0.495	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.50	
24	0.6818	1154.7	1175.2	0.000	2.340	74.255	22.779	0.612	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.02	
25	0.6783	1149.2	1169.6	0.000	2.347	74.782	22.434	0.424	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.84	
26	0.6792	1150.3	1170.7	0.000	2.364	74.620	22.556	0.447	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.70	
27	0.6793	1150.8	1171.2	0.000	2.340	74.702	22.408	0.536	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.44	
28	0.6783	1149.1	1169.4	0.000	2.359	74.882	22.214	0.531	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.81	
29	0.6793	1150.6	1170.9	0.000	2.357	74.717	22.354	0.559	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
30	0.6777	1147.4	1167.7	0.000	2.402	74.954	22.143	0.487	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
31	0.6790	1150.4	1170.8	0.000	2.340	74.718	22.428	0.500	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Avg	0.6779	1148.0	1168.6	0.000	2.363	74.900	22.270	0.453	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.36	

Zone 33

GQ Source Daily Summary

March 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	0.8062	1138.3	1158.4	2.794	10.795	53.561	29.332	3.160	0.077	0.241	0.010	0.027	0.004	0.000	0.000	0.000	0.000	1290.16	
2	0.8053	1140.9	1161.1	2.674	10.733	53.573	29.365	3.101	0.077	0.238	0.010	0.026	0.004	0.000	0.000	0.000	0.000	1293.86	
3	0.8043	1141.6	1161.8	2.560	10.765	53.655	29.570	3.095	0.077	0.238	0.010	0.027	0.004	0.000	0.000	0.000	0.000	1295.52	
4	0.8067	1137.6	1157.7	2.702	11.027	53.618	29.026	3.120	0.100	0.334	0.016	0.047	0.010	0.000	0.000	0.000	0.000	1288.79	
5	0.8049	1141.6	1161.8	2.494	10.931	52.484	31.505	3.314	0.058	0.183	0.007	0.020	0.003	0.000	0.000	0.000	0.000	1295.00	
6	0.8090	1156.5	1177.0	2.488	10.409	53.025	30.269	3.458	0.079	0.237	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1308.59	
7	0.8055	1148.4	1168.7	2.517	10.534	53.304	30.245	3.086	0.070	0.210	0.008	0.022	0.003	0.000	0.000	0.000	0.000	1302.19	
8	0.8037	1145.6	1165.9	2.459	10.623	53.682	29.765	3.143	0.071	0.220	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1300.52	
9	0.8059	1151.8	1172.2	2.465	10.440	53.336	30.220	3.218	0.072	0.217	0.009	0.021	0.003	0.000	0.000	0.000	0.000	1305.77	
10	0.8090	1150.0	1170.4	2.442	10.292	52.841	30.767	3.309	0.078	0.236	0.010	0.023	0.003	0.000	0.000	0.000	0.000	1312.09	
11	0.8054	1150.3	1160.5	2.420	10.575	53.404	30.032	3.086	0.074	0.225	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1304.12	
12	0.8023	1140.3	1160.5	2.336	11.001	53.745	29.498	3.136	0.076	0.231	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1295.61	
13	0.8039	1144.5	1164.7	2.301	10.952	53.460	29.809	3.136	0.076	0.231	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1299.02	
14	0.8038	1142.6	1162.8	2.435	10.853	53.693	29.467	3.211	0.075	0.228	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1296.98	
15	0.8053	1145.7	1166.0	2.405	10.845	53.480	29.624	3.285	0.079	0.242	0.010	0.026	0.003	0.000	0.000	0.000	0.000	1299.37	
16	0.8026	1138.1	1158.2	2.305	11.210	53.723	29.275	3.129	0.077	0.240	0.010	0.027	0.004	0.000	0.000	0.000	0.000	1292.84	
17	0.8075	1150.7	1171.0	2.380	10.794	53.015	30.157	3.292	0.079	0.243	0.010	0.025	0.004	0.000	0.000	0.000	0.000	1303.13	
18	0.8117	1151.1	1171.5	2.768	10.568	52.562	30.443	3.315	0.076	0.231	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1301.47	
19	0.8093	1150.5	1170.8	2.660	10.549	52.792	30.474	3.198	0.072	0.219	0.009	0.023	0.002	0.000	0.000	0.000	0.000	1305.35	
20	0.8063	1151.8	1172.2	2.386	10.606	53.294	30.059	3.297	0.079	0.241	0.010	0.026	0.003	0.000	0.000	0.000	0.000	1305.75	
21	0.8062	1152.0	1172.4	2.274	10.748	53.261	30.010	3.327	0.082	0.255	0.011	0.028	0.003	0.000	0.000	0.000	0.000	1307.61	
22	0.8070	1154.2	1174.6	2.259	10.709	53.040	30.335	3.288	0.081	0.249	0.010	0.027	0.003	0.000	0.000	0.000	0.000	1305.76	
23	0.8056	1151.6	1172.0	2.238	10.773	53.271	30.066	3.285	0.079	0.246	0.010	0.027	0.003	0.000	0.000	0.000	0.000	1309.41	
24	0.8064	1155.4	1175.9	2.150	10.750	53.024	30.427	3.282	0.080	0.245	0.010	0.027	0.003	0.000	0.000	0.000	0.000	1307.20	
25	0.8065	1153.5	1173.9	2.225	10.756	53.160	30.147	3.335	0.083	0.253	0.011	0.027	0.003	0.000	0.000	0.000	0.000	1305.93	
26	0.8055	1151.7	1172.1	2.243	10.749	53.260	30.134	3.256	0.079	0.240	0.010	0.026	0.003	0.000	0.000	0.000	0.000	1311.35	
27	0.8072	1157.7	1178.2	2.213	10.587	53.085	30.342	3.404	0.081	0.247	0.010	0.027	0.003	0.000	0.000	0.000	0.000	1308.49	
28	0.8057	1154.1	1174.5	2.209	10.676	53.215	30.260	3.287	0.078	0.237	0.010	0.026	0.004	0.000	0.000	0.000	0.000	1306.77	
29	0.8054	1152.3	1172.8	2.229	10.720	53.243	30.209	3.252	0.076	0.232	0.010	0.025	0.003	0.000	0.000	0.000	0.000	1304.96	
30	0.8054	1150.7	1171.1	2.269	10.755	53.205	30.240	3.194	0.074	0.226	0.009	0.024	0.003	0.000	0.000	0.000	0.000	1307.81	
31	0.8068	1154.3	1174.7	2.282	10.655	53.008	30.472	3.232	0.077	0.236	0.010	0.025	0.003	0.000	0.000	0.000	0.000	1302.31	
Avg	0.8060	1149.0	1169.2	2.406	10.722	53.259	30.056	3.204	0.077	0.237	0.010	0.026	0.004	0.000	0.000	0.000	0.000		

*** End of Report***

Zone 34

Williston Basin Interstate Pipeline Co.

GQ Source Analysis

GQ Source Number:	1201140	Specific Gravity:	0.5730
GQ Source Name:	EAGLE 8B ND	BTU Base:	Dry
Effective Date:	6/19/2009 9:00:00 AM	Measured Heat Value:	977.81
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	977.72
Pressure Base:	14.730	Wet Heat Value:	960.70
Viscosity:		As Deliv. Heat Value:	977.72

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	95.826		CO2	Carbon Dioxide	0.096
C2	Ethane	0.305		N2	Nitrogen	3.757
C3	Propane	0.009	0.002	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 %	0.005 GPM
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Sample Date: 6/12/2009 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	Monthly Sampler	Baker Field – North Dakota

[illegible]

THERMAL ZONE VARIANCE DOCUMENTATION		
March 2010		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
211	61	Higher BTU gas coming from the North
24	39	Higher BTU gas coming from the North
264	39	Higher BTU gas coming from the North
271	47	Higher BTU gas coming from Bismarck
272	48	Higher BTU gas coming from Bismarck
273	47	Higher BTU gas coming from Bismarck
28	32	Higher BTU gas coming from Bismarck going West towards Glen Ullin