

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

January 27, 2011

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JAN 28 2011

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

PUBLIC SERVICE COMMISSION

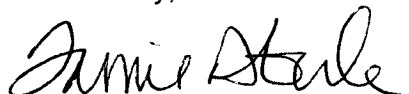
Re: Case No. 11,006 (Therm Billing)
Monthly Report – December 2010

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 January 2011.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of December 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 December 2010.

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
JAN 2011

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
12	314	APPLE VALLEY	271	1.1193
12	327	BISMARCK	28	1.0180
12	343	CARRINGTON	273	1.1183
12	344	CLEVELAND	272	1.1104
12	364	CAVALIER	273	1.1418
12	365	DAWSON	271	1.1114
12	374	FT TOTTEN	273	1.1262
12	375	DEVILS LAKE	273	1.1262
12	379	BARLOW	273	1.1183
12	387	ELDRIDGE	272	1.1183
12	411	GLEN ULLIN	31	.9946
12	417	GRAFTON	273	1.1497
12	439	HANKINSON	600	1.0680
12	449	JAMESTOWN	272	1.1262
12	463	LANGDON	273	1.1183
12	475	LINTON	802	.9803
12	478	LINCOLN	28	1.0180
12	494	MEDINA	271	1.1114
12	498	MANDAN	28	1.0180
12	524	NEW SALEM	28	.9964
12	532	NEW ROCKFORD	273	1.1183
12	539	PARK RIVER	273	1.1418
12	574	SANBORN	272	1.1262
12	593	STEELE	271	1.1114
12	598	SHEYENNE	273	1.1262
12	610	TAPPEN	271	1.1114
12	625	VALLEY CITY	272	1.1340
12	629	WALHALLA	273	1.1418
12	647	WILTON	262	1.1249
12	717	SPIRITWOOD	272	1.1262
12	718	FAIRMOUNT	600	1.0658
12	732	MSR SITE	273	1.1183
12	733	PAR SITE	273	1.1183
15	303	ALEXANDER	25	1.0720
15	308	ARNEGARD	25	1.0720

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
JAN 2011

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	318	BEACH	32	.9703
15	319	BELFIELD	32	.9774
15	323	BERTHOLD	262	1.1249
15	330	BOWMAN	34	1.0751
15	337	BURLINGTON	262	1.1492
15	368	DES LACS	262	1.1330
15	369	DICKINSON	31	.9874
15	384	EPPING	264	1.1400
15	407	GLADSTONE	31	.9874
15	413	GOLVA	32	.9561
15	416	GARRISON	262	1.1330
15	429	HEBRON	31	.9946
15	459	KILLDEER	33	1.1098
15	469	LEFOR	31	.9874
15	474	LIGNITE	263	1.0464
15	500	MARMARTH	34	1.0830
15	505	MINOT	262	1.1492
15	510	MOTT	31	.9874
15	512	MAX	262	1.1249
15	522	NEW ENGLAND	31	.9802
15	540	PALERMO	262	1.1249
15	558	RAY	264	1.1400
15	561	REGENT	31	.9874
15	563	RHAME	34	1.0672
15	564	RICHARDTON	31	.9802
15	568	ROSS	261	1.0821
15	572	RUTHVILLE	262	1.1492
15	583	SENTINEL BUTTE	32	.9703
15	588	SOUTH HEART	31	.9802
15	590	SPRINGBROOK	264	1.1400
15	591	STANLEY	261	1.0900
15	605	SURREY	262	1.1492
15	611	TAYLOR	31	.9802
15	616	TIOGA	261	1.0821
15	619	TURTLE LAKE	262	1.1330

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
JAN 2011

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billing Factor
15	620	TRENTON	24	1.1482
15	624	UNDERWOOD	262	1.1330
15	632	WATFORD CITY	25	1.0720
15	636	WHEELLOCK	264	1.1318
15	637	WHITE EARTH	261	1.0900
15	642	WILLISTON	24	1.1482
15	646	WASHBURN	262	1.1411
15	664	RIVERDALE	262	1.1330
15	691	FAIRVIEW	24	1.1482
15	712	MINOT AFB	262	1.1492
15	743	BAKER FIELD	35	.8980

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

GQ Source Daily Summary December 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	C02	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7153	1191.6	1212.7	0.054	3.145	70.169	23.315	3.176	0.057	0.081	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1433.88
2	0.7203	1203.2	1224.5	0.040	2.930	69.610	23.679	3.582	0.065	0.091	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1442.73
3	0.7172	1196.9	1218.1	0.034	3.033	69.980	23.440	3.366	0.060	0.085	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1438.23
4	0.7138	1189.4	1210.5	0.034	3.176	70.216	23.457	2.999	0.049	0.067	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1432.69
5	0.7142	1191.5	1212.6	0.044	3.069	70.441	23.071	3.234	0.058	0.081	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1434.77
6	0.7150	1193.4	1214.5	0.047	3.021	70.356	23.137	3.298	0.058	0.080	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1436.28
7	0.7117	1187.6	1208.6	0.048	3.068	70.692	23.058	3.017	0.050	0.067	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1432.58
8	0.7129	1190.8	1211.9	0.042	2.990	70.472	23.352	3.024	0.050	0.067	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1435.29
9	0.7154	1193.3	1214.5	0.046	3.064	70.267	23.178	3.310	0.057	0.075	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1435.82
10	0.7151	1196.3	1217.5	0.032	2.875	70.455	23.205	3.201	0.077	0.135	0.009	0.001	0.003	0.000	0.000	0.000	0.000	0.000	1439.69
11	0.7154	1194.1	1215.3	0.035	3.033	70.185	23.366	3.258	0.053	0.068	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1436.76
12	0.7236	1207.8	1229.2	0.025	2.982	69.122	23.904	3.815	0.064	0.085	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1444.99
13	0.7151	1193.2	1214.3	0.036	3.067	70.151	23.502	3.075	0.063	0.100	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1435.89
14	0.7140	1192.2	1213.3	0.034	3.011	70.547	23.065	3.128	0.076	0.128	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1435.97
15	0.7136	1192.1	1213.2	0.033	2.995	70.461	23.285	3.047	0.064	0.106	0.004	0.004	0.001	0.000	0.000	0.000	0.000	0.000	1436.08
16	0.7178	1198.0	1219.2	0.035	3.023	69.909	23.452	3.450	0.054	0.073	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1438.99
17	0.7210	1203.2	1224.5	0.038	2.996	69.796	23.175	3.774	0.075	0.128	0.008	0.009	0.003	0.000	0.000	0.000	0.000	0.000	1442.05
18	0.7179	1199.1	1220.4	0.039	2.948	70.213	22.975	3.651	0.064	0.098	0.005	0.005	0.002	0.000	0.000	0.000	0.000	0.000	1440.36
19	0.7176	1197.3	1218.5	0.042	3.037	70.225	22.880	3.649	0.063	0.094	0.004	0.005	0.001	0.000	0.000	0.000	0.000	0.000	1438.31
20	0.7167	1195.3	1216.5	0.047	3.055	70.281	22.991	3.420	0.076	0.118	0.005	0.005	0.002	0.000	0.000	0.000	0.000	0.000	1436.97
21	0.7211	1202.1	1223.4	0.034	3.085	69.544	23.415	3.806	0.053	0.062	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1440.62
22	0.7250	1206.6	1227.9	0.029	3.177	69.272	23.090	4.294	0.062	0.072	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1442.13
23	0.7191	1198.6	1219.8	0.032	3.111	69.943	23.001	3.797	0.052	0.061	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1438.41
24	0.7175	1198.1	1219.3	0.039	2.980	70.125	23.116	3.619	0.053	0.066	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1439.44
25	0.7187	1198.8	1220.0	0.043	3.039	70.007	23.036	3.761	0.052	0.060	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1439.13
26	0.7212	1203.5	1224.9	0.042	2.990	69.767	23.066	4.009	0.057	0.066	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1442.24
27	0.7140	1192.6	1213.7	0.044	2.979	70.438	23.169	3.284	0.039	0.045	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1436.38
28	0.7137	1190.9	1212.0	0.045	3.058	70.381	23.250	3.181	0.038	0.045	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1434.56
29	0.7110	1187.1	1208.1	0.044	3.037	70.698	23.194	2.949	0.035	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1432.71
30	0.7147	1193.5	1214.6	0.038	3.004	70.325	23.232	3.307	0.043	0.049	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1436.65
31	0.7361	1228.0	1249.7	0.028	2.914	67.932	23.872	5.049	0.088	0.112	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1456.53
Avg	0.7174	1197.0	1218.4	0.039	3.023	70.074	23.224	3.497	0.058	0.081	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1438.50

Zone 211

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

Attachment B
Page 2 of 15

GQ Source Number:	0602330	Specific Gravity:	0.7205
GQ Source Name:	WILLISTON BORDER	BTU Base:	Dry
Effective Date:	12/1/2010 9:00:00 AM	Measured Heat Value:	1209.74
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1206.77
Pressure Base:	14.730	Wet Heat Value:	1185.77
Viscosity:		As Deliv. Heat Value:	1206.77
		Sample Pressure:	0.00
		Sample Temperature:	

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	71.129		CO2	Carbon Dioxide	0.621
C2	Ethane	20.494	5.465	N2	Nitrogen	3.083
C3	Propane	4.141	1.137	O2	Oxygen	0.000
IC4	Iso-Butane	0.166	0.054	HE	Helium	
NC4	N-Butane	0.313	0.098	H2	Hydrogen	
IC5	Iso-Pentane	0.021	0.008	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.021	0.007	AR	Argon	
C6	Hexane	0.007	0.003	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane			Neo-C5	Neo-Pentane	
C9	Nonane					
C10	Decane					

Totals 99.996% 6.773 GPM

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

Analysis Tech: Mary Berger

Analysis Remarks:

Zone 24, 264

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

Attachment B
Page 3 of 15

GQ Source Number:	0602230	Specific Gravity:	0.7260
GQ Source Name:	WATFORD CITY BORDER	BTU Base:	Dry
Effective Date:	12/1/2010 9:00:00 AM	Measured Heat Value:	1137.97
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1135.34
Pressure Base:	14.730	Wet Heat Value:	1115.58
Viscosity:		As Deliv. Heat Value:	1135.34
		Sample Pressure:	0.00
		Sample Temperature:	

		<u>Mol %</u>	<u>GPM</u>			<u>Mol %</u>
C1	Methane	69.263		CO2	Carbon Dioxide	0.677
C2	Ethane	17.752	4.734	N2	Nitrogen	7.815
C3	Propane	3.868	1.063	O2	Oxygen	0.000
IC4	Iso-Butane	0.199	0.065	HE	Helium	
NC4	N-Butane	0.359	0.113	H2	Hydrogen	
IC5	Iso-Pentane	0.029	0.010	H2S	Hydrogen Sulfide	
NC5	N-Pentane	0.028	0.010	AR	Argon	
C6	Hexane	0.007	0.003	CO	Carbon Monoxide	
C7	Heptane			H2O	Water	
C8	Octane			Neo-C5	Neo-Pentane	
C9	Nonane					
C10	Decane					

Totals 99.997% 5.998 GPM

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

Analysis Tech: Mary Berger
Analysis Remarks:

Zone 25

GQ Source Daily Summary December 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	C02	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6860	1134.8	1154.9	0.365	3.373	75.530	18.495	1.957	0.076	0.165	0.012	0.015	0.011						1394.48
2	0.6814	1127.3	1147.2	0.314	3.490	75.778	18.698	1.523	0.051	0.115	0.009	0.012	0.009						1389.78
3	0.6757	1118.1	1137.9	0.271	3.581	76.625	18.029	1.330	0.043	0.096	0.008	0.009	0.008						1384.23
4	0.6790	1122.9	1142.8	0.292	3.561	76.210	18.243	1.497	0.052	0.116	0.009	0.011	0.008						1386.85
5	0.6804	1125.6	1145.5	0.295	3.525	75.902	18.607	1.486	0.050	0.109	0.008	0.010	0.008						1388.72
6	0.6812	1126.7	1146.7	0.309	3.506	75.821	18.634	1.538	0.053	0.115	0.008	0.010	0.006						1389.38
7	0.6846	1130.8	1150.8	0.369	3.490	75.427	18.754	1.746	0.060	0.130	0.009	0.010	0.005						1390.87
8	0.6862	1133.7	1153.8	0.381	3.438	75.383	18.622	1.926	0.071	0.151	0.010	0.011	0.007						1392.89
9	0.6943	1148.6	1169.0	0.448	3.187	74.732	18.686	2.572	0.111	0.230	0.013	0.014	0.007						1402.89
10	0.6896	1140.7	1160.9	0.412	3.291	75.007	18.874	2.121	0.087	0.182	0.011	0.012	0.002						1397.89
11	0.6993	1155.1	1175.5	0.463	3.241	73.944	19.263	2.640	0.124	0.275	0.021	0.024	0.005						1405.72
12	0.6993	1154.1	1174.5	0.446	3.329	73.694	19.583	2.565	0.111	0.233	0.016	0.017	0.007						1404.51
13	0.6958	1149.1	1169.4	0.429	3.336	74.105	19.372	2.450	0.094	0.188	0.010	0.010	0.004						1401.87
14	0.6887	1137.8	1158.0	0.380	3.425	74.983	18.943	2.007	0.075	0.160	0.010	0.011	0.006						1395.38
15	0.6891	1138.2	1158.3	0.371	3.455	74.998	18.827	2.060	0.080	0.175	0.012	0.014	0.008						1395.39
16	0.6756	1119.9	1139.7	0.257	3.482	76.761	17.914	1.394	0.055	0.116	0.007	0.008	0.006						1386.58
17	0.6838	1130.5	1150.6	0.349	3.460	75.568	18.673	1.730	0.065	0.135	0.008	0.008	0.005						1391.36
18	0.6802	1124.8	1144.7	0.341	3.491	75.871	18.708	1.422	0.048	0.101	0.006	0.007	0.004						1387.89
19	0.6845	1132.2	1152.2	0.358	3.409	75.339	19.046	1.643	0.058	0.125	0.008	0.009	0.005						1392.73
20	0.6818	1128.3	1148.3	0.349	3.406	75.746	18.768	1.540	0.053	0.114	0.008	0.009	0.006						1390.70
21	0.6787	1124.0	1144.0	0.325	3.407	76.528	17.918	1.571	0.067	0.149	0.012	0.014	0.009						1388.62
22	0.6749	1118.0	1137.8	0.322	3.427	76.955	17.732	1.385	0.051	0.107	0.006	0.007	0.007						1385.00
23	0.6797	1124.8	1144.7	0.335	3.450	76.160	18.315	1.547	0.055	0.114	0.007	0.008	0.010						1388.44
24	0.6819	1128.4	1148.4	0.320	3.453	75.738	18.730	1.562	0.055	0.116	0.008	0.009	0.010						1390.70
25	0.6806	1125.7	1145.6	0.324	3.488	76.029	18.382	1.575	0.056	0.119	0.008	0.009	0.011						1388.72
26	0.6796	1125.3	1145.3	0.333	3.408	76.129	18.443	1.503	0.053	0.110	0.007	0.007	0.009						1389.24
27	0.6832	1131.5	1151.6	0.349	3.338	75.792	18.525	1.765	0.066	0.137	0.008	0.009	0.012						1393.26
28	0.6877	1137.5	1157.7	0.371	3.362	75.207	18.808	1.962	0.082	0.177	0.011	0.012	0.009						1396.02
29	0.6990	1156.1	1176.6	0.397	3.246	74.242	18.775	2.847	0.136	0.301	0.022	0.025	0.010						1407.31
30	0.6914	1144.3	1164.5	0.395	3.265	74.800	18.979	2.247	0.092	0.193	0.012	0.013	0.003						1400.50
31	0.6914	1144.3	1164.5	0.395	3.265	74.800	18.979	2.247	0.092	0.193	0.012	0.013	0.003						1400.50
Avg	0.6914	1144.0	1153.6	0.395	3.265	74.800	18.979	2.247	0.092	0.193	0.012	0.013	0.003						1400.50

*** End of Report***

Zone 261

GQ Source Daily Summary

December 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	0.7234	1168.8	1189.5	0.555	4.527	69.648	21.337	3.569	0.107	0.225	0.013	0.014	0.005	0.000	0.000	0.000	0.000	0.000	1398.57
2	0.7267	1171.2	1191.9	0.553	4.698	69.039	21.676	3.679	0.106	0.220	0.012	0.013	0.004	0.000	0.000	0.000	0.000	0.000	1398.20
3	0.7301	1174.8	1195.6	0.555	4.796	68.565	21.824	3.885	0.116	0.233	0.011	0.011	0.003	0.000	0.000	0.000	0.000	0.000	1399.19
4	0.7295	1174.0	1194.8	0.541	4.799	68.794	21.508	3.968	0.124	0.241	0.010	0.011	0.003	0.000	0.000	0.000	0.000	0.000	1398.96
5	0.7313	1176.6	1197.4	0.552	4.802	68.547	21.641	4.049	0.129	0.254	0.011	0.011	0.003	0.000	0.000	0.000	0.000	0.000	1400.21
6	0.7303	1175.3	1196.1	0.549	4.784	68.639	21.673	3.965	0.124	0.242	0.010	0.011	0.003	0.000	0.000	0.000	0.000	0.000	1399.73
7	0.7242	1168.8	1189.5	0.539	4.626	69.396	21.525	3.581	0.103	0.207	0.010	0.010	0.003	0.000	0.000	0.000	0.000	0.000	1397.81
8	0.7217	1165.4	1186.1	0.547	4.590	69.679	21.471	3.418	0.092	0.184	0.009	0.009	0.002	0.000	0.000	0.000	0.000	0.000	1396.15
9	0.7155	1163.5	1184.1	0.536	4.145	71.032	20.611	3.313	0.110	0.226	0.011	0.012	0.003	0.000	0.000	0.000	0.000	0.000	1399.83
10	0.7170	1164.2	1184.8	0.541	4.234	70.680	20.885	3.316	0.106	0.217	0.010	0.010	0.003	0.000	0.000	0.000	0.000	0.000	1399.23
11	0.7185	1172.0	1192.8	0.549	3.876	70.956	20.597	3.548	0.140	0.294	0.017	0.018	0.004	0.000	0.000	0.000	0.000	0.000	1407.20
12	0.7189	1169.3	1190.0	0.544	4.092	70.548	21.016	3.385	0.121	0.255	0.016	0.018	0.005	0.000	0.000	0.000	0.000	0.000	1403.52
13	0.7174	1166.3	1187.0	0.536	4.142	70.610	21.057	3.319	0.104	0.211	0.010	0.010	0.003	0.000	0.000	0.000	0.000	0.000	1401.45
14	0.7251	1171.6	1192.3	0.565	4.503	69.317	21.638	3.649	0.103	0.205	0.009	0.009	0.002	0.000	0.000	0.000	0.000	0.000	1400.25
15	0.7254	1170.1	1190.8	0.551	4.648	69.234	21.573	3.658	0.103	0.210	0.010	0.011	0.002	0.000	0.000	0.000	0.000	0.000	1398.14
16	0.7279	1170.2	1190.9	0.558	4.864	68.673	21.903	3.696	0.095	0.190	0.009	0.009	0.002	0.000	0.000	0.000	0.000	0.000	1395.90
17	0.7224	1166.8	1187.5	0.534	4.586	69.600	21.499	3.478	0.094	0.189	0.009	0.009	0.003	0.000	0.000	0.000	0.000	0.000	1397.19
18	0.7252	1168.6	1189.3	0.553	4.714	69.053	21.870	3.506	0.091	0.194	0.009	0.009	0.002	0.000	0.000	0.000	0.000	0.000	1396.61
19	0.7270	1171.7	1192.5	0.563	4.679	68.842	21.969	3.639	0.094	0.193	0.009	0.009	0.002	0.000	0.000	0.000	0.000	0.000	1398.57
20	0.7275	1173.5	1194.3	0.555	4.631	68.902	21.859	3.687	0.113	0.229	0.011	0.011	0.002	0.000	0.000	0.000	0.000	0.000	1400.16
21	0.7170	1159.3	1179.8	0.530	4.552	70.269	21.302	3.041	0.088	0.192	0.011	0.012	0.003	0.000	0.000	0.000	0.000	0.000	1393.34
22	0.7259	1170.3	1191.1	0.543	4.687	69.232	21.500	3.607	0.117	0.253	0.016	0.018	0.006	0.000	0.000	0.000	0.000	0.000	1397.98
23	0.7300	1176.9	1197.7	0.547	4.667	68.913	21.384	4.038	0.140	0.284	0.013	0.012	0.003	0.000	0.000	0.000	0.000	0.000	1401.81
24	0.7318	1179.1	1199.9	0.547	4.705	68.534	21.719	4.051	0.138	0.278	0.013	0.013	0.003	0.000	0.000	0.000	0.000	0.000	1402.67
25	0.7314	1178.1	1199.0	0.541	4.730	68.573	21.682	4.047	0.134	0.268	0.012	0.012	0.002	0.000	0.000	0.000	0.000	0.000	1401.99
26	0.7278	1172.9	1193.6	0.543	4.713	68.949	21.615	3.812	0.116	0.230	0.010	0.010	0.002	0.000	0.000	0.000	0.000	0.000	1399.15
27	0.7186	1162.6	1183.2	0.532	4.495	70.323	20.966	3.353	0.101	0.206	0.010	0.010	0.004	0.000	0.000	0.000	0.000	0.000	1395.74
28	0.7214	1167.3	1188.0	0.535	4.461	69.871	21.327	3.483	0.100	0.201	0.009	0.009	0.005	0.000	0.000	0.000	0.000	0.000	1398.76
29	0.7235	1167.2	1193.0	0.530	4.370	69.793	21.322	3.521	0.127	0.291	0.019	0.022	0.006	0.000	0.000	0.000	0.000	0.000	1402.54
30	0.7258	1173.7	1194.5	0.546	4.463	69.370	21.606	3.546	0.127	0.294	0.020	0.022	0.005	0.000	0.000	0.000	0.000	0.000	1402.16
31	0.7250	1171.9	1192.7	0.547	4.504	69.373	21.708	3.397	0.127	0.294	0.021	0.023	0.006	0.000	0.000	0.000	0.000	0.000	1400.69
Avg	0.7242	1170.0	1191.0	0.545	4.528	69.516	21.441	3.596	0.112	0.233	0.012	0.013	0.003	0.000	0.000	0.000	0.000	0.000	1399.58

Zone 262

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

Attachment B
Page 6 of 15

GQ Source Number:	2501030	Specific Gravity:	0.6462
GQ Source Name:	LIGNITE PLANT	BTU Base:	Dry
Effective Date:	12/1/2010 9:00:00 AM	Measured Heat Value:	1100.91
Effective End Date:	1/18/2038 9:14:07 PM	Dry Heat Value:	1099.99
Pressure Base:	14.730	Wet Heat Value:	1080.85
Viscosity:		As Deliv. Heat Value:	1099.99
		Sample Pressure:	0.00
		Sample Temperature:	

	<u>Mol %</u>	<u>GPM</u>		<u>Mol %</u>
C1 Methane	82.075		CO2 Carbon Dioxide	0.124
C2 Ethane	13.615	0.000	N2 Nitrogen	3.267
C3 Propane	0.683	0.188	O2 Oxygen	0.000
IC4 Iso-Butane	0.046	0.015	HE Helium	
NC4 N-Butane	0.047	0.015	H2 Hydrogen	
IC5 Iso-Pentane	0.050	0.018	H2S Hydrogen Sulfide	
NC5 N-Pentane	0.052	0.019	AR Argon	
C6 Hexane	0.027	0.012	CO Carbon Monoxide	
C7 Heptane			H2O Water	
C8 Octane			Neo-C5 Neo-Pentane	
C9 Nonane				
C10 Decane				
Totals		99.986%	0.267 GPM	

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

Analysis Tech: Mary Berger
Analysis Remarks:

*** End of Report ***

Zone 263

GQ Source Daily Summary

December 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	C02	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6960	1133.2	1153.2	0.496	4.218	74.412	17.722	2.857	0.087	0.174	0.012	0.013	0.011	0.000	0.000	0.000	0.000	0.000	1382.34
2	0.6974	1134.0	1154.1	0.518	4.266	74.112	17.955	2.865	0.085	0.168	0.011	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1381.99
3	0.7037	1142.0	1162.2	0.531	4.355	73.021	18.741	3.067	0.088	0.167	0.010	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1385.43
4	0.7103	1150.0	1170.3	0.538	4.471	72.149	19.073	3.424	0.107	0.206	0.011	0.011	0.009	0.000	0.000	0.000	0.000	0.000	1388.65
5	0.7158	1157.5	1178.0	0.543	4.525	71.217	19.764	3.589	0.113	0.216	0.012	0.012	0.010	0.000	0.000	0.000	0.000	0.000	1392.30
6	0.7125	1153.2	1173.6	0.535	4.483	71.766	19.393	3.467	0.111	0.213	0.011	0.011	0.009	0.000	0.000	0.000	0.000	0.000	1390.45
7	0.7033	1142.3	1162.5	0.522	4.310	73.099	18.724	3.059	0.089	0.169	0.010	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1386.22
8	0.6983	1136.0	1156.1	0.543	4.195	73.912	18.223	2.865	0.081	0.153	0.010	0.010	0.008	0.000	0.000	0.000	0.000	0.000	1383.46
9	0.6915	1129.3	1149.3	0.535	3.968	75.143	17.431	2.654	0.093	0.158	0.010	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1382.20
10	0.6841	1120.4	1140.3	0.585	3.738	76.775	15.978	2.623	0.093	0.176	0.012	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1378.63
11	0.6776	1114.4	1134.1	0.572	3.518	77.858	15.392	2.366	0.090	0.171	0.013	0.012	0.009	0.000	0.000	0.000	0.000	0.000	1377.74
12	0.6866	1125.4	1145.3	0.582	3.678	76.307	16.506	2.594	0.098	0.193	0.015	0.016	0.011	0.000	0.000	0.000	0.000	0.000	1376.68
13	0.6800	1115.5	1135.2	0.587	3.652	77.362	15.719	2.404	0.085	0.158	0.012	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1380.26
14	0.6884	1125.3	1145.2	0.579	3.849	75.861	16.751	2.684	0.084	0.155	0.010	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1381.78
15	0.6974	1133.9	1153.9	0.587	4.183	74.189	17.882	2.893	0.083	0.160	0.011	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1381.45
16	0.6995	1135.3	1155.4	0.587	4.282	73.859	17.997	3.000	0.084	0.159	0.011	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1381.05
17	0.6943	1130.7	1150.8	0.551	4.125	74.655	17.629	2.789	0.078	0.144	0.010	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1383.82
18	0.7011	1138.6	1158.7	0.580	4.246	73.447	18.527	2.932	0.079	0.159	0.010	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1382.69
19	0.6988	1135.8	1155.9	0.579	4.202	73.820	18.284	2.864	0.075	0.147	0.010	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1385.47
20	0.7008	1139.7	1159.9	0.579	4.150	73.742	18.149	3.074	0.094	0.181	0.011	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1375.34
21	0.6856	1119.0	1138.8	0.566	4.003	76.015	16.819	2.357	0.071	0.139	0.010	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1376.33
22	0.6899	1123.3	1143.2	0.576	4.126	75.467	16.976	2.551	0.083	0.176	0.015	0.016	0.013	0.000	0.000	0.000	0.000	0.000	1375.34
23	0.7178	1160.9	1181.5	0.563	4.471	71.002	19.896	3.668	0.122	0.241	0.013	0.013	0.011	0.000	0.000	0.000	0.000	0.000	1394.52
24	0.7267	1173.3	1194.1	0.557	4.560	69.537	20.985	3.893	0.139	0.288	0.015	0.015	0.012	0.000	0.000	0.000	0.000	0.000	1400.75
25	0.7233	1168.3	1189.0	0.555	4.551	69.952	20.773	3.771	0.121	0.242	0.012	0.012	0.011	0.000	0.000	0.000	0.000	0.000	1398.06
26	0.7188	1162.0	1182.5	0.555	4.519	70.668	20.271	3.604	0.117	0.230	0.012	0.012	0.011	0.000	0.000	0.000	0.000	0.000	1394.75
27	0.7116	1152.9	1173.3	0.546	4.410	71.621	19.882	3.237	0.091	0.182	0.010	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1390.88
28	0.7103	1153.2	1173.6	0.539	4.280	71.813	19.938	3.118	0.090	0.186	0.011	0.012	0.013	0.000	0.000	0.000	0.000	0.000	1390.54
29	0.7087	1152.4	1172.9	0.559	4.142	72.335	19.437	3.161	0.104	0.218	0.015	0.016	0.013	0.000	0.000	0.000	0.000	0.000	1392.54
30	0.7013	1142.3	1162.5	0.568	4.054	73.758	18.247	2.976	0.108	0.236	0.019	0.020	0.015	0.000	0.000	0.000	0.000	0.000	1393.20
31	0.6903	1126.1	1146.0	0.580	3.986	75.460	17.107	2.532	0.092	0.197	0.017	0.017	0.014	0.000	0.000	0.000	0.000	0.000	1388.12
AVG	0.7005	1140.0	1159.7	0.563	4.156	73.727	18.247	2.990	0.095	0.187	0.012	0.012	0.011	0.000	0.000	0.000	0.000	0.000	1385.56

Zone 271

GQ Source Daily Summary

December 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	0.6934	1129.5	1149.5	0.482	4.219	74.872	17.306	2.836	0.086	0.169	0.012	0.012	0.007	0.000	0.000	0.000	0.000	0.000	1380.44
2	0.6955	1131.5	1151.5	0.508	4.255	74.423	17.724	2.813	0.084	0.166	0.011	0.011	0.006	0.000	0.000	0.000	0.000	0.000	1380.80
3	0.7019	1139.4	1159.6	0.524	4.349	73.364	18.437	3.042	0.088	0.170	0.011	0.011	0.005	0.000	0.000	0.000	0.000	0.000	1384.09
4	0.7070	1145.3	1165.6	0.530	4.465	72.640	18.731	3.308	0.103	0.198	0.011	0.011	0.004	0.000	0.000	0.000	0.000	0.000	1386.17
5	0.7130	1153.3	1173.7	0.541	4.524	71.673	19.393	3.521	0.110	0.212	0.011	0.011	0.004	0.000	0.000	0.000	0.000	0.000	1389.96
6	0.7142	1155.0	1175.5	0.534	4.542	71.503	19.491	3.559	0.117	0.228	0.012	0.011	0.003	0.000	0.000	0.000	0.000	0.000	1390.87
7	0.7057	1144.4	1164.7	0.527	4.402	72.786	18.751	3.232	0.096	0.182	0.010	0.010	0.003	0.000	0.000	0.000	0.000	0.000	1386.36
8	0.6981	1135.4	1155.5	0.527	4.233	73.926	18.186	2.867	0.083	0.159	0.010	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1382.99
9	0.6958	1132.2	1152.2	0.546	4.183	74.311	17.935	2.773	0.080	0.153	0.010	0.009	0.001	0.000	0.000	0.000	0.000	0.000	1381.36
10	0.6809	1118.8	1138.6	0.545	3.602	77.152	15.999	2.419	0.087	0.168	0.011	0.011	0.006	0.000	0.000	0.000	0.000	0.000	1379.87
11	0.6786	1113.6	1133.3	0.570	3.668	77.683	15.333	2.463	0.089	0.167	0.012	0.011	0.005	0.000	0.000	0.000	0.000	0.000	1375.70
12	0.6846	1123.0	1142.9	0.579	3.637	76.776	16.043	2.614	0.104	0.208	0.017	0.017	0.007	0.000	0.000	0.000	0.000	0.000	1381.32
13	0.6793	1115.2	1134.9	0.583	3.616	77.505	15.619	2.390	0.088	0.168	0.013	0.012	0.007	0.000	0.000	0.000	0.000	0.000	1376.96
14	0.6839	1119.8	1139.7	0.579	3.768	76.623	16.232	2.540	0.082	0.151	0.010	0.009	0.005	0.000	0.000	0.000	0.000	0.000	1378.09
15	0.6954	1130.8	1150.9	0.588	4.162	74.555	17.563	2.872	0.083	0.155	0.010	0.009	0.003	0.000	0.000	0.000	0.000	0.000	1380.13
16	0.6997	1136.6	1156.8	0.571	4.245	73.824	18.072	2.999	0.089	0.173	0.012	0.011	0.004	0.000	0.000	0.000	0.000	0.000	1382.85
17	0.6961	1131.0	1151.0	0.559	4.264	74.375	17.659	2.890	0.081	0.149	0.010	0.009	0.004	0.000	0.000	0.000	0.000	0.000	1379.57
18	0.6980	1135.2	1155.3	0.570	4.171	74.007	18.127	2.859	0.080	0.159	0.011	0.010	0.005	0.000	0.000	0.000	0.000	0.000	1382.83
19	0.6974	1133.0	1153.1	0.572	4.248	74.004	18.131	2.800	0.075	0.148	0.010	0.009	0.004	0.000	0.000	0.000	0.000	0.000	1380.76
20	0.6996	1137.4	1157.6	0.577	4.174	73.894	18.037	3.032	0.089	0.172	0.011	0.010	0.004	0.000	0.000	0.000	0.000	0.000	1383.96
21	0.6923	1127.4	1147.3	0.575	4.102	74.993	17.403	2.662	0.081	0.157	0.011	0.010	0.006	0.000	0.000	0.000	0.000	0.000	1378.94
22	0.6812	1112.2	1131.9	0.556	4.010	76.798	16.151	2.245	0.070	0.141	0.011	0.011	0.007	0.000	0.000	0.000	0.000	0.000	1371.52
23	0.7091	1148.9	1169.2	0.566	4.381	72.502	18.781	3.375	0.116	0.237	0.016	0.014	0.009	0.000	0.000	0.000	0.000	0.000	1388.50
24	0.7258	1171.6	1192.4	0.556	4.577	69.713	20.775	3.914	0.140	0.288	0.014	0.014	0.007	0.000	0.000	0.000	0.000	0.000	1399.64
25	0.7236	1168.2	1188.9	0.549	4.593	69.936	20.710	3.799	0.125	0.252	0.014	0.014	0.007	0.000	0.000	0.000	0.000	0.000	1397.64
26	0.7200	1163.4	1184.0	0.550	4.549	70.548	20.243	3.714	0.122	0.241	0.013	0.013	0.007	0.000	0.000	0.000	0.000	0.000	1395.35
27	0.7156	1157.2	1177.7	0.551	4.508	71.017	20.174	3.432	0.099	0.195	0.011	0.010	0.004	0.000	0.000	0.000	0.000	0.000	1392.26
28	0.7087	1149.8	1170.2	0.549	4.320	72.146	19.532	3.138	0.095	0.194	0.012	0.012	0.004	0.000	0.000	0.000	0.000	0.000	1390.03
29	0.7084	1150.3	1170.7	0.544	4.266	72.043	19.828	3.038	0.087	0.172	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1390.93
30	0.7035	1146.6	1166.9	0.548	4.021	73.525	18.362	3.093	0.121	0.273	0.023	0.024	0.010	0.000	0.000	0.000	0.000	0.000	1391.28
31	0.6913	1127.5	1147.4	0.578	3.995	75.361	17.099	2.623	0.095	0.205	0.018	0.018	0.009	0.000	0.000	0.000	0.000	0.000	1380.10
Avg	0.7000	1138.0	1158.6	0.559	4.176	73.821	18.134	2.995	0.096	0.189	0.012	0.012	0.005	0.000	0.000	0.000	0.000	0.000	1384.81

Zone 272

GQ Source Daily Summary

December 2010

Number: 061 **Pressure Base:** 14.730 **Contract Day:** 1

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

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6937	1130.2	1150.2	0.483	4.209	74.818	17.360	2.844	0.086	0.170	0.012	0.012	0.007	0.000	0.000	0.000	0.000	0.000	1380.92
2	0.6957	1132.0	1152.1	0.508	4.246	74.385	17.761	2.821	0.084	0.167	0.011	0.011	0.006	0.000	0.000	0.000	0.000	0.000	1381.19
3	0.7023	1140.3	1160.5	0.525	4.332	73.291	18.509	3.055	0.089	0.171	0.011	0.011	0.006	0.000	0.000	0.000	0.000	0.000	1384.80
4	0.7075	1146.2	1166.5	0.530	4.452	72.571	18.795	3.323	0.103	0.199	0.011	0.011	0.004	0.000	0.000	0.000	0.000	0.000	1386.81
5	0.7134	1154.0	1174.5	0.542	4.513	71.620	19.438	3.535	0.111	0.213	0.011	0.011	0.005	0.000	0.000	0.000	0.000	0.000	1390.49
6	0.7148	1156.1	1176.6	0.535	4.528	71.419	19.560	3.583	0.118	0.230	0.012	0.012	0.005	0.000	0.000	0.000	0.000	0.000	1391.64
7	0.7060	1144.9	1165.2	0.528	4.391	72.741	18.802	3.235	0.097	0.184	0.010	0.010	0.003	0.000	0.000	0.000	0.000	0.000	1386.78
8	0.6984	1136.1	1156.2	0.527	4.222	73.876	18.230	2.881	0.083	0.160	0.010	0.009	0.001	0.000	0.000	0.000	0.000	0.000	1383.48
9	0.6812	1132.9	1153.0	0.546	4.174	74.254	17.982	2.788	0.080	0.154	0.010	0.009	0.001	0.000	0.000	0.000	0.000	0.000	1381.88
10	0.6812	1119.4	1139.2	0.546	3.595	77.105	16.042	2.427	0.088	0.169	0.011	0.011	0.006	0.000	0.000	0.000	0.000	0.000	1380.24
11	0.6790	1114.2	1133.9	0.570	3.663	77.629	15.376	2.475	0.090	0.168	0.012	0.011	0.005	0.000	0.000	0.000	0.000	0.000	1376.07
12	0.6849	1123.6	1143.5	0.579	3.630	76.727	16.086	2.625	0.104	0.209	0.016	0.017	0.007	0.000	0.000	0.000	0.000	0.000	1381.74
13	0.6795	1115.6	1135.3	0.584	3.608	77.471	15.653	2.394	0.088	0.169	0.013	0.012	0.007	0.000	0.000	0.000	0.000	0.000	1377.27
14	0.6842	1120.4	1140.2	0.580	3.757	76.582	16.271	2.550	0.082	0.152	0.010	0.009	0.006	0.000	0.000	0.000	0.000	0.000	1378.51
15	0.6957	1131.5	1151.5	0.588	4.151	74.510	17.608	2.882	0.083	0.156	0.010	0.009	0.004	0.000	0.000	0.000	0.000	0.000	1380.61
16	0.6999	1137.0	1157.1	0.571	4.235	73.804	18.099	3.001	0.089	0.173	0.012	0.011	0.005	0.000	0.000	0.000	0.000	0.000	1383.16
17	0.6962	1131.3	1151.3	0.560	4.253	74.363	17.679	2.892	0.081	0.150	0.010	0.009	0.005	0.000	0.000	0.000	0.000	0.000	1379.86
18	0.6982	1135.6	1155.8	0.570	4.162	73.976	18.155	2.872	0.080	0.159	0.011	0.010	0.005	0.000	0.000	0.000	0.000	0.000	1383.18
19	0.6977	1133.7	1153.7	0.572	4.238	73.961	18.170	2.813	0.075	0.149	0.010	0.009	0.004	0.000	0.000	0.000	0.000	0.000	1381.22
20	0.6999	1138.0	1158.1	0.577	4.167	73.852	18.073	3.044	0.090	0.173	0.011	0.010	0.003	0.000	0.000	0.000	0.000	0.000	1384.34
21	0.6926	1127.9	1147.9	0.576	4.094	74.947	17.444	2.673	0.082	0.158	0.011	0.010	0.006	0.000	0.000	0.000	0.000	0.000	1379.36
22	0.6815	1112.8	1132.5	0.557	4.006	76.747	16.192	2.256	0.071	0.141	0.011	0.011	0.007	0.000	0.000	0.000	0.000	0.000	1371.87
23	0.7094	1149.6	1170.0	0.566	4.367	72.452	18.829	3.391	0.116	0.237	0.016	0.017	0.010	0.000	0.000	0.000	0.000	0.000	1389.07
24	0.7237	1168.5	1189.1	0.549	4.586	69.917	20.735	3.922	0.141	0.291	0.014	0.014	0.007	0.000	0.000	0.000	0.000	0.000	1400.04
25	0.7205	1164.3	1184.9	0.551	4.538	70.483	20.290	3.740	0.126	0.253	0.014	0.013	0.008	0.000	0.000	0.000	0.000	0.000	1395.97
26	0.7160	1158.1	1178.6	0.552	4.498	70.949	20.234	3.446	0.099	0.196	0.011	0.010	0.005	0.000	0.000	0.000	0.000	0.000	1392.81
27	0.7086	1149.9	1170.2	0.548	4.309	72.173	19.511	3.141	0.095	0.194	0.012	0.012	0.005	0.000	0.000	0.000	0.000	0.000	1390.18
28	0.7084	1150.7	1171.1	0.543	4.245	72.038	19.863	3.030	0.087	0.172	0.010	0.010	0.001	0.000	0.000	0.000	0.000	0.000	1391.40
29	0.7029	1145.9	1166.2	0.548	4.013	73.591	18.334	3.077	0.119	0.267	0.022	0.022	0.006	0.000	0.000	0.000	0.000	0.000	1390.95
30	0.6917	1128.3	1148.3	0.578	3.987	75.294	17.155	2.639	0.096	0.207	0.018	0.019	0.008	0.000	0.000	0.000	0.000	0.000	1380.67
31	0.7002	1139.0	1159.1	0.559	4.167	73.784	18.171	3.004	0.096	0.190	0.012	0.012	0.005	0.000	0.000	0.000	0.000	0.000	1385.21

Zone 273

GQ Source Daily Summary

December 2010

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

Day	Relative Density	Heating Value Wet	Heating Value Dry	C02	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6329	1048.4	1067.0	0.337	3.695	85.132	9.563	1.179	0.037	0.045	0.005	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1341.19
2	0.6316	1049.1	1067.7	0.414	3.416	85.497	9.424	1.148	0.040	0.045	0.006	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1343.45
3	0.6323	1051.6	1070.2	0.431	3.306	85.413	9.586	1.159	0.041	0.047	0.007	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1345.83
4	0.6301	1047.7	1066.3	0.468	3.269	85.977	8.968	1.206	0.044	0.049	0.007	0.005	0.007	0.000	0.000	0.000	0.000	0.000	1343.32
5	0.6291	1047.3	1065.9	0.486	3.177	86.107	9.009	1.113	0.042	0.047	0.007	0.005	0.007	0.000	0.000	0.000	0.000	0.000	1343.84
6	0.6322	1051.3	1069.9	0.431	3.310	85.442	9.543	1.170	0.041	0.046	0.006	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1345.63
7	0.6330	1052.9	1071.5	0.436	3.286	85.314	9.657	1.200	0.042	0.047	0.007	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1346.73
8	0.6272	1044.2	1062.7	0.502	3.158	86.466	8.711	1.058	0.041	0.046	0.007	0.005	0.007	0.000	0.000	0.000	0.000	0.000	1341.96
9	0.6245	1040.4	1058.8	0.538	3.088	87.016	8.235	1.015	0.042	0.045	0.008	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1339.84
10	0.6210	1035.2	1053.6	0.583	3.002	87.735	7.622	0.950	0.042	0.045	0.008	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1336.97
11	0.6180	1030.6	1048.9	0.627	2.935	88.337	7.115	0.875	0.043	0.046	0.009	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1334.23
12	0.6166	1028.1	1046.3	0.640	2.934	88.598	6.881	0.835	0.043	0.045	0.009	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1332.53
13	0.6159	1027.4	1045.6	0.649	2.899	88.743	6.777	0.818	0.043	0.046	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1332.34
14	0.6160	1027.6	1045.8	0.646	2.903	88.724	6.784	0.832	0.043	0.045	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1332.46
15	0.6161	1027.3	1045.5	0.638	2.941	88.692	6.791	0.828	0.042	0.045	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1331.99
16	0.6211	1036.1	1054.4	0.610	2.924	87.744	7.670	0.936	0.044	0.050	0.009	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1337.90
17	0.6207	1035.0	1053.4	0.615	2.937	87.813	7.607	0.915	0.042	0.047	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1337.05
18	0.6217	1036.8	1055.2	0.618	2.921	87.655	7.728	0.971	0.041	0.044	0.008	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1338.25
19	0.6224	1038.1	1056.4	0.616	2.913	87.584	7.744	1.027	0.044	0.049	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1339.09
20	0.6233	1039.7	1058.1	0.608	2.907	87.396	7.947	1.028	0.043	0.048	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1340.29
21	0.6203	1033.8	1052.1	0.619	2.975	87.917	7.428	0.944	0.043	0.050	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.000	1335.82
22	0.6170	1027.9	1046.1	0.630	3.008	88.485	6.921	0.849	0.041	0.044	0.008	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1331.72
23	0.6184	1029.8	1048.0	0.623	3.029	88.245	7.103	0.893	0.040	0.044	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1332.72
24	0.6234	1037.8	1056.2	0.582	3.075	87.311	7.886	1.043	0.040	0.043	0.008	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1337.67
25	0.6260	1043.4	1061.9	0.581	2.982	86.857	8.358	1.119	0.040	0.042	0.007	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1342.08
26	0.6237	1039.9	1058.3	0.603	2.939	87.298	8.017	1.037	0.041	0.043	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1337.11
27	0.6229	1037.6	1056.0	0.594	3.020	87.430	7.815	1.039	0.040	0.042	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1340.12
28	0.6225	1036.6	1055.0	0.618	3.006	87.592	7.597	1.077	0.042	0.045	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1337.99
29	0.6233	1039.2	1057.6	0.594	2.963	87.273	8.098	0.976	0.037	0.038	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1339.61
30	0.6241	1040.0	1058.4	0.604	2.974	87.144	8.190	0.985	0.038	0.040	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1339.74
31	0.6199	1032.2	1050.5	0.631	3.015	87.926	7.442	0.886	0.039	0.041	0.008	0.005	0.009	0.000	0.000	0.000	0.000	0.000	1334.20
AVG	0.6222	1037.0	1055.3	0.590	3.008	87.513	7.803	0.979	0.041	0.045	0.008	0.005	0.008	0.000	0.000	0.000	0.000	0.000	1337.77

Zone 28

GQ Source Daily Summary

December 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	0.6323	1047.9	1066.4	0.359	3.624	85.246	9.497	1.194	0.036	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1341.18
2	0.6301	1047.9	1066.5	0.424	3.322	85.743	9.292	1.137	0.038	0.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1343.47
3	0.6299	1048.4	1066.9	0.435	3.252	85.874	9.168	1.186	0.039	0.045	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1344.35
4	0.6268	1043.7	1062.2	0.485	3.169	86.520	8.609	1.129	0.040	0.045	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1341.67
5	0.6300	1048.4	1067.0	0.429	3.275	85.748	9.354	1.116	0.037	0.041	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1344.23
6	0.6301	1049.0	1067.6	0.434	3.232	85.829	9.240	1.180	0.039	0.045	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1344.98
7	0.6288	1046.8	1065.4	0.445	3.226	86.029	9.114	1.104	0.038	0.042	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1343.55
8	0.6241	1040.3	1058.7	0.512	3.082	87.020	8.260	1.043	0.039	0.043	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1340.19
9	0.6231	1039.1	1057.5	0.544	3.012	87.208	8.172	0.982	0.038	0.042	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1339.69
10	0.6165	1027.9	1046.1	0.604	2.983	88.554	6.865	0.909	0.040	0.042	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1332.28
11	0.6161	1028.0	1046.2	0.625	2.913	88.584	6.955	0.838	0.039	0.042	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1332.81
12	0.6157	1027.6	1045.8	0.641	2.866	88.720	6.835	0.850	0.041	0.044	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1332.86
13	0.6136	1023.7	1041.8	0.639	2.914	89.071	6.501	0.791	0.039	0.042	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1330.00
14	0.6144	1025.4	1043.5	0.639	2.888	88.934	6.637	0.818	0.039	0.041	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1331.31
15	0.6178	1030.8	1049.0	0.614	2.919	88.288	7.198	0.892	0.040	0.045	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1334.58
16	0.6203	1035.5	1053.8	0.606	2.872	87.815	7.698	0.921	0.040	0.046	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1338.10
17	0.6208	1035.6	1054.0	0.596	2.931	87.715	7.713	0.961	0.039	0.043	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1337.66
18	0.6186	1032.5	1050.8	0.613	2.885	88.174	7.301	0.943	0.039	0.042	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1336.04
19	0.6208	1036.4	1054.7	0.603	2.869	87.803	7.629	1.005	0.041	0.047	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1338.68
20	0.6202	1035.4	1053.7	0.610	2.869	87.885	7.563	0.993	0.038	0.040	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1337.98
21	0.6188	1030.0	1048.2	0.597	3.085	88.063	7.255	0.911	0.039	0.048	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1332.55
22	0.6156	1025.9	1044.1	0.631	2.978	88.701	6.760	0.850	0.038	0.041	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1330.71
23	0.6204	1033.4	1051.7	0.584	3.047	87.766	7.558	0.967	0.036	0.039	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1335.19
24	0.6248	1041.8	1060.2	0.560	2.991	87.011	8.220	1.138	0.037	0.040	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1341.24
25	0.6221	1038.2	1056.6	0.589	2.904	87.530	7.850	1.047	0.038	0.040	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1339.62
26	0.6219	1037.1	1055.5	0.584	2.957	87.538	7.818	1.027	0.037	0.039	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1338.47
27	0.6194	1032.6	1050.9	0.603	2.973	88.049	7.280	1.015	0.037	0.039	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1335.24
28	0.6204	1035.0	1053.3	0.594	2.932	87.794	7.634	0.973	0.035	0.035	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1337.28
29	0.6240	1041.3	1059.7	0.568	2.933	87.067	8.333	1.028	0.034	0.035	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1341.47
30	0.6202	1033.8	1052.1	0.615	2.958	87.774	7.679	0.899	0.035	0.038	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1335.92
31	0.6187	1029.9	1048.1	0.638	3.024	88.075	7.304	0.881	0.036	0.039	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	1332.47
Avg	0.6206	1035.0	1053.2	0.582	2.982	87.731	7.656	0.966	0.038	0.042	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	1336.86

Zone 31

GQ Source Daily Summary

December 2010

Number: 051 **Pressure Base:** 14,730 **Contract Day:** 1
Name: CABIN CR-DICKINSON **Temperature Base:** **Contract Hour:** 9

Day	Heating Value		CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
	Relative Density	Dry																
1	0.6294	1044.4	1062.9	0.404	3.513	85.940	8.875	1.167	0.040	0.047	0.006	0.004	0.005	0.000	0.000	0.000	0.000	1339.71
2	0.6295	1046.3	1064.8	0.447	3.339	86.029	8.898	1.178	0.043	0.049	0.007	0.005	0.006	0.000	0.000	0.000	0.000	1342.04
3	0.6278	1043.7	1062.1	0.471	3.305	86.412	8.511	1.190	0.044	0.050	0.007	0.005	0.006	0.000	0.000	0.000	0.000	1340.46
4	0.6277	1044.6	1063.1	0.488	3.207	86.418	8.635	1.141	0.043	0.049	0.007	0.005	0.007	0.000	0.000	0.000	0.000	1341.86
5	0.6298	1046.7	1065.3	0.444	3.338	85.973	8.954	1.185	0.042	0.048	0.007	0.004	0.006	0.000	0.000	0.000	0.000	1342.39
6	0.6306	1048.1	1066.7	0.449	3.322	85.871	9.015	1.233	0.043	0.050	0.007	0.004	0.006	0.000	0.000	0.000	0.000	1343.30
7	0.6249	1040.0	1058.4	0.513	3.190	86.962	8.136	1.089	0.043	0.048	0.008	0.005	0.007	0.000	0.000	0.000	0.000	1338.90
8	0.6225	1036.8	1055.2	0.549	3.102	87.449	7.764	1.025	0.043	0.047	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1337.36
9	0.6200	1033.4	1051.7	0.586	3.013	87.985	7.321	0.983	0.043	0.047	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1335.70
10	0.6167	1028.2	1046.4	0.622	2.973	88.623	6.759	0.911	0.044	0.047	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1332.42
11	0.6135	1022.6	1040.7	0.652	2.962	89.237	6.208	0.828	0.043	0.047	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1328.69
12	0.6137	1023.7	1041.9	0.671	2.884	89.244	6.240	0.843	0.045	0.049	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1329.94
13	0.6135	1023.0	1041.2	0.661	2.924	89.261	6.196	0.843	0.045	0.049	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1328.25
14	0.6127	1021.6	1039.7	0.664	2.931	89.409	6.057	0.826	0.043	0.047	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1333.95
15	0.6180	1030.4	1048.7	0.630	2.944	88.411	6.962	0.934	0.045	0.052	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1334.29
16	0.6180	1030.7	1049.0	0.639	2.915	88.411	6.983	0.934	0.044	0.050	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1335.11
17	0.6193	1032.4	1050.7	0.628	2.949	88.165	7.164	0.981	0.043	0.047	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1336.45
18	0.6191	1032.2	1050.5	0.637	2.925	88.271	7.035	1.012	0.044	0.050	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1333.61
19	0.6201	1034.1	1052.4	0.628	2.920	88.084	7.209	1.041	0.044	0.050	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1330.24
20	0.6179	1030.0	1048.3	0.650	2.923	88.504	6.826	0.978	0.044	0.050	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1334.90
21	0.6154	1024.5	1042.6	0.624	3.069	88.834	6.494	0.870	0.041	0.047	0.008	0.006	0.008	0.000	0.000	0.000	0.000	1337.75
22	0.6162	1026.1	1044.2	0.637	3.030	88.715	6.606	0.903	0.041	0.045	0.008	0.006	0.009	0.000	0.000	0.000	0.000	1336.34
23	0.6214	1034.0	1052.3	0.595	3.100	87.780	7.326	1.092	0.041	0.045	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1334.08
24	0.6222	1036.9	1055.2	0.611	2.974	87.685	7.502	1.120	0.042	0.044	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1335.86
25	0.6208	1034.6	1052.9	0.624	2.961	87.938	7.303	1.064	0.042	0.045	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1335.75
26	0.6198	1032.0	1050.3	0.616	3.035	88.098	7.100	1.044	0.041	0.044	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1336.23
27	0.6191	1031.3	1049.5	0.629	2.998	88.261	6.955	1.049	0.041	0.044	0.008	0.005	0.009	0.000	0.000	0.000	0.000	1331.93
28	0.6204	1033.8	1052.1	0.619	2.981	87.931	7.361	1.009	0.038	0.039	0.008	0.005	0.009	0.000	0.000	0.000	0.000	1329.66
29	0.6213	1035.0	1053.3	0.617	3.001	87.751	7.514	1.013	0.039	0.042	0.008	0.005	0.009	0.000	0.000	0.000	0.000	1334.24
30	0.6178	1028.7	1046.9	0.650	3.001	88.404	6.932	0.907	0.040	0.043	0.008	0.006	0.009	0.000	0.000	0.000	0.000	1334.24
31	0.6156	1025.1	1043.2	0.687	2.954	88.885	6.494	0.870	0.041	0.044	0.009	0.006	0.011	0.000	0.000	0.000	0.000	1334.24
AVG	0.6193	1032.0	1050.0	0.612	3.012	88.153	7.126	0.985	0.042	0.047	0.008	0.006	0.008	0.000	0.000	0.000	0.000	1334.24

Zone 32

GQ Source Daily Summary

December 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	0.6824	1154.5	1174.9	0.000	2.414	73.958	23.164	0.450	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.28
2	0.6840	1156.2	1176.7	0.000	2.454	73.731	23.248	0.553	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.79
3	0.6839	1157.0	1177.5	0.000	2.401	73.696	23.391	0.497	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.81
4	0.6830	1155.2	1175.6	0.000	2.424	73.856	23.246	0.460	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.55
5	0.6828	1154.8	1175.3	0.000	2.424	73.886	23.223	0.453	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.35
6	0.6827	1154.9	1175.3	0.000	2.419	73.894	23.215	0.458	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.43
7	0.6825	1154.1	1174.5	0.000	2.447	73.937	23.152	0.449	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.65
8	0.6821	1153.8	1174.3	0.000	2.422	74.050	23.044	0.471	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.83
9	0.6822	1153.4	1173.8	0.000	2.459	74.007	23.068	0.451	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.16
10	0.6814	1153.3	1173.8	0.000	2.386	74.157	23.023	0.420	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.96
11	0.6827	1154.6	1175.1	0.000	2.429	73.911	23.186	0.459	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.18
12	0.6806	1151.8	1172.2	0.000	2.407	74.277	22.909	0.394	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.85
13	0.6834	1155.3	1175.8	0.000	2.449	73.818	23.213	0.505	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.35
14	0.6813	1153.1	1173.5	0.000	2.398	74.170	22.980	0.440	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.66
15	0.6818	1153.6	1174.0	0.000	2.405	74.073	23.074	0.434	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.88
16	0.6826	1154.8	1175.3	0.000	2.408	73.899	23.253	0.426	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.54
17	0.6833	1155.3	1175.7	0.000	2.448	73.744	23.381	0.413	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.33
18	0.6815	1152.6	1173.0	0.000	2.446	74.090	23.040	0.410	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.85
19	0.6815	1152.7	1173.1	0.000	2.438	74.109	23.023	0.416	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.99
20	0.6833	1155.8	1176.3	0.000	2.411	73.798	23.315	0.462	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.06
21	0.6834	1155.4	1175.9	0.000	2.454	73.772	23.287	0.473	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.34
22	0.6824	1154.6	1175.1	0.000	2.402	73.969	23.159	0.456	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.48
23	0.6823	1154.7	1175.1	0.000	2.391	73.980	23.171	0.444	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.62
24	0.6820	1153.8	1174.2	0.000	2.412	74.034	23.104	0.436	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.92
25	0.6817	1153.6	1174.0	0.000	2.400	74.095	23.059	0.432	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.93
26	0.6835	1156.4	1176.8	0.000	2.399	73.750	23.379	0.456	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.47
27	0.6809	1153.1	1173.5	0.000	2.358	74.263	22.928	0.436	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.12
28	0.6801	1151.0	1171.4	0.000	2.408	74.405	22.755	0.418	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.39
29	0.6822	1154.0	1174.4	0.000	2.424	73.954	23.202	0.406	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.87
30	0.6833	1155.2	1175.6	0.000	2.453	73.719	23.422	0.393	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.22
31	0.6821	1153.4	1173.8	0.000	2.445	73.949	23.212	0.381	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.32
Avg	0.6822	1154.0	1174.5	0.000	2.420	73.989	23.140	0.437	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.95

Zone 33

GQ Source Daily Summary December 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	IC3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7950	1137.8	1157.9	1.769	11.341	54.050	29.923	2.640	0.063	0.185	0.008	0.020	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1298.64
2	0.7981	1144.5	1164.8	1.878	11.056	53.595	30.523	2.671	0.063	0.185	0.007	0.019	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1303.80
3	0.8022	1150.7	1171.1	1.951	10.949	52.999	31.006	2.819	0.063	0.185	0.007	0.019	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1307.53
4	0.8029	1150.5	1170.8	1.955	11.028	52.872	31.013	2.860	0.063	0.183	0.007	0.018	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1306.64
5	0.8260	1189.4	1210.5	1.886	10.888	52.402	27.914	6.189	0.155	0.464	0.022	0.064	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1331.70
6	0.8243	1186.3	1207.3	1.865	10.957	52.729	27.606	6.090	0.159	0.487	0.025	0.071	0.012	0.012	0.000	0.000	0.000	0.000	0.000	1329.35
7	0.8188	1177.6	1198.4	1.822	11.039	53.223	27.671	5.474	0.160	0.495	0.026	0.073	0.018	0.018	0.000	0.000	0.000	0.000	0.000	1323.79
8	0.8032	1152.9	1173.4	1.859	11.042	53.490	29.769	3.510	0.077	0.220	0.008	0.021	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1309.22
9	0.8050	1158.2	1178.7	1.900	10.826	52.900	30.900	3.101	0.082	0.251	0.011	0.028	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1313.76
10	0.8022	1154.3	1174.8	1.963	10.717	52.925	31.419	2.696	0.064	0.187	0.008	0.020	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1311.57
11	0.8079	1162.5	1183.1	1.986	10.709	52.721	30.724	3.539	0.074	0.214	0.008	0.021	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1316.18
12	0.8025	1153.3	1173.7	1.923	10.858	53.224	30.678	2.972	0.078	0.230	0.009	0.024	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1310.24
13	0.8051	1157.3	1177.8	1.942	10.824	53.045	30.606	3.190	0.087	0.262	0.011	0.029	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1312.71
14	0.8033	1152.8	1173.2	1.938	10.945	53.125	30.602	3.049	0.077	0.227	0.009	0.024	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1308.96
15	0.8005	1147.5	1167.8	1.936	11.014	53.449	30.400	2.896	0.069	0.203	0.008	0.021	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1305.17
16	0.8013	1149.9	1170.2	1.931	10.949	53.218	30.768	2.835	0.069	0.200	0.008	0.020	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1307.27
17	0.8003	1146.9	1167.2	1.867	11.131	53.229	30.746	2.733	0.067	0.196	0.008	0.020	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1304.73
18	0.8030	1154.3	1174.7	1.924	10.845	52.829	31.309	2.815	0.065	0.185	0.007	0.018	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1310.95
19	0.8011	1147.6	1167.9	1.940	11.056	53.357	30.401	2.956	0.068	0.194	0.008	0.019	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1304.81
20	0.7970	1144.4	1164.6	1.863	10.978	53.907	30.217	2.764	0.063	0.181	0.007	0.018	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1304.58
21	0.7999	1146.8	1167.1	1.916	11.028	53.386	30.588	2.827	0.060	0.171	0.007	0.016	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1304.91
22	0.8136	1165.7	1186.4	2.005	11.010	52.756	29.154	4.743	0.079	0.221	0.008	0.021	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1315.21
23	0.8025	1145.7	1166.0	1.990	11.218	53.451	29.750	3.296	0.069	0.196	0.008	0.020	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1301.58
24	0.8002	1140.4	1160.6	1.969	11.352	53.846	29.368	3.097	0.081	0.244	0.011	0.028	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1297.42
25	0.8000	1141.2	1161.4	1.992	11.260	53.519	30.066	2.879	0.065	0.190	0.008	0.019	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1298.47
26	0.8024	1143.1	1163.4	2.027	11.310	53.421	29.771	3.137	0.076	0.224	0.009	0.023	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1298.76
27	0.8012	1142.5	1162.7	1.973	11.321	53.543	29.757	3.071	0.076	0.224	0.009	0.023	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1298.97
28	0.8074	1143.7	1164.0	2.382	11.201	53.185	29.441	3.373	0.092	0.279	0.012	0.031	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1295.43
29	0.8041	1141.0	1161.2	2.255	11.259	53.375	29.597	3.148	0.082	0.244	0.010	0.027	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1294.88
30	0.7911	1123.6	1143.5	1.793	11.798	55.025	28.288	2.777	0.072	0.212	0.009	0.023	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1285.54
31	0.7907	1136.2	1156.4	1.483	11.460	54.578	29.641	2.545	0.067	0.194	0.008	0.021	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1300.45
Avg	0.8042	1152.0	1172.4	1.938	11.074	53.328	29.894	3.396	0.083	0.244	0.010	0.028	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1307.28

*** End of Report***

Zone 34

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

Attachment B
Page 15 of 15

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

	<u>Mol %</u>	<u>GPM</u>		<u>Mol %</u>
C1 Methane	95.949		CO2 Carbon Dioxide	0.088
C2 Ethane	0.311	0.083	N2 Nitrogen	3.635
C3 Propane	0.009	0.003	O2 Oxygen	0.000
IC4 Iso-Butane	0.007	0.002	HE Helium	
NC4 N-Butane	0.000	0.000	H2 Hydrogen	
IC5 Iso-Pentane	0.000	0.000	H2S Hydrogen Sulfide	
NC5 N-Pentane	0.000	0.000	AR Argon	
C6 Hexane	0.000	0.000	CO Carbon Monoxide	
C7 Heptane			H2O Water	
C8 Octane			Neo-C5 Neo-Pentane	
C9 Nonane				
C10 Decane				
Totals		100.000%	0.088 GPM	

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

Analysis Tech: Mary Berger
Analysis Remarks:

Zone 35

NORTH DAKOTA HEATING VALUE ZONES		
ZONES	MEASURING DEVICE	LOCATION
211	Chromatograph	Sidney Area
24	Monthly Sampler	Williston Area
25	Monthly Sampler	Watford City Area
261	Chromatograph	Williston – Tioga – Minot Line
262	Chromatograph	Minot Area
263	Monthly Sampler	Tioga – Portal
264	Monthly Sampler	Williston – Ray
271	Chromatograph	Bismarck – Cleveland
272	Chromatograph	Cleveland – Mapleton
273	Chromatograph	Cleveland – Grafton
28	Chromatograph	Bismarck
31	Chromatograph	Dickinson
32	Chromatograph	Cabin Creek – Dickinson
33	Chromatograph	Killdeer
34	Chromatograph	Bowman Area
35	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	DEC 10	NOV 10	OCT 10	SEPT 10	AUG 10	JULY 10	JUNE 10	MAY 10	APR 10	MAR 10	FEB 10	JAN 10	ZONE
MT/ND	211	Sidney Area	1194	1218	1210	1206	1209	1208	1204	1197	1199	1197	1193	1132	1155	21
ND	24	Williston Area	1193	1207	1208	1193	1200	1212	1208	1171	1186	1192	1200	1161	1176	24
ND	25	Watford City Area	1131	1135	1133	1130	1133	1129	1130	1134	1132	1128	1132	1125	1132	25
ND	261	Williston - Toga - Minot Line	1147	1154	1135	1140	1145	1161	1160	1147	1134	1150	1156	1144	1141	261
ND	262	Minot Area	1183	1191	1186	1190	1191	1189	1193	1188	1187	1184	1175	1164	1163	262
ND	263	Toga - Portal	1106	1100	1107	1120	1133	1127	1124	1104	1102	1110	1090	1078	1073	263
ND	264	Williston - Ray	1193	1207	1208	1193	1200	1212	1208	1171	1186	1192	1200	1161	1176	264
ND	271	Bismarck - Cleveland	1172	1160	1172	1190	1191	1187	1193	1186	1185	1183	1164	1117	1135	271
ND	272	Cleveland - Mapleton	1171	1159	1171	1190	1190	1187	1193	1187	1186	1182	1163	1115	1134	272
ND	273	Cleveland - Grafton	1128	1055	1097	1173	1191	1187	1193	1187	1186	1182	1163	1115	1135	273
ND	28	Bismarck - Cabin Creek	1049	1053	1082	1078	1056	1065	1023	1053	1066	1033	1029	1023	1025	28
ND/MT	31	Dickinson Area	1030	1050	1079	1075	1040	1031	986	1043	1005	996	1022	1019	1017	31
ND	32	Cabin Creek - Dickinson	1172	1175	1177	1179	1179	1177	1177	1172	1169	1168	1169	1163	1160	32
ND	33	Killdeer	1164	1172	1167	1163	1157	1157	1156	1165	1162	1170	1169	1172	1161	33
ND	34	Bowman Area	979	979	979	979	979	979	979	979	978	978	978	978	978	34
ND	35	Baker Field - North Dakota	979	979	979	979	979	979	979	979	978	978	978	978	978	35

THERMAL ZONE VARIANCE DOCUMENTATION		
December 2010		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
28	-42	Lower BTU gas coming from West
31	-29	Lower BTU gas coming from West
32	-29	Lower BTU gas coming from West