



MONTANA-DAKOTA

UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

March 23, 2012

RECEIVED

MAR 26 2012

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 – February 2012

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 March 2012.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of February 2012. There is a report for each of the 17 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 February 2012.

Please acknowledge receipt by stamping or initialing the duplicate copy of this letter attached hereto and returning the same in the enclosed self-addressed, stamped envelope. Should the Commission or its Staff have any comments or questions with respect to these reports, please call me.

Sincerely,

Tamie Aberle
Regulatory Affairs Manager

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
MAR 2012

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.0836
12	323	BERTHOLD	262	1.0937
12	327	BISMARCK	28	1.0276
12	337	BURLINGTON	262	1.1174
12	343	CARRINGTON	273	1.0817
12	344	CLEVELAND	272	1.0740
12	364	CAVALIER	273	1.1044
12	365	DAWSON	271	1.0759
12	368	DES LACS	262	1.1016
12	374	FT TOTTEN	273	1.0893
12	375	DEVILS LAKE	273	1.0893
12	379	BARLOW	273	1.0817
12	387	ELDRIDGE	272	1.0817
12	411	GLEN ULLIN	31	1.0049
12	416	GARRISON	262	1.1016
12	417	GRAFTON	273	1.1120
12	439	HANKINSON	600	1.0788
12	449	JAMESTOWN	272	1.0893
12	463	LANGDON	273	1.0817
12	475	LINTON	802	.9803
12	478	LINCOLN	28	1.0276
12	494	MEDINA	271	1.0759
12	498	MANDAN	28	1.0276
12	505	MINOT	262	1.1174
12	512	MAX	262	1.0937
12	524	NEW SALEM	28	1.0059
12	532	NEW ROCKFORD	273	1.0817
12	539	PARK RIVER	273	1.1044
12	572	RUTHVILLE	262	1.1174
12	574	SANBORN	272	1.0893
12	593	STEELE	271	1.0759
12	598	SHEYENNE	273	1.0893
12	605	SURREY	262	1.1174
12	610	TAPPEN	271	1.0759
12	619	TURTLE LAKE	262	1.1016

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
MAR 2012

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	624	UNDERWOOD	262	1.1016
12	625	VALLEY CITY	272	1.0968
12	629	WALHALLA	273	1.1044
12	646	WASHBURN	262	1.1095
12	647	WILTON	262	1.0937
12	664	RIVERDALE	262	1.1016
12	712	MINOT AFB	262	1.1174
12	717	SPIRITWOOD	272	1.0893
12	718	FAIRMOUNT	600	1.0766
12	732	MSR SITE	273	1.0817
12	733	PAR SITE	273	1.0817
15	303	ALEXANDER	25	1.0692
15	308	ARNEGARD	25	1.0692
15	318	BEACH	32	.9648
15	319	BELFIELD	32	.9719
15	330	BOWMAN	34	1.0329
15	369	DICKINSON	31	.9977
15	384	EPPING	264	1.1287
15	407	GLADSTONE	31	.9977
15	413	GOLVA	32	.9507
15	429	HEBRON	31	1.0049
15	459	KILLDEER	33	1.1164
15	469	LEFOR	31	.9977
15	474	LIGNITE	263	1.0284
15	500	MARMARTH	34	1.0405
15	510	MOTT	31	.9977
15	522	NEW ENGLAND	31	.9905
15	540	PALERMO	262	1.0937
15	558	RAY	264	1.1287
15	561	REGENT	31	.9977
15	563	RHAME	34	1.0253
15	564	RICHARDTON	31	.9905
15	568	ROSS	261	1.0840
15	583	SENTINEL BUTTE	32	.9648
15	588	SOUTH HEART	31	.9905

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
MAR 2012

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	590	SPRINGBROOK	264	1.1287
15	591	STANLEY	261	1.0918
15	611	TAYLOR	31	.9905
15	616	TIOGA	261	1.0840
15	620	TRENTON	24	1.1368
15	632	WATFORD CITY	25	1.0692
15	636	WHEELOCK	264	1.1206
15	637	WHITE EARTH	261	1.0918
15	642	WILLISTON	24	1.1368
15	691	FAIRVIEW	241	1.1349
15	743	BAKER FIELD	35	.8980

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

GQ Source Daily Summary

February 2012

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	0.7136	1184.7	1205.7	0.046	3.425	69.831	23.953	2.661	0.031	0.048	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1427.28	
2	0.7158	1188.1	1209.1	0.045	3.422	69.668	23.847	2.931	0.033	0.049	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1429.18	
3	0.7163	1189.1	1210.1	0.044	3.420	69.528	24.010	2.907	0.035	0.052	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1429.76	
4	0.7124	1181.9	1202.8	0.045	3.487	70.042	23.681	2.685	0.026	0.039	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1425.05	
5	0.7132	1180.7	1201.6	0.140	3.487	70.108	23.428	2.740	0.037	0.057	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1422.84	
6	0.7150	1186.4	1207.4	0.042	3.465	69.527	24.193	2.714	0.025	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1427.83	
7	0.7130	1183.9	1204.8	0.043	3.425	69.950	23.823	2.689	0.027	0.040	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1426.84	
8	0.7139	1184.8	1205.8	0.041	3.456	69.679	24.130	2.638	0.024	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1427.10	
9	0.7097	1178.9	1199.8	0.041	3.427	70.263	23.857	2.347	0.026	0.037	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1424.11	
10	0.7170	1190.7	1211.8	0.038	3.384	69.469	24.033	3.000	0.031	0.041	0.001	0.001	0.001	0.000	0.000	0.000	0.000	1431.14	
11	0.7161	1188.4	1209.5	0.035	3.450	69.794	23.507	3.110	0.038	0.059	0.002	0.003	0.001	0.000	0.000	0.000	0.000	1429.20	
12	0.7163	1189.3	1210.3	0.035	3.415	69.786	23.536	3.118	0.040	0.064	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1430.06	
13	0.7189	1194.0	1215.2	0.041	3.360	69.035	24.548	2.926	0.033	0.051	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1433.19	
14	0.7116	1180.4	1201.3	0.044	3.508	70.009	23.869	2.515	0.023	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.05	
15	0.7167	1188.7	1209.8	0.041	3.475	69.350	24.223	2.840	0.029	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1429.06	
16	0.7123	1182.2	1203.1	0.051	3.447	69.925	23.992	2.522	0.025	0.036	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1425.57	
17	0.7138	1185.8	1206.8	0.045	3.375	69.836	23.971	2.688	0.032	0.049	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1428.44	
18	0.7152	1188.2	1209.2	0.043	3.370	69.599	24.134	2.780	0.030	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1429.82	
19	0.7175	1192.3	1213.4	0.050	3.321	69.481	24.018	3.013	0.041	0.068	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1432.48	
20	0.7100	1180.5	1201.5	0.043	3.338	70.441	23.552	2.535	0.030	0.047	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1425.83	
21	0.7155	1189.0	1210.0	0.041	3.351	69.720	23.895	2.887	0.038	0.061	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1430.49	
22	0.7178	1185.3	1206.3	0.229	3.507	69.680	23.340	3.114	0.045	0.077	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1423.81	
23	0.7142	1185.6	1206.6	0.040	3.434	69.898	23.707	2.825	0.034	0.056	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1427.73	
24	0.7118	1182.4	1203.4	0.043	3.401	70.027	23.947	2.515	0.027	0.039	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1426.32	
25	0.7114	1180.9	1201.8	0.043	3.459	70.090	23.812	2.536	0.025	0.033	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1424.87	
26	0.7124	1183.4	1204.3	0.047	3.393	69.900	24.062	2.551	0.022	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1426.86	
27	0.7117	1182.3	1203.3	0.043	3.401	69.987	24.025	2.490	0.023	0.031	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1426.26	
28	0.7103	1179.7	1200.6	0.042	3.428	70.123	24.008	2.351	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.53	
29	0.7123	1183.1	1204.1	0.042	3.411	69.905	24.056	2.527	0.024	0.034	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1426.60	
Avg	0.7140	1185.0	1206.2	0.053	3.423	69.816	23.902	2.729	0.030	0.044	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1427.46	

Zone 211

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	0602330	Specific Gravity:	0.7265
GQ Source Name:	WILLISTON BORDER	Dry Heat Value:	1195.34
Effective Date:	2/1/2012 9:00:00 AM	Wet Heat Value:	1174.54
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1195.34
Pressure Base:	14.730	Sample Pressure:	0.00
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>		<u>Mol %</u>
C1 Methane	69.261		CO2 Carbon Dioxide	0.935
C2 Ethane	21.884	5.8353	N2 Nitrogen	3.865
C3 Propane	3.685	1.0124	O2 Oxygen	0.000
IC4 Isobutane	0.121	0.0395	He Helium	
NC4 n-Butane	0.223	0.0701	H2 Hydrogen	
IC5 Isopentane	0.013	0.0048	H2S Hydrogen Sulfide	
NC5 n-Pentane	0.012	0.0042	Ar Argon	
C6 Hexanes	0.000	0.0000	CO Carbon Monoxide	
C7 Heptanes			H2 Water	
C8 Octanes			Neo-C5 Neopentane	
C9 Nonanes				
C10 Decanes				

Totals 100.000% 6.966 GPM

Sample Date: 2/29/2012 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
H2S: ppm

Sample Remarks:

Analysis Tech: Mary Berger

Analysis Remarks:

Zone 24, 264

GQ Source Daily Summary

February 2012

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	0.6920	1137.2	1157.3	0.510	3.584	74.693	18.635	2.339	0.072	0.139	0.008	0.009	0.011					1391.19	
2	0.6923	1137.2	1157.3	0.564	3.527	74.573	18.845	2.280	0.068	0.129	0.006	0.006	0.008					1390.93	
3	0.6922	1138.4	1158.5	0.543	3.475	74.485	19.099	2.196	0.065	0.118	0.006	0.005	0.007					1392.53	
4	0.6904	1134.3	1154.4	0.564	3.525	74.768	18.888	2.108	0.066	0.120	0.006	0.005	0.007					1389.34	
5	0.6913	1136.2	1156.4	0.560	3.498	74.728	18.792	2.194	0.072	0.134	0.007	0.007	0.009					1390.78	
6	0.6913	1134.8	1154.9	0.596	3.528	74.746	18.708	2.205	0.070	0.127	0.007	0.006	0.008					1389.08	
7	0.6924	1137.1	1157.2	0.589	3.507	74.571	18.873	2.230	0.072	0.133	0.008	0.008	0.008					1390.69	
8	0.6916	1135.8	1155.9	0.578	3.523	74.656	18.841	2.186	0.068	0.125	0.007	0.007	0.009					1389.95	
9	0.6922	1137.5	1157.6	0.564	3.506	74.439	19.131	2.162	0.064	0.115	0.006	0.006	0.006					1391.33	
10	0.6932	1137.6	1157.7	0.553	3.607	74.191	19.299	2.167	0.061	0.107	0.006	0.005	0.005					1390.50	
11	0.6923	1136.8	1156.9	0.511	3.632	74.233	19.377	2.069	0.057	0.102	0.005	0.005	0.007					1390.46	
12	0.6880	1129.6	1149.6	0.500	3.680	75.140	18.425	2.049	0.065	0.117	0.007	0.007	0.010					1386.00	
13	0.6917	1135.3	1155.4	0.550	3.603	74.587	18.870	2.166	0.070	0.129	0.007	0.007	0.009					1389.29	
14	0.6948	1139.7	1159.9	0.580	3.581	74.294	18.908	2.355	0.091	0.167	0.009	0.008	0.009					1391.56	
15	0.6929	1136.9	1157.0	0.587	3.565	74.593	18.748	2.213	0.081	0.169	0.016	0.017	0.010					1389.97	
16	0.6938	1138.3	1158.5	0.588	3.564	74.320	19.036	2.249	0.075	0.141	0.009	0.009	0.011					1390.82	
17	0.6940	1138.2	1158.4	0.595	3.579	74.331	18.964	2.282	0.076	0.143	0.009	0.010	0.011					1390.48	
18	0.6908	1134.0	1154.1	0.563	3.576	74.819	18.649	2.150	0.074	0.141	0.009	0.009	0.009					1388.63	
19	0.6899	1133.4	1153.5	0.559	3.536	74.880	18.732	2.073	0.068	0.127	0.008	0.008	0.009					1388.79	
20	0.6922	1134.6	1154.7	0.602	3.615	74.476	18.993	2.082	0.072	0.134	0.008	0.008	0.010					1387.91	
21	0.6927	1135.5	1155.6	0.598	3.616	74.399	19.026	2.139	0.070	0.129	0.007	0.007	0.010					1388.48	
22	0.6915	1134.8	1154.9	0.551	3.619	74.466	19.113	2.044	0.063	0.118	0.007	0.007	0.010					1388.82	
23	0.6943	1138.0	1158.2	0.601	3.615	74.074	19.315	2.195	0.063	0.114	0.007	0.007	0.009					1389.88	
24	0.6955	1139.4	1159.6	0.602	3.639	73.971	19.243	2.347	0.063	0.114	0.007	0.006	0.008					1390.43	
25	0.6933	1137.6	1157.7	0.545	3.632	74.213	19.210	2.210	0.061	0.109	0.006	0.006	0.008					1390.36	
26	0.6925	1136.5	1156.6	0.516	3.668	74.191	19.362	2.086	0.057	0.101	0.006	0.006	0.007					1389.85	
27	0.6915	1135.2	1155.3	0.503	3.670	74.342	19.273	2.029	0.057	0.103	0.006	0.007	0.009					1389.30	
28	0.6921	1136.1	1156.3	0.517	3.650	74.277	19.319	2.043	0.061	0.111	0.007	0.007	0.011					1389.82	
29	0.6920	1135.6	1155.7	0.546	3.623	74.426	19.119	2.060	0.067	0.129	0.009	0.009	0.011					1389.30	
Avg	0.6922	1136.0	1156.4	0.560	3.584	74.479	18.991	2.169	0.068	0.125	0.007	0.007	0.009					1389.88	

Zone 261

GQ Source Daily Summary

February 2012

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	0.6943	1139.9	1160.1	0.541	3.577	74.591	18.480	2.490	0.091	0.190	0.012	0.013	0.016	0.000	0.000	0.000	0.000	1392.27	
2	0.6927	1137.8	1158.0	0.564	3.520	74.539	18.853	2.310	0.068	0.125	0.004	0.002	0.015	0.000	0.000	0.000	0.000	1391.34	
3	0.6928	1140.5	1160.7	0.541	3.400	74.380	19.277	2.201	0.065	0.119	0.003	0.001	0.013	0.000	0.000	0.000	0.000	1394.55	
4	0.6918	1136.7	1156.8	0.585	3.479	74.560	19.016	2.156	0.067	0.121	0.003	0.000	0.019	0.000	0.000	0.000	0.000	1390.79	
5	0.6915	1136.1	1156.3	0.587	3.475	74.626	18.965	2.140	0.067	0.123	0.003	0.000	0.013	0.000	0.000	0.000	0.000	1390.50	
6	0.6920	1136.8	1156.9	0.591	3.476	74.656	18.829	2.214	0.074	0.139	0.005	0.003	0.013	0.000	0.000	0.000	0.000	1390.77	
7	0.6928	1137.5	1157.7	0.615	3.478	74.555	18.852	2.266	0.074	0.138	0.005	0.004	0.013	0.000	0.000	0.000	0.000	1390.80	
8	0.6923	1137.7	1157.9	0.581	3.464	74.554	18.975	2.203	0.070	0.130	0.005	0.004	0.014	0.000	0.000	0.000	0.000	1391.62	
9	0.6925	1137.6	1157.7	0.590	3.484	74.444	19.107	2.163	0.067	0.124	0.005	0.004	0.012	0.000	0.000	0.000	0.000	1391.16	
10	0.6941	1139.5	1159.7	0.595	3.506	74.133	19.360	2.216	0.063	0.112	0.003	0.001	0.012	0.000	0.000	0.000	0.000	1391.96	
11	0.6940	1139.3	1159.5	0.544	3.581	74.020	19.522	2.150	0.059	0.106	0.002	0.001	0.015	0.000	0.000	0.000	0.000	1391.89	
12	0.6902	1133.9	1154.0	0.509	3.612	74.606	19.086	2.005	0.058	0.106	0.002	0.001	0.014	0.000	0.000	0.000	0.000	1389.03	
13	0.6898	1132.4	1152.5	0.537	3.619	74.900	18.617	2.105	0.069	0.130	0.005	0.005	0.014	0.000	0.000	0.000	0.000	1387.65	
14	0.6937	1138.6	1158.7	0.598	3.522	74.278	19.171	2.203	0.071	0.139	0.005	0.004	0.014	0.000	0.000	0.000	0.000	1391.20	
15	0.6958	1141.1	1161.3	0.606	3.543	74.276	18.864	2.371	0.100	0.200	0.014	0.012	0.014	0.000	0.000	0.000	0.000	1392.26	
16	0.6928	1137.1	1157.2	0.604	3.516	74.519	18.908	2.203	0.075	0.141	0.007	0.003	0.013	0.000	0.000	0.000	0.000	1390.29	
17	0.6960	1141.6	1161.8	0.622	3.519	74.052	19.194	2.350	0.079	0.152	0.008	0.008	0.015	0.000	0.000	0.000	0.000	1392.56	
18	0.6939	1138.0	1158.2	0.614	3.542	74.363	18.978	2.252	0.077	0.145	0.006	0.006	0.015	0.000	0.000	0.000	0.000	1390.42	
19	0.6908	1134.5	1154.6	0.581	3.520	74.737	18.866	2.068	0.069	0.132	0.006	0.006	0.015	0.000	0.000	0.000	0.000	1389.17	
20	0.6908	1134.0	1154.1	0.598	3.525	74.770	18.792	2.086	0.070	0.136	0.005	0.005	0.016	0.000	0.000	0.000	0.000	1388.55	
21	0.6942	1137.3	1157.5	0.636	3.584	74.181	19.212	2.147	0.074	0.140	0.006	0.005	0.015	0.000	0.000	0.000	0.000	1389.22	
22	0.6934	1138.2	1158.4	0.592	3.519	74.247	19.305	2.120	0.067	0.126	0.005	0.005	0.015	0.000	0.000	0.000	0.000	1391.14	
23	0.6927	1136.4	1156.5	0.580	3.585	74.262	19.330	2.034	0.064	0.120	0.005	0.005	0.015	0.000	0.000	0.000	0.000	1389.60	
24	0.6970	1141.8	1162.0	0.636	3.579	73.782	19.401	2.396	0.065	0.119	0.005	0.003	0.014	0.000	0.000	0.000	0.000	1391.83	
25	0.6942	1138.5	1158.7	0.578	3.602	74.142	19.219	2.260	0.063	0.115	0.004	0.003	0.014	0.000	0.000	0.000	0.000	1390.64	
26	0.6935	1138.8	1159.0	0.538	3.583	74.098	19.443	2.158	0.058	0.106	0.003	0.001	0.012	0.000	0.000	0.000	0.000	1391.68	
27	0.6930	1137.2	1157.4	0.528	3.639	74.111	19.495	2.038	0.058	0.107	0.004	0.003	0.017	0.000	0.000	0.000	0.000	1390.35	
28	0.6925	1137.1	1157.2	0.523	3.619	74.210	19.398	2.065	0.058	0.107	0.003	0.003	0.015	0.000	0.000	0.000	0.000	1390.55	
29	0.6923	1137.2	1157.3	0.550	3.545	74.287	19.410	2.000	0.063	0.120	0.005	0.005	0.015	0.000	0.000	0.000	0.000	1390.94	
Avg	0.6930	1138.0	1157.8	0.578	3.538	74.375	19.101	2.185	0.069	0.130	0.005	0.004	0.014	0.000	0.000	0.000	0.000	1390.85	

Zone 262

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	2501030	Specific Gravity:	0.6402
GQ Source Name:	LIGNITE PLANT	Dry Heat Value:	1081.22
Effective Date:	2/1/2012 9:00:00 AM	Wet Heat Value:	1062.40
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1081.22
Pressure Base:	14.730	Sample Pressure:	0.00
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>		<u>Mol %</u>
C1 Methane	82.513		CO2 Carbon Dioxide	0.153
C2 Ethane	13.067	3.4844	N2 Nitrogen	3.788
C3 Propane	0.436	0.1196	O2 Oxygen	0.000
IC4 Isobutane	0.000	0.0000	He Helium	
NC4 n-Butane	0.005	0.0016	H2 Hydrogen	
IC5 Isopentane	0.000	0.0000	H2S Hydrogen Sulfide	
NC5 n-Pentane	0.000	0.0000	Ar Argon	
C6 Hexanes	0.038	0.0175	CO Carbon Monoxide	
C7 Heptanes			H2 Water	
C8 Octanes			Neo-C5 Neopentane	
C9 Nonanes				
C10 Decanes				

Totals 100.000% 3.623 GPM

Sample Date: 2/29/2012 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
H2S: ppm

Sample Remarks:

Analysis Tech: Mary Berger

Analysis Remarks:

*** End of Report ***

Zone 263

GQ Source Daily Summary

February 2012

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	0.6733	1110.0	1129.7	0.459	3.559	78.022	15.829	1.904	0.064	0.128	0.009	0.010	0.015	0.000	0.000	0.000	0.000	1376.67	
2	0.6764	1114.8	1134.5	0.476	3.534	77.356	16.516	1.922	0.058	0.109	0.007	0.007	0.016	0.000	0.000	0.000	0.000	1379.44	
3	0.6743	1111.2	1130.9	0.521	3.487	77.670	16.333	1.822	0.052	0.093	0.005	0.004	0.011	0.000	0.000	0.000	0.000	1377.15	
4	0.6747	1113.5	1133.2	0.469	3.465	77.507	16.597	1.802	0.051	0.089	0.005	0.004	0.011	0.000	0.000	0.000	0.000	1379.56	
5	0.6740	1111.9	1131.6	0.481	3.473	77.590	16.572	1.723	0.051	0.090	0.005	0.004	0.011	0.000	0.000	0.000	0.000	1378.38	
6	0.6697	1105.9	1125.4	0.457	3.473	78.348	15.937	1.625	0.050	0.089	0.005	0.005	0.010	0.000	0.000	0.000	0.000	1375.28	
7	0.6627	1092.9	1112.3	0.476	3.574	79.673	14.587	1.545	0.046	0.080	0.005	0.004	0.010	0.000	0.000	0.000	0.000	1366.35	
8	0.6614	1091.6	1110.9	0.460	3.559	79.907	14.402	1.523	0.047	0.081	0.006	0.005	0.010	0.000	0.000	0.000	0.000	1366.01	
9	0.6620	1092.5	1111.8	0.462	3.564	79.781	14.513	1.534	0.046	0.080	0.005	0.005	0.010	0.000	0.000	0.000	0.000	1366.43	
10	0.6534	1079.6	1098.7	0.441	3.570	81.274	13.263	1.328	0.040	0.066	0.005	0.004	0.008	0.000	0.000	0.000	0.000	1359.18	
11	0.6536	1078.5	1097.6	0.467	3.615	81.289	13.141	1.360	0.042	0.068	0.005	0.004	0.008	0.000	0.000	0.000	0.000	1357.62	
12	0.6549	1080.3	1099.4	0.458	3.640	81.003	13.419	1.357	0.040	0.067	0.005	0.004	0.009	0.000	0.000	0.000	0.000	1358.58	
13	0.6616	1090.5	1109.8	0.463	3.639	79.854	14.381	1.512	0.048	0.082	0.005	0.005	0.011	0.000	0.000	0.000	0.000	1364.44	
14	0.6716	1106.3	1125.9	0.482	3.588	78.081	15.957	1.720	0.054	0.095	0.006	0.006	0.012	0.000	0.000	0.000	0.000	1373.87	
15	0.6801	1119.0	1138.8	0.522	3.552	76.737	17.018	1.941	0.072	0.132	0.007	0.006	0.013	0.000	0.000	0.000	0.000	1380.89	
16	0.6736	1108.8	1128.4	0.519	3.566	77.881	16.044	1.765	0.063	0.124	0.012	0.012	0.013	0.000	0.000	0.000	0.000	1374.93	
17	0.6719	1106.9	1126.5	0.510	3.535	78.115	15.912	1.742	0.056	0.102	0.007	0.007	0.013	0.000	0.000	0.000	0.000	1374.32	
18	0.6740	1110.4	1130.1	0.514	3.515	77.725	16.292	1.764	0.057	0.105	0.007	0.007	0.014	0.000	0.000	0.000	0.000	1376.49	
19	0.6735	1110.1	1129.7	0.504	3.504	77.772	16.312	1.720	0.057	0.105	0.007	0.006	0.013	0.000	0.000	0.000	0.000	1376.59	
20	0.6736	1110.5	1130.2	0.502	3.487	77.672	16.505	1.659	0.053	0.098	0.006	0.006	0.014	0.000	0.000	0.000	0.000	1377.08	
21	0.6760	1113.2	1132.9	0.523	3.523	77.248	16.814	1.707	0.056	0.103	0.006	0.006	0.013	0.000	0.000	0.000	0.000	1377.88	
22	0.6766	1113.0	1132.7	0.541	3.559	77.230	16.695	1.790	0.057	0.103	0.006	0.006	0.014	0.000	0.000	0.000	0.000	1377.08	
23	0.6727	1108.2	1127.8	0.493	3.566	77.788	16.337	1.651	0.050	0.091	0.006	0.006	0.013	0.000	0.000	0.000	0.000	1375.02	
24	0.6708	1104.5	1124.1	0.508	3.581	78.219	15.847	1.687	0.049	0.086	0.006	0.005	0.012	0.000	0.000	0.000	0.000	1372.48	
25	0.6677	1099.8	1119.2	0.507	3.586	78.822	15.247	1.689	0.047	0.081	0.005	0.005	0.011	0.000	0.000	0.000	0.000	1369.69	
26	0.6642	1094.9	1114.3	0.475	3.595	79.402	14.803	1.580	0.045	0.078	0.005	0.005	0.011	0.000	0.000	0.000	0.000	1367.28	
27	0.6642	1094.9	1114.3	0.477	3.597	79.309	14.964	1.515	0.043	0.074	0.005	0.005	0.010	0.000	0.000	0.000	0.000	1367.25	
28	0.6680	1100.7	1120.2	0.477	3.598	78.639	15.557	1.584	0.046	0.080	0.006	0.006	0.012	0.000	0.000	0.000	0.000	1370.60	
29	0.6779	1115.8	1135.6	0.500	3.573	76.854	17.150	1.750	0.052	0.094	0.006	0.006	0.014	0.000	0.000	0.000	0.000	1379.23	
Avg	0.6693	1103.0	1122.6	0.488	3.554	78.509	15.619	1.663	0.052	0.092	0.006	0.006	0.012	0.000	0.000	0.000	0.000	1372.27	

Zone 271

GQ Source Daily Summary

February 2012

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	0.6727	1108.5	1128.1	0.455	3.604	77.993	15.906	1.856	0.057	0.105	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1375.38	
2	0.6753	1112.5	1132.2	0.466	3.586	77.735	15.982	1.984	0.069	0.141	0.011	0.012	0.014	0.000	0.000	0.000	0.000	1377.68	
3	0.6750	1111.1	1130.8	0.527	3.543	77.595	16.284	1.881	0.054	0.097	0.005	0.005	0.009	0.000	0.000	0.000	0.000	1376.39	
4	0.6740	1112.4	1132.1	0.452	3.489	77.581	16.538	1.790	0.051	0.089	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1378.96	
5	0.6733	1110.3	1129.9	0.475	3.514	77.704	16.414	1.740	0.052	0.091	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1377.09	
6	0.6711	1107.5	1127.1	0.458	3.502	78.032	16.220	1.639	0.050	0.087	0.005	0.004	0.002	0.000	0.000	0.000	0.000	1375.89	
7	0.6634	1094.3	1113.7	0.466	3.574	79.515	14.740	1.559	0.049	0.087	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1367.30	
8	0.6612	1091.2	1110.6	0.460	3.565	79.936	14.354	1.542	0.047	0.083	0.006	0.005	0.002	0.000	0.000	0.000	0.000	1365.75	
9	0.6617	1091.9	1111.3	0.457	3.577	79.831	14.446	1.546	0.047	0.083	0.006	0.005	0.004	0.000	0.000	0.000	0.000	1366.06	
10	0.6551	1081.7	1100.9	0.430	3.611	80.949	13.525	1.356	0.042	0.071	0.005	0.005	0.006	0.000	0.000	0.000	0.000	1360.19	
11	0.6525	1076.4	1095.5	0.468	3.633	81.507	12.909	1.356	0.042	0.069	0.005	0.005	0.006	0.000	0.000	0.000	0.000	1356.21	
12	0.6535	1077.8	1096.9	0.450	3.677	81.235	13.167	1.352	0.041	0.068	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1356.82	
13	0.6585	1085.2	1104.4	0.459	3.676	80.337	13.970	1.429	0.044	0.075	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1361.02	
14	0.6669	1098.8	1118.3	0.458	3.638	78.883	15.230	1.634	0.052	0.093	0.006	0.006	0.001	0.000	0.000	0.000	0.000	1369.37	
15	0.6767	1113.8	1133.6	0.512	3.564	77.190	16.710	1.845	0.059	0.106	0.006	0.006	0.001	0.000	0.000	0.000	0.000	1377.98	
16	0.6751	1111.3	1131.0	0.516	3.563	77.713	16.084	1.870	0.075	0.151	0.016	0.012	0.005	0.000	0.000	0.000	0.000	1376.45	
17	0.6711	1104.9	1124.5	0.508	3.590	78.260	15.715	1.740	0.057	0.104	0.007	0.007	0.012	0.000	0.000	0.000	0.000	1372.60	
18	0.6735	1109.1	1128.7	0.509	3.554	77.858	16.090	1.794	0.059	0.110	0.007	0.007	0.012	0.000	0.000	0.000	0.000	1375.38	
19	0.6734	1109.0	1128.7	0.504	3.554	77.818	16.185	1.748	0.058	0.108	0.007	0.007	0.011	0.000	0.000	0.000	0.000	1375.46	
20	0.6728	1108.9	1128.6	0.496	3.520	77.811	16.341	1.655	0.054	0.099	0.006	0.006	0.011	0.000	0.000	0.000	0.000	1375.89	
21	0.6749	1111.2	1130.9	0.510	3.559	77.434	16.625	1.689	0.056	0.103	0.007	0.006	0.011	0.000	0.000	0.000	0.000	1376.54	
22	0.6762	1112.2	1131.9	0.530	3.586	77.238	16.699	1.768	0.058	0.105	0.006	0.006	0.003	0.000	0.000	0.000	0.000	1376.51	
23	0.6738	1109.3	1128.9	0.504	3.584	77.647	16.377	1.715	0.053	0.097	0.006	0.006	0.011	0.000	0.000	0.000	0.000	1375.28	
24	0.6699	1102.7	1122.2	0.487	3.640	78.309	15.787	1.617	0.049	0.089	0.006	0.006	0.010	0.000	0.000	0.000	0.000	1371.12	
25	0.6681	1099.4	1118.9	0.517	3.623	78.777	15.202	1.735	0.049	0.086	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1368.88	
26	0.6636	1093.2	1112.6	0.471	3.653	79.494	14.639	1.603	0.046	0.080	0.006	0.005	0.003	0.000	0.000	0.000	0.000	1365.76	
27	0.6629	1092.7	1112.0	0.473	3.620	79.570	14.662	1.542	0.044	0.075	0.005	0.005	0.004	0.000	0.000	0.000	0.000	1365.75	
28	0.6657	1096.6	1116.0	0.470	3.649	78.938	15.221	1.635	0.045	0.081	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1367.77	
29	0.6737	1108.7	1128.3	0.483	3.646	77.580	16.420	1.717	0.050	0.090	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1374.59	
Avg	0.6685	1101.0	1121.0	0.482	3.589	78.639	15.464	1.663	0.052	0.094	0.006	0.006	0.005	0.000	0.000	0.000	0.000	1371.04	

Zone 272

GQ Source Daily Summary

February 2012

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	0.6730	1109.0	1128.6	0.455	3.596	77.952	15.946	1.863	0.058	0.106	0.007	0.006	0.012	0.000	0.000	0.000	0.000	1375.75	
2	0.6755	1112.8	1132.5	0.466	3.580	77.710	16.004	1.991	0.070	0.142	0.011	0.012	0.014	0.000	0.000	0.000	0.000	1377.96	
3	0.6754	1111.8	1131.5	0.527	3.537	77.532	16.340	1.893	0.055	0.097	0.005	0.005	0.009	0.000	0.000	0.000	0.000	1376.87	
4	0.6743	1113.0	1132.7	0.453	3.481	77.528	16.591	1.798	0.051	0.090	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1379.38	
5	0.6735	1110.8	1130.5	0.475	3.506	77.658	16.460	1.747	0.052	0.092	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1377.49	
6	0.6713	1108.0	1127.6	0.459	3.494	77.989	16.264	1.646	0.050	0.087	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1376.25	
7	0.6636	1094.7	1114.1	0.467	3.565	79.486	14.771	1.564	0.049	0.087	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1367.64	
8	0.6614	1091.7	1111.0	0.460	3.556	79.903	14.388	1.549	0.048	0.088	0.006	0.005	0.002	0.000	0.000	0.000	0.000	1366.08	
9	0.6620	1092.5	1111.8	0.457	3.569	79.782	14.494	1.553	0.048	0.084	0.006	0.005	0.004	0.000	0.000	0.000	0.000	1366.47	
10	0.6553	1082.1	1101.3	0.430	3.605	80.915	13.561	1.361	0.042	0.071	0.005	0.005	0.006	0.000	0.000	0.000	0.000	1360.49	
11	0.6526	1076.8	1095.8	0.469	3.625	81.484	12.935	1.361	0.042	0.069	0.005	0.005	0.006	0.000	0.000	0.000	0.000	1356.46	
12	0.6537	1078.1	1097.2	0.449	3.672	81.208	13.197	1.355	0.041	0.068	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1357.09	
13	0.6586	1085.5	1104.7	0.459	3.668	80.313	13.997	1.432	0.044	0.075	0.005	0.005	0.001	0.000	0.000	0.000	0.000	1361.28	
14	0.6670	1099.1	1118.5	0.458	3.635	78.866	15.242	1.640	0.052	0.093	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1369.56	
15	0.6769	1114.3	1134.0	0.512	3.558	77.162	16.735	1.852	0.059	0.106	0.006	0.006	0.004	0.000	0.000	0.000	0.000	1378.30	
16	0.6755	1111.9	1131.6	0.516	3.555	77.662	16.130	1.880	0.075	0.151	0.013	0.012	0.006	0.000	0.000	0.000	0.000	1376.87	
17	0.6713	1105.3	1124.9	0.508	3.582	78.225	15.751	1.744	0.057	0.105	0.007	0.007	0.012	0.000	0.000	0.000	0.000	1372.92	
18	0.6737	1109.5	1129.2	0.510	3.547	77.825	16.121	1.801	0.059	0.110	0.007	0.007	0.012	0.000	0.000	0.000	0.000	1375.70	
19	0.6736	1109.5	1129.1	0.505	3.547	77.783	16.217	1.755	0.059	0.109	0.007	0.007	0.011	0.000	0.000	0.000	0.000	1375.76	
20	0.6730	1109.4	1129.0	0.497	3.514	77.773	16.379	1.660	0.054	0.099	0.006	0.006	0.012	0.000	0.000	0.000	0.000	1376.21	
21	0.6751	1111.5	1131.2	0.512	3.555	77.394	16.665	1.691	0.056	0.103	0.006	0.006	0.011	0.000	0.000	0.000	0.000	1376.76	
22	0.6763	1112.5	1132.2	0.530	3.584	77.214	16.723	1.771	0.058	0.106	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1376.68	
23	0.6740	1109.7	1129.4	0.504	3.577	77.613	16.411	1.721	0.053	0.098	0.006	0.006	0.011	0.000	0.000	0.000	0.000	1375.60	
24	0.6700	1103.1	1122.6	0.487	3.633	78.276	15.820	1.623	0.049	0.089	0.006	0.006	0.010	0.000	0.000	0.000	0.000	1371.42	
25	0.6683	1099.9	1119.4	0.518	3.616	78.733	15.244	1.742	0.049	0.086	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1369.25	
26	0.6639	1093.7	1113.1	0.471	3.645	79.454	14.680	1.609	0.047	0.081	0.006	0.005	0.002	0.000	0.000	0.000	0.000	1366.11	
27	0.6631	1093.0	1112.4	0.473	3.612	79.545	14.689	1.548	0.044	0.075	0.005	0.005	0.004	0.000	0.000	0.000	0.000	1366.06	
28	0.6660	1097.0	1116.4	0.471	3.642	79.951	14.258	1.549	0.046	0.086	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1368.09	
29	0.6740	1109.1	1128.7	0.483	3.641	77.544	16.455	1.723	0.050	0.090	0.006	0.006	0.003	0.000	0.000	0.000	0.000	1374.89	
Avg	0.6687	1102.0	1121.4	0.482	3.583	78.603	15.499	1.669	0.052	0.094	0.006	0.006	0.005	0.000	0.000	0.000	0.000	1371.36	

*** End of Report***

Zone 273

GQ Source Daily Summary

February 2012

Number: 041

Pressure Base: 14.730

Contract Day: 1

Name: BISMARCK-DICKINSON

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value	Heating Value	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
		Wet	Dry																
1	0.6333	1050.1	1068.7	0.318	3.661	84.681	10.386	0.888	0.023	0.031	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1342.94
2	0.6355	1054.0	1072.6	0.311	3.647	84.195	10.918	0.866	0.022	0.030	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1345.51
3	0.6308	1045.6	1064.1	0.386	3.600	85.123	10.066	0.775	0.019	0.024	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1339.71
4	0.6404	1062.9	1081.8	0.271	3.620	83.351	11.644	1.045	0.025	0.034	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1351.77
5	0.6420	1067.0	1085.9	0.257	3.546	82.958	12.188	0.983	0.024	0.033	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1355.23
6	0.6392	1062.3	1081.1	0.271	3.549	83.383	11.894	0.845	0.021	0.028	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1352.20
7	0.6327	1048.4	1067.0	0.331	3.687	84.786	10.271	0.863	0.023	0.030	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1341.44
8	0.6325	1048.7	1067.3	0.321	3.672	84.814	10.267	0.862	0.023	0.031	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.94
9	0.6312	1046.5	1065.0	0.321	3.681	85.083	9.997	0.850	0.024	0.033	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1340.53
10	0.6279	1040.9	1059.4	0.339	3.682	85.714	9.410	0.786	0.025	0.033	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1336.89
11	0.6214	1029.6	1047.8	0.375	3.709	87.003	8.135	0.702	0.027	0.036	0.005	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1329.21
12	0.6198	1026.5	1044.6	0.381	3.741	87.300	7.824	0.681	0.026	0.034	0.005	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1326.86
13	0.6229	1031.6	1049.8	0.377	3.728	86.711	8.379	0.737	0.024	0.032	0.004	0.003	0.005	0.000	0.000	0.000	0.000	0.000	1330.12
14	0.6336	1050.2	1068.8	0.307	3.698	84.646	10.368	0.913	0.025	0.034	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1342.78
15	0.6362	1054.9	1073.6	0.294	3.685	84.048	11.024	0.884	0.023	0.032	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1345.90
16	0.6327	1048.6	1067.2	0.318	3.701	84.734	10.351	0.833	0.023	0.030	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.60
17	0.6320	1048.1	1066.7	0.321	3.656	84.923	10.180	0.853	0.024	0.032	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.77
18	0.6352	1055.0	1073.6	0.299	3.574	84.192	11.081	0.791	0.023	0.030	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1347.12
19	0.6351	1055.1	1073.8	0.294	3.562	84.213	11.072	0.795	0.023	0.030	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1347.43
20	0.6342	1053.7	1072.4	0.296	3.564	84.352	10.965	0.761	0.022	0.030	0.003	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1346.57
21	0.6387	1061.5	1080.3	0.269	3.551	83.501	11.770	0.848	0.022	0.030	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1351.74
22	0.6328	1049.6	1068.1	0.300	3.681	84.732	10.362	0.860	0.024	0.032	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1342.71
23	0.6314	1047.1	1065.6	0.311	3.678	85.016	10.090	0.839	0.024	0.032	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.09
24	0.6308	1045.8	1064.3	0.310	3.706	85.164	9.886	0.859	0.026	0.036	0.004	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1339.99
25	0.6276	1040.6	1059.0	0.345	3.665	85.766	9.384	0.770	0.025	0.033	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1336.81
26	0.6251	1036.0	1054.4	0.354	3.690	86.288	8.832	0.761	0.025	0.035	0.005	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1333.59
27	0.6228	1032.3	1050.6	0.384	3.656	86.719	8.472	0.701	0.024	0.032	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1331.29
28	0.6219	1030.8	1049.0	0.377	3.674	86.941	8.209	0.723	0.026	0.035	0.005	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1330.26
29	0.6250	1036.4	1054.8	0.335	3.684	86.255	8.933	0.723	0.025	0.033	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1334.26
Avg	0.6312	1047.0	1065.4	0.323	3.654	85.055	10.081	0.821	0.024	0.032	0.004	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.01

Zone 28

GQ Source Daily Summary

February 2012

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	0.6326	1049.0	1067.6	0.295	3.690	84.684	10.443	0.843	0.019	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1342.23	
2	0.6294	1043.3	1061.8	0.378	3.607	85.368	9.823	0.768	0.015	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1338.27	
3	0.6403	1061.1	1079.9	0.257	3.731	83.271	11.653	1.037	0.021	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1349.61	
4	0.6404	1064.2	1083.0	0.244	3.571	83.205	11.952	0.977	0.020	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1353.39	
5	0.6398	1064.1	1083.0	0.236	3.535	83.181	12.151	0.855	0.018	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1353.92	
6	0.6323	1048.6	1067.2	0.302	3.675	84.726	10.423	0.835	0.016	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1342.06	
7	0.6319	1048.3	1066.8	0.311	3.644	84.898	10.216	0.885	0.020	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1342.03	
8	0.6300	1044.5	1063.0	0.310	3.697	85.244	9.848	0.852	0.020	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1339.19	
9	0.6304	1045.7	1064.2	0.299	3.682	85.120	10.028	0.822	0.020	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1340.27	
10	0.6217	1029.8	1048.0	0.370	3.715	86.909	8.213	0.738	0.022	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1329.19	
11	0.6200	1026.9	1045.0	0.351	3.766	87.182	7.952	0.693	0.023	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1327.20	
12	0.6207	1026.6	1044.8	0.385	3.796	87.077	7.975	0.717	0.021	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1326.14	
13	0.6303	1044.8	1063.3	0.302	3.721	85.210	9.829	0.887	0.021	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1339.22	
14	0.6347	1052.7	1071.3	0.278	3.690	84.292	10.796	0.895	0.020	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1344.69	
15	0.6321	1048.0	1066.5	0.299	3.698	84.789	10.327	0.842	0.019	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1341.48	
16	0.6310	1046.1	1064.6	0.305	3.697	85.049	10.046	0.856	0.020	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1340.23	
17	0.6336	1052.1	1070.7	0.287	3.612	84.434	10.821	0.800	0.019	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1345.04	
18	0.6341	1053.4	1072.1	0.282	3.583	84.328	10.969	0.794	0.019	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1346.27	
19	0.6358	1054.9	1073.6	0.277	3.658	83.958	11.278	0.786	0.018	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1346.43	
20	0.6378	1059.8	1078.5	0.252	3.584	83.606	11.669	0.852	0.018	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1350.51	
21	0.6328	1049.6	1068.2	0.278	3.700	84.667	10.421	0.884	0.020	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1342.75	
22	0.6299	1044.3	1062.8	0.303	3.704	85.244	9.872	0.829	0.020	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1339.15	
23	0.6306	1045.5	1064.0	0.281	3.738	85.125	9.920	0.881	0.022	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1339.83	
24	0.6262	1038.2	1056.5	0.336	3.687	85.971	9.187	0.768	0.021	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1335.12	
25	0.6249	1035.9	1054.2	0.326	3.716	86.236	8.888	0.781	0.021	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1333.60	
26	0.6215	1030.5	1048.7	0.369	3.655	86.924	8.291	0.711	0.021	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1330.32	
27	0.6227	1030.3	1048.5	0.373	3.781	86.680	8.382	0.732	0.022	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1328.72	
28	0.6232	1033.8	1052.2	0.323	3.681	86.549	8.683	0.724	0.021	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1332.82	
29	0.6383	1054.3	1072.9	0.302	3.898	83.563	11.277	0.906	0.022	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1343.07	
Avg	0.6307	1046.0	1064.2	0.307	3.687	85.086	10.046	0.827	0.020	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1340.09	

Zone 31

GQ Source Daily Summary

February 2012

Number: 051

Pressure Base: 14.730

Contract Day: 1

Name: CABIN CR-DICKINSON

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6268	1034.7	1053.0	0.380	3.896	86.142	8.539	0.969	0.026	0.037	0.004	0.003	0.004	0.000	0.000	0.000	0.000	1330.03	
2	0.6240	1029.5	1047.7	0.413	3.899	86.671	8.037	0.914	0.024	0.032	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1326.17	
3	0.6317	1043.6	1062.1	0.327	3.890	85.291	9.253	1.154	0.029	0.042	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1336.33	
4	0.6271	1035.7	1054.0	0.341	3.926	86.074	8.578	1.002	0.028	0.039	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1330.95	
5	0.6253	1031.8	1050.0	0.351	3.980	86.376	8.262	0.964	0.024	0.032	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1327.81	
6	0.6244	1030.6	1048.9	0.391	3.895	86.617	8.088	0.936	0.026	0.036	0.004	0.003	0.004	0.000	0.000	0.000	0.000	1327.44	
7	0.6238	1030.2	1048.4	0.376	3.895	86.706	8.023	0.923	0.027	0.037	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1327.42	
8	0.6224	1027.9	1046.1	0.378	3.899	86.978	7.759	0.905	0.028	0.039	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1326.00	
9	0.6199	1023.6	1041.7	0.384	3.920	87.450	7.312	0.853	0.029	0.039	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1323.02	
10	0.6140	1013.5	1031.5	0.425	3.910	88.606	6.234	0.740	0.030	0.041	0.006	0.004	0.005	0.000	0.000	0.000	0.000	1316.39	
11	0.6138	1013.1	1031.0	0.420	3.929	88.612	6.232	0.724	0.029	0.039	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1315.98	
12	0.6182	1020.0	1038.1	0.400	3.949	87.820	6.887	0.865	0.028	0.038	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1320.26	
13	0.6254	1032.3	1050.6	0.350	3.956	86.456	8.133	1.021	0.030	0.042	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1328.45	
14	0.6244	1030.1	1048.4	0.372	3.961	86.578	8.080	0.937	0.026	0.035	0.004	0.003	0.004	0.000	0.000	0.000	0.000	1326.71	
15	0.6231	1028.3	1046.5	0.374	3.952	86.824	7.860	0.913	0.027	0.037	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1325.64	
16	0.6222	1027.2	1045.4	0.383	3.912	87.020	7.711	0.895	0.028	0.038	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1325.34	
17	0.6222	1027.6	1045.8	0.376	3.906	87.000	7.751	0.887	0.028	0.038	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1325.72	
18	0.6208	1024.8	1042.9	0.374	3.941	87.278	7.454	0.874	0.028	0.038	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1323.67	
19	0.6249	1031.8	1050.0	0.349	3.944	86.506	8.142	0.982	0.028	0.038	0.004	0.004	0.004	0.000	0.000	0.000	0.000	1328.28	
20	0.6256	1033.0	1051.2	0.342	3.946	86.380	8.255	0.997	0.028	0.039	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1329.09	
21	0.6223	1027.4	1045.5	0.367	3.939	86.982	7.735	0.900	0.028	0.038	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1325.39	
22	0.6234	1029.1	1047.4	0.351	3.954	86.803	7.861	0.950	0.029	0.040	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1326.56	
23	0.6206	1024.4	1042.6	0.379	3.936	87.350	7.362	0.888	0.029	0.042	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1323.43	
24	0.6166	1017.7	1035.8	0.398	3.943	88.102	6.658	0.818	0.028	0.039	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1319.00	
25	0.6136	1012.5	1030.5	0.431	3.927	88.648	6.192	0.724	0.027	0.037	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1315.48	
26	0.6105	1007.4	1025.2	0.448	3.925	89.259	5.614	0.675	0.028	0.038	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1312.07	
27	0.6123	1010.4	1028.3	0.411	3.961	88.896	5.939	0.711	0.029	0.039	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1314.18	
28	0.6181	1020.7	1038.8	0.382	3.927	87.779	7.045	0.813	0.029	0.039	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1321.28	
29	0.6200	1023.6	1041.8	0.359	3.965	87.367	7.401	0.828	0.028	0.038	0.005	0.004	0.005	0.000	0.000	0.000	0.000	1322.99	
Avg	0.6213	1026.0	1043.8	0.380	3.930	87.192	7.530	0.888	0.028	0.038	0.005	0.004	0.004	0.000	0.000	0.000	0.000	1324.18	

Zone 32

GQ Source Daily Summary February 2012

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	0.6876	1161.2	1181.8	0.000	2.497	72.951	24.024	0.517	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.13	
2	0.6876	1161.4	1181.9	0.000	2.489	72.938	24.050	0.511	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.31	
3	0.6870	1160.3	1180.9	0.000	2.496	73.057	23.934	0.502	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.65	
4	0.6868	1160.1	1180.6	0.000	2.486	73.101	23.913	0.490	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.63	
5	0.6872	1160.6	1181.2	0.000	2.490	73.030	23.963	0.506	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.89	
6	0.6870	1160.2	1180.7	0.000	2.501	73.049	23.945	0.493	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.54	
7	0.6865	1159.2	1179.7	0.000	2.513	73.115	23.907	0.454	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.86	
8	0.6869	1159.8	1180.3	0.000	2.513	73.071	23.918	0.487	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.16	
9	0.6862	1158.8	1179.4	0.000	2.512	73.144	23.899	0.434	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.66	
10	0.6865	1159.1	1179.6	0.000	2.515	73.107	23.926	0.441	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.78	
11	0.6868	1159.6	1180.2	0.000	2.512	73.074	23.935	0.469	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.11	
12	0.6862	1158.7	1179.2	0.000	2.513	73.180	23.842	0.454	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.57	
13	0.6878	1161.2	1181.8	0.000	2.514	72.886	24.094	0.495	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.96	
14	0.6871	1160.2	1180.8	0.000	2.511	72.999	24.088	0.471	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.45	
15	0.6874	1161.0	1181.5	0.000	2.494	72.948	24.067	0.479	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.04	
16	0.6875	1160.7	1181.3	0.000	2.512	72.945	24.048	0.484	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.71	
17	0.6867	1159.6	1180.2	0.000	2.503	73.095	23.924	0.467	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.19	
18	0.6874	1161.1	1181.6	0.000	2.488	72.963	24.046	0.493	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.16	
19	0.6867	1159.5	1180.1	0.000	2.515	73.074	23.938	0.461	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.01	
20	0.6879	1161.3	1181.9	0.000	2.521	72.860	24.189	0.498	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.93	
21	0.6872	1160.0	1180.5	0.000	2.534	72.942	24.075	0.438	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.06	
22	0.6873	1160.4	1180.9	0.000	2.515	72.937	24.098	0.439	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.49	
23	0.6878	1160.9	1181.5	0.000	2.528	72.829	24.196	0.435	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.64	
24	0.6899	1163.9	1184.5	0.000	2.551	72.687	24.020	0.726	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1426.01	
25	0.6914	1167.0	1187.7	0.000	2.498	72.575	24.026	0.860	0.013	0.024	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1428.31	
26	0.6904	1165.4	1186.0	0.000	2.505	72.686	23.971	0.820	0.008	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1427.34	
27	0.6908	1165.6	1186.2	0.000	2.527	72.663	23.926	0.856	0.010	0.016	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1427.20	
28	0.6917	1167.2	1187.9	0.000	2.542	72.524	24.031	0.914	0.008	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1428.30	
29	0.6903	1164.8	1185.5	0.000	2.524	72.610	24.136	0.715	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1426.84	
Avg	0.6879	1161.0	1181.9	0.000	2.510	72.932	23.999	0.545	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1425.07	

Zone 33

GQ Source Daily Summary February 2012

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	0.7907	1122.4	1142.3	1.972	11.563	55.036	28.622	2.486	0.070	0.212	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1284.59	
2	0.7865	1128.2	1148.1	1.632	11.338	55.499	28.814	2.398	0.070	0.211	0.009	0.024	0.005	0.000	0.000	0.000	0.000	1294.63	
3	0.7913	1132.4	1152.4	1.715	11.402	54.604	29.549	2.417	0.069	0.208	0.009	0.023	0.004	0.000	0.000	0.000	0.000	1295.56	
4	0.7969	1130.9	1150.9	2.033	11.536	54.007	29.460	2.630	0.074	0.223	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1289.25	
5	0.7988	1132.3	1152.3	2.122	11.495	53.877	29.392	2.756	0.078	0.238	0.010	0.026	0.004	0.000	0.000	0.000	0.000	1289.29	
6	0.7972	1126.1	1146.1	2.175	11.637	53.944	29.399	2.531	0.071	0.243	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1283.64	
7	0.7939	1128.7	1148.7	1.924	11.557	54.233	29.554	2.428	0.068	0.203	0.008	0.022	0.004	0.000	0.000	0.000	0.000	1289.18	
8	0.7967	1128.7	1148.7	2.061	11.607	54.059	29.306	2.633	0.074	0.223	0.009	0.025	0.004	0.000	0.000	0.000	0.000	1286.96	
9	0.8023	1117.9	1137.7	2.712	11.805	53.499	29.031	2.629	0.072	0.216	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1270.18	
10	0.7961	1115.6	1135.3	2.295	12.001	54.021	29.003	2.381	0.066	0.199	0.008	0.022	0.004	0.000	0.000	0.000	0.000	1272.44	
11	0.7950	1121.0	1140.8	2.115	11.839	54.408	28.691	2.609	0.075	0.225	0.010	0.025	0.004	0.000	0.000	0.000	0.000	1279.46	
12	0.7983	1125.9	1145.9	2.219	11.682	54.102	28.853	2.774	0.081	0.245	0.010	0.028	0.005	0.000	0.000	0.000	0.000	1282.51	
13	0.7961	1124.1	1144.0	1.978	11.961	54.169	28.841	2.680	0.081	0.246	0.011	0.028	0.005	0.000	0.000	0.000	0.000	1282.12	
14	0.7960	1113.8	1133.5	2.399	11.939	54.202	28.766	2.373	0.069	0.213	0.009	0.025	0.004	0.000	0.000	0.000	0.000	1270.50	
15	0.7983	1127.0	1146.9	2.311	11.482	54.023	29.195	2.656	0.074	0.222	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1283.70	
16	0.7968	1120.3	1140.1	2.249	11.841	54.169	28.801	2.606	0.074	0.223	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1277.30	
17	0.7965	1126.2	1146.1	2.086	11.704	54.190	28.985	2.693	0.075	0.227	0.009	0.025	0.004	0.000	0.000	0.000	0.000	1284.19	
18	0.8003	1124.8	1144.7	2.448	11.595	54.007	28.722	2.861	0.080	0.244	0.010	0.027	0.004	0.000	0.000	0.000	0.000	1279.55	
19	0.7971	1123.1	1142.9	2.241	11.713	54.402	28.455	2.822	0.080	0.244	0.010	0.028	0.004	0.000	0.000	0.000	0.000	1280.18	
20	0.8060	1082.5	1101.7	2.167	15.145	52.010	27.451	2.851	0.082	0.250	0.010	0.028	0.004	0.000	0.000	0.000	0.000	1227.13	
21	0.8078	1083.8	1103.0	2.163	15.239	51.781	27.464	2.953	0.087	0.267	0.011	0.030	0.005	0.000	0.000	0.000	0.000	1227.20	
22	0.7996	1053.9	1072.6	1.869	16.736	52.733	25.492	2.787	0.084	0.255	0.011	0.029	0.005	0.000	0.000	0.000	0.000	1199.19	
23	0.7785	1010.5	1028.4	1.301	18.276	55.237	22.910	1.994	0.063	0.185	0.009	0.022	0.004	0.000	0.000	0.000	0.000	1166.44	
24	0.8067	1057.4	1076.1	2.154	16.767	50.997	27.370	2.414	0.067	0.198	0.008	0.021	0.003	0.000	0.000	0.000	0.000	1198.07	
25	0.8021	1051.5	1070.1	2.009	16.909	51.773	26.607	2.402	0.067	0.199	0.008	0.022	0.004	0.000	0.000	0.000	0.000	1194.89	
26	0.7947	1099.9	1119.4	2.078	13.157	53.867	28.249	2.375	0.063	0.186	0.008	0.020	0.003	0.000	0.000	0.000	0.000	1255.71	
27	0.8031	1082.7	1101.9	2.200	14.804	52.419	27.587	2.655	0.074	0.224	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1229.59	
28	0.8037	1075.5	1094.6	2.319	15.417	52.345	27.245	2.648	0.072	0.219	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1221.00	
29	0.7941	1109.2	1128.8	2.028	12.605	54.269	28.251	2.528	0.070	0.212	0.009	0.024	0.004	0.000	0.000	0.000	0.000	1266.84	
Avg	0.7973	1106.0	1125.7	2.103	12.981	53.720	28.278	2.585	0.074	0.222	0.009	0.025	0.004	0.000	0.000	0.000	0.000	1260.74	

Zone 34

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	1201140	Specific Gravity:	0.5726
GQ Source Name:	EAGLE 8B ND	Dry Heat Value:	978.94
Effective Date:	6/1/2011 9:00:00 AM	Wet Heat Value:	961.90
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	978.94
Pressure Base:	14.730	Sample Pressure:	32.00
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>			<u>Mol %</u>	
C1	Methane	95.931		CO2	Carbon Dioxide	0.106
C2	Ethane	0.312	0.0833	N2	Nitrogen	3.634
C3	Propane	0.009	0.0026	O2	Oxygen	0.000
IC4	Isobutane	0.007	0.0024	He	Helium	
NC4	n-Butane	0.000	0.0000	H2	Hydrogen	
IC5	Isopentane	0.000	0.0000	H2S	Hydrogen Sulfide	
NC5	n-Pentane	0.000	0.0000	Ar	Argon	
C6	Hexanes	0.000	0.0000	CO	Carbon Monoxide	
C7	Heptanes			H2	Water	
C8	Octanes			Neo-C5	Neopentane	
C9	Nonanes					
C10	Decanes					
		Totals	100.000%	0.088	GPM	

Sample Date: 6/22/2011 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
H2S: ppm

Sample Remarks:

Analysis Tech: Mary Berger

Analysis Remarks:

Zone 35

NORTH DAKOTA HEATING VALUE ZONES		
ZONES	MEASURING DEVICE	LOCATION
211	Chromatograph	Sidney Area
24	Monthly Sampler	Williston Area
241	Monthly Sampler	Fairview 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

MONTANA DAKOTA UTILITIES CO
 NORTH DAKOTA
 HEATING VALUE DATA
 12 MONTH ACCUMULATIVE AT 14.73 psia, 60 f. DRY

STATE	ZONE	ZONE BOUNDARY	12 MONTH AVERAGE	FEB 12	JAN 12	DEC 11	NOV 11	OCT 11	SEPT 11	AUG 11	JULY 11	JUNE 11	MAY 11	APR 11	MAR 11	ZONE
MT/ND	211	Sidney Area	1208	1206	1210	1212	1215	1212	1199	1204	1215	1205	1206	1202	1211	211
ND	24	Williston Area	1197	1195	1184	1199	1203	1197	1200	1200	1198	1197	1196	1194	1198	24
ND	25	Waford City Area	1136	1132	1140	1140	1131	1129	1136	1136	1135	1140	1128	1143	1143	25
ND/MT	241	Fairview Area	1196	1193	1194	1194	1201	1198	1200	1200	1199	1193	1193	1194	1197	241
ND	261	Williston - Tioga - Minot Line	1162	1156	1160	1163	1166	1158	1144	1159	1176	1165	1159	1162	1172	261
ND	262	Minot Area	1166	1158	1161	1165	1168	1163	1160	1161	1179	1168	1161	1167	1175	262
ND	263	Tioga - Portal	1102	1081	1075	1074	1092	1126	1128	1128	1126	1082	1093	1123	1094	263
ND	264	Williston - Ray	1197	1195	1184	1199	1203	1197	1200	1200	1198	1197	1196	1194	1198	264
ND	271	Bismarck - Cleveland	1150	1123	1124	1130	1148	1161	1159	1160	1177	1166	1152	1161	1136	271
ND	272	Cleveland - Mapleton	1149	1121	1122	1129	1148	1161	1159	1160	1179	1166	1151	1161	1134	272
ND	273	Cleveland - Grafton	1150	1121	1123	1129	1148	1162	1159	1160	1179	1167	1151	1161	1135	273
ND	28	Bismarck - Cabin Creek	1118	1065	1073	1078	1084	1148	1160	1160	1180	1166	1139	1112	1051	28
ND	31	Dickinson Area	1105	1064	1072	1077	1081	1138	1162	1152	1135	1123	1109	1093	1049	31
ND/MT	32	Cabin Creek - Dickinson	1091	1044	1057	1063	1061	1100	1156	1126	1133	1153	1080	1071	1046	32
ND	33	Kildeer	1180	1182	1179	1183	1181	1181	1181	1181	1182	1183	1180	1177	1175	33
ND	34	Bowman Area	1141	1126	1147	1129	1117	1139	1132	1138	1144	1149	1153	1154	1163	34
ND	35	Baker Field - North Dakota	979	979	979	979	979	979	979	979	979	979	979	979	979	35

**THERMAL ZONE VARIANCE
DOCUMENTATION**

February 2012

ZONE	<i>BTU VARIANCE</i>	<i>REASON</i>
34	-21	Mix of Gas in the area