MONTANA-DAKOTA
UTILITIES CO.
A Division of MDU Resources Group, Inc.

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

December 23, 2010

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

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

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

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billng Factor
12	314	APPLE VALLEY	271	1.1309
12	327	BISMARCK	28	1.0585
12	343	CARRINGTON	273	1.1309
12	344	CLEVELAND	272	1.1219
12	364	CAVALIER	273	1.1547
12	365	DAWSON	271	1.1229
12	374	FT TOTTEN	273	1.1388
12	375	DEVILS LAKE	273	1.1388
12	379	BARLOW	273	1.1309
12	387	ELDRIDGE	272	1.1299
12	411	GLEN ULLIN	31	1.0219
12	417	GRAFTON	273	1.1626
12	439	HANKINSON	600	1.0699
12	449	JAMESTOWN	272	1.1379
12	463	LANGDON	273	1.1309
12	475	LINTON	802	.9765
12	478	LINCOLN	28	1.0585
12	494	MEDINA	271	1.1229
12	498	MANDAN	28	1.0585
12	524	NEW SALEM	28	1.0361
12	532	NEW ROCKFORD	273	1.1309
12	539	PARK RIVER	273	1.1547
12	574	SANBORN	272	1.1379
12	593	STEELE	271	1.1229
12	598	SHEYENNE	273	1.1388
12	610	TAPPEN	271	1.1229
12	625	VALLEY CITY	272	1.1457
12	629	WALHALLA	273	1.1547
12	647	WILTON	262	1.1202
12	717	SPIRITWOOD	272	1.1379
12	718	FAIRMOUNT	600	1.0678
12	732	MSR SITE	273	1.1309
12	733	PAR SITE	273	1.1309
15	303	ALEXANDER	25	1.0701
15	308	ARNEGARD	25	1.0701

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
DEC 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billng Factor
15	318	BEACH	32	.9971
15	319	BELFIELD	32	1.0044
15	323	BERTHOLD	262	1.1202
15	330	BOWMAN	34	1.0705
15	337	BURLINGTON	262	1.1444
15	368	DES LACS	262	1.1282
15	369	DICKINSON	31	1.0146
15	384	EPPING	264	1.1410
15	407	GLADSTONE	31	1.0146
15	413	GOLVA	32	.9825
15	416	GARRISON	262	1.1282
15	429	HEBRON	31	1.0219
15	459	KILLDEER	33	1.1117
15	469	LEFOR	31	1.0146
15	474	LIGNITE	263	1.0531
15	500	MARMARTH	34	1.0784
15	505	MINOT	262	1.1444
15	510	MOTT	31	1.0146
15	512	MAX	262	1.1202
15	522	NEW ENGLAND	31	1.0072
15	540	PALERMO	262	1.1202
15	558	RAY	264	1.1410
15	561	REGENT	31	1.0146
15	563	RHAME	34	1.0627
15	564	RICHARDTON	31	1.0072
15	568	ROSS	261	1.0643
15	572	RUTHVILLE	262	1.1444
15	583	SENTINEL BUTTE	32	.9971
15	588	SOUTH HEART	31	1.0072
15	590	SPRINGBROOK	264	1.1410
15	591	STANLEY	261	1.0720
15	605	SURREY	262	1.1444
15	611	TAYLOR	31	1.0072
15	616	TIOGA	261	1.0643
15	619	TURTLE LAKE	262	1.1282

MONTANA-DAKOTA UTILITIES CO.
Therm Billing Factor
DEC 2010

Div Nbr	Off Code	City Name	Heat Zone Nbr	Therm Billng Factor
15	620	TRENTON	24	1.1492
15	624	UNDERWOOD	262	1.1282
15	632	WATFORD CITY	25	1.0701
15	636	WHEELOCK	264	1.1327
15	637	WHITE EARTH	261	1.0720
15	642	WILLISTON	24	1.1492
15	646	WASHBURN	262	1.1363
15	664	RIVERDALE	262	1.1282
15	691	FAIRVIEW	24	1.1492
15	712	MINOT AFB	262	1.1444
15	743	BAKER FIELD	35	.8980

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

GQ Source Daily Summary

November 2010

Number: 251 **Pressure Base:** 14.730 **Contract Day:** 1

Name: SIDNEY AREA **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7080	1183.3	1204.2	0.036	3.002	71.077	23.099	2.696	0.037	0.049	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1431.15	
2	0.7070	1180.4	1201.3	0.036	3.083	71.228	22.916	2.639	0.039	0.053	0.002	0.002	0.002	0.000	0.000	0.000	0.000	1428.66	
3	0.7085	1182.6	1203.5	0.070	3.033	71.164	22.876	2.691	0.060	0.097	0.004	0.003	0.001	0.000	0.000	0.000	0.000	1429.85	
4	0.7159	1180.9	1201.8	0.379	3.362	70.330	22.699	3.010	0.077	0.132	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1420.54	
5	0.7115	1187.2	1208.3	0.050	3.062	70.732	23.092	2.896	0.064	0.097	0.004	0.003	0.001	0.000	0.000	0.000	0.000	1432.44	
6	0.7110	1187.0	1208.0	0.044	3.038	70.816	23.058	2.872	0.069	0.095	0.004	0.003	0.001	0.000	0.000	0.000	0.000	1432.66	
7	0.7093	1184.2	1205.1	0.040	3.061	71.091	22.823	2.817	0.061	0.098	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1430.91	
8	0.7115	1188.9	1210.0	0.036	2.981	70.811	23.037	2.956	0.066	0.104	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1434.46	
9	0.7128	1190.5	1211.6	0.036	3.011	70.652	23.056	3.055	0.070	0.112	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1434.99	
10	0.7131	1190.2	1211.3	0.036	3.052	70.525	23.194	3.021	0.065	0.101	0.004	0.003	0.001	0.000	0.000	0.000	0.000	1434.42	
11	0.7126	1190.6	1211.6	0.035	2.984	70.700	23.044	3.043	0.071	0.113	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1435.34	
12	0.7138	1185.9	1206.9	0.140	3.224	70.512	22.902	3.020	0.074	0.118	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1428.52	
13	0.7151	1183.4	1204.3	0.041	3.012	70.387	23.150	3.204	0.076	0.121	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1424.28	
14	0.7126	1189.2	1210.2	0.042	3.055	70.692	22.989	3.028	0.070	0.114	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1433.70	
15	0.7128	1190.0	1211.1	0.040	3.034	70.646	23.049	3.036	0.072	0.114	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1434.42	
16	0.7241	1184.2	1205.2	0.611	3.571	69.561	22.411	3.536	0.107	0.186	0.009	0.007	0.001	0.000	0.000	0.000	0.000	1416.51	
17	0.7233	1180.5	1201.4	0.661	3.653	69.697	22.190	3.498	0.104	0.181	0.009	0.007	0.001	0.000	0.000	0.000	0.000	1412.77	
18	0.7180	1183.7	1204.6	0.383	3.382	70.233	22.462	3.298	0.086	0.144	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1421.80	
19	0.7178	1198.0	1219.2	0.041	3.007	70.207	22.996	3.513	0.085	0.138	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1439.04	
20	0.7169	1196.5	1217.7	0.039	3.021	70.260	22.994	3.494	0.073	0.110	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1438.15	
21	0.7209	1202.8	1224.1	0.039	3.008	69.955	22.929	3.770	0.105	0.179	0.008	0.007	0.001	0.000	0.000	0.000	0.000	1441.68	
22	0.7208	1201.9	1223.2	0.078	2.993	69.864	23.151	3.616	0.104	0.180	0.008	0.007	0.001	0.000	0.000	0.000	0.000	1440.77	
23	0.7159	1194.3	1215.4	0.055	3.039	70.329	23.088	3.258	0.083	0.137	0.006	0.005	0.001	0.000	0.000	0.000	0.000	1436.46	
24	0.7153	1194.0	1215.1	0.053	3.000	70.377	23.135	3.228	0.075	0.123	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1436.77	
25	0.7150	1192.8	1213.9	0.056	3.042	70.402	23.088	3.214	0.073	0.115	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1435.56	
26	0.7135	1190.2	1211.3	0.055	3.067	70.569	23.018	3.099	0.071	0.113	0.004	0.004	0.001	0.000	0.000	0.000	0.000	1433.93	
27	0.7089	1182.4	1203.3	0.060	3.104	71.168	22.688	2.817	0.061	0.095	0.004	0.003	0.001	0.000	0.000	0.000	0.000	1429.14	
28	0.7157	1195.2	1216.4	0.047	2.975	70.229	23.354	3.209	0.069	0.108	0.004	0.003	0.001	0.000	0.000	0.000	0.000	1437.79	
29	0.7181	1199.3	1220.5	0.042	2.962	69.921	23.490	3.398	0.071	0.109	0.004	0.003	0.000	0.000	0.000	0.000	0.000	1440.16	
30	0.7127	1185.5	1206.5	0.068	3.255	70.529	22.983	3.040	0.052	0.072	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1429.10	
Avg	0.7146	1189.0	1210.4	0.114	3.106	70.468	22.961	3.147	0.074	0.119	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1431.89	

Zone 211

GQ Source Daily Summary

November 2010

Number: 163 **Pressure Base:** 14.730 **Contract Day:** 1

Name: NORTH TIOGA - MINOT **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6649	1,103.3	1,122.8	0.177	3.614	78.135	17.108	0.869	0.026	0.056	0.004	0.005	0.008					1376.96	
2	0.6668	1,106.2	1,125.8	0.194	3.589	77.836	17.355	0.920	0.028	0.060	0.004	0.005	0.008					1378.61	
3	0.6695	1,108.4	1,128.0	0.228	3.653	77.393	17.626	0.984	0.030	0.066	0.005	0.006	0.008					1378.61	
4	0.6695	1,108.4	1,128.0	0.228	3.653	77.393	17.626	0.984	0.030	0.066	0.005	0.006	0.008					1378.61	
5	0.6717	1,109.7	1,129.3	0.250	3.744	77.173	17.538	1.164	0.036	0.075	0.005	0.006	0.009					1377.98	
6	0.6715	1,111.4	1,131.1	0.246	3.632	77.277	17.504	1.196	0.038	0.082	0.006	0.008	0.010					1380.26	
7	0.6743	1,113.7	1,133.5	0.255	3.735	76.772	17.826	1.268	0.039	0.084	0.006	0.006	0.008					1380.32	
8	0.6624	1,099.3	1,118.8	0.136	3.680	78.399	17.000	0.699	0.024	0.049	0.002	0.003	0.008					1374.64	
9	0.6634	1,103.3	1,122.8	0.162	3.492	78.594	16.664	0.961	0.041	0.076	0.003	0.002	0.006					1378.54	
10	0.6666	1,106.3	1,125.9	0.200	3.554	78.142	16.851	1.109	0.044	0.087	0.004	0.004	0.005					1378.92	
11	0.6752	1,117.2	1,137.0	0.301	3.541	76.635	18.100	1.296	0.037	0.075	0.004	0.004	0.006					1383.69	
12	0.6714	1,111.6	1,131.3	0.229	3.628	77.321	17.474	1.178	0.044	0.100	0.008	0.009	0.008					1380.71	
13	0.6689	1,107.0	1,126.6	0.216	3.699	77.678	17.160	1.104	0.038	0.084	0.006	0.007	0.008					1377.48	
14	0.6723	1,113.1	1,132.8	0.238	3.613	77.199	17.534	1.255	0.043	0.094	0.007	0.008	0.009					1381.57	
15	0.6862	1,134.6	1,154.7	0.367	3.408	75.431	18.567	1.977	0.068	0.149	0.011	0.013	0.009					1393.93	
16	0.6630	1,101.7	1,121.2	0.122	3.609	78.326	17.123	0.728	0.024	0.053	0.003	0.004	0.007					1377.03	
17	0.6704	1,111.2	1,130.9	0.200	3.610	77.629	17.092	1.277	0.053	0.119	0.007	0.008	0.005					1381.13	
18	0.6710	1,111.7	1,131.4	0.252	3.552	77.185	17.831	1.079	0.030	0.061	0.003	0.003	0.005					1381.25	
19	0.6597	1,096.7	1,116.1	0.114	3.619	78.761	16.856	0.599	0.015	0.030	0.001	0.001	0.004					1374.19	
20	0.6701	1,112.6	1,132.3	0.222	3.452	77.837	16.924	1.378	0.055	0.114	0.006	0.006	0.005					1383.32	
21	0.6801	1,124.9	1,144.9	0.317	3.500	76.350	17.838	1.764	0.066	0.142	0.009	0.010	0.004					1388.26	
22	0.6747	1,115.9	1,135.6	0.302	3.575	76.886	17.693	1.389	0.045	0.095	0.006	0.006	0.004					1382.52	
23	0.6828	1,128.1	1,148.1	0.333	3.531	76.123	17.926	1.704	0.083	0.222	0.028	0.036	0.013					1389.45	
24	0.6812	1,127.1	1,147.1	0.287	3.516	76.397	17.817	1.548	0.084	0.232	0.035	0.050	0.032					1389.79	
25	0.6877	1,137.1	1,157.3	0.329	3.445	75.439	18.586	1.726	0.088	0.245	0.038	0.054	0.050					1395.57	
26	0.6832	1,130.4	1,150.4	0.284	3.507	76.097	18.075	1.592	0.081	0.225	0.036	0.052	0.051					1391.81	
27	0.6813	1,127.5	1,147.5	0.278	3.512	76.266	18.048	1.504	0.072	0.200	0.031	0.046	0.042					1390.21	
28	0.6785	1,123.2	1,143.1	0.278	3.517	76.549	17.972	1.339	0.065	0.180	0.028	0.040	0.033					1387.71	
29	0.6675	1,107.4	1,127.0	0.196	3.576	77.905	17.218	0.921	0.037	0.097	0.013	0.019	0.019					1379.39	
30	0.6849	1,132.8	1,152.8	0.368	3.390	75.785	18.204	1.961	0.078	0.172	0.014	0.017	0.010					1393.06	
Avg	0.6730	1,114.7	1,134.5	0.244	3.571	77.164	17.571	1.249	0.048	0.113	0.011	0.015	0.013					1382.85	

Zone 261

GQ Source Daily Summary

November 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	0.7314	1173.5	1194.3	0.582	4.953	68.301	21.883	3.929	0.108	0.220	0.011	0.011	0.003	0.000	0.000	0.000	0.000	1396.49	
2	0.7290	1170.2	1190.9	0.511	5.039	68.687	21.500	3.906	0.117	0.221	0.009	0.008	0.003	0.000	0.000	0.000	0.000	1394.81	
3	0.7183	1154.1	1174.5	0.520	5.008	70.062	20.895	3.232	0.087	0.177	0.008	0.008	0.004	0.000	0.000	0.000	0.000	1385.77	
4	0.7195	1156.2	1176.7	0.519	4.991	69.823	21.144	3.246	0.085	0.174	0.008	0.008	0.003	0.000	0.000	0.000	0.000	1387.19	
5	0.7186	1155.5	1176.0	0.514	4.955	69.814	21.369	3.091	0.077	0.163	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1387.24	
6	0.7183	1152.7	1173.2	0.526	5.079	69.953	21.022	3.149	0.082	0.171	0.008	0.008	0.002	0.000	0.000	0.000	0.000	1384.21	
7	0.7186	1153.8	1174.2	0.525	5.045	69.960	20.985	3.218	0.081	0.168	0.008	0.008	0.002	0.000	0.000	0.000	0.000	1385.16	
8	0.7229	1158.0	1178.6	0.546	5.150	69.276	21.368	3.385	0.084	0.172	0.008	0.008	0.002	0.000	0.000	0.000	0.000	1386.20	
9	0.7209	1156.6	1177.1	0.515	5.100	69.495	21.402	3.206	0.086	0.179	0.008	0.007	0.002	0.000	0.000	0.000	0.000	1386.36	
10	0.7241	1162.4	1183.0	0.539	5.010	69.258	21.341	3.546	0.096	0.192	0.008	0.007	0.002	0.000	0.000	0.000	0.000	1390.23	
11	0.7198	1161.5	1182.0	0.513	4.705	70.074	20.947	3.449	0.099	0.196	0.008	0.007	0.002	0.000	0.000	0.000	0.000	1393.25	
12	0.7300	1172.0	1192.8	0.554	4.952	68.690	21.433	3.977	0.125	0.248	0.010	0.009	0.002	0.000	0.000	0.000	0.000	1396.06	
13	0.7277	1169.3	1190.0	0.529	4.945	68.855	21.537	3.778	0.110	0.221	0.011	0.011	0.003	0.000	0.000	0.000	0.000	1394.98	
14	0.7293	1171.5	1192.2	0.539	4.939	68.738	21.484	3.928	0.119	0.231	0.010	0.010	0.003	0.000	0.000	0.000	0.000	1396.12	
15	0.7287	1170.6	1191.3	0.551	4.928	68.638	21.751	3.811	0.102	0.199	0.009	0.009	0.003	0.000	0.000	0.000	0.000	1395.55	
16	0.7349	1179.2	1200.1	0.596	4.913	67.866	22.115	4.128	0.121	0.236	0.011	0.011	0.003	0.000	0.000	0.000	0.000	1399.87	
17	0.7279	1169.4	1190.1	0.503	4.999	68.773	21.559	3.838	0.109	0.202	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1394.87	
18	0.7277	1169.4	1190.1	0.549	4.909	68.859	21.532	3.825	0.105	0.202	0.008	0.008	0.002	0.000	0.000	0.000	0.000	1395.09	
19	0.7276	1166.8	1187.4	0.531	5.085	68.740	21.564	3.781	0.099	0.184	0.007	0.006	0.002	0.000	0.000	0.000	0.000	1392.08	
20	0.7119	1152.2	1172.6	0.444	4.635	71.087	20.598	2.951	0.085	0.180	0.009	0.009	0.003	0.000	0.000	0.000	0.000	1389.79	
21	0.7215	1162.1	1182.7	0.528	4.797	69.681	21.303	3.373	0.094	0.199	0.010	0.011	0.003	0.000	0.000	0.000	0.000	1392.41	
22	0.7242	1166.4	1187.1	0.552	4.752	69.416	21.335	3.616	0.101	0.206	0.010	0.010	0.002	0.000	0.000	0.000	0.000	1394.96	
23	0.7261	1169.6	1190.3	0.538	4.762	69.230	21.338	3.768	0.115	0.227	0.010	0.010	0.002	0.000	0.000	0.000	0.000	1396.85	
24	0.7299	1175.7	1196.5	0.536	4.741	69.000	21.286	3.910	0.139	0.310	0.027	0.034	0.016	0.000	0.000	0.000	0.000	1400.54	
25	0.7292	1175.4	1196.2	0.550	4.685	68.835	21.706	3.789	0.117	0.252	0.021	0.027	0.017	0.000	0.000	0.000	0.000	1400.75	
26	0.7267	1173.2	1193.9	0.533	4.606	69.396	21.266	3.703	0.129	0.286	0.025	0.034	0.020	0.000	0.000	0.000	0.000	1400.58	
27	0.7315	1177.5	1198.3	0.537	4.790	68.599	21.614	3.993	0.131	0.276	0.021	0.026	0.014	0.000	0.000	0.000	0.000	1401.06	
28	0.7279	1172.8	1193.6	0.542	4.729	68.975	21.625	3.708	0.111	0.249	0.021	0.027	0.014	0.000	0.000	0.000	0.000	1398.96	
29	0.7265	1169.7	1190.4	0.541	4.794	69.017	21.674	3.609	0.103	0.216	0.017	0.021	0.010	0.000	0.000	0.000	0.000	1396.55	
30	0.7207	1164.1	1184.7	0.516	4.621	69.995	21.069	3.454	0.101	0.212	0.012	0.014	0.005	0.000	0.000	0.000	0.000	1395.54	
Avg	0.7248	1166.0	1186.4	0.531	4.885	69.269	21.371	3.599	0.104	0.212	0.011	0.013	0.005	0.000	0.000	0.000	0.000	1393.55	

Zone 262

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

GQ Source Number:	2501030	**Specific Gravity:**	0.6502
GQ Source Name:	LIGNITE PLANT	**BTU Base:**	Dry
Effective Date:	11/1/2010 9:00:00 AM	**Measured Heat Value:**	1108.08
Effective End Date	1/18/2038 9:14:07 PM	**Dry Heat Value:**	1106.49
Pressure Base:	14.730	**Wet Heat Value:**	1087.23
Viscosity:		**As Deliv. Heat Value:**	1106.49
		Sample Pressure:	0.00
		Sample Temperature:	

		Mol %	GPM
C1	Methane	81.005	
C2	Ethane	14.510	3.869
C3	Propane	1.096	0.301
IC4	Iso-Butane	0.002	0.001
NC4	N-Butane	0.000	0.000
IC5	Iso-Pentane	0.000	0.000
NC5	N-Pentane	0.000	0.000
C6	Hexane	0.000	0.000
C7	Heptane		
C8	Octane		
C9	Nonane		
C10	Decane		

		Mol %
CO2	Carbon Dioxide	0.116
N2	Nitrogen	3.267
O2	Oxygen	0.000
HE	Helium	
H2	Hydrogen	
H2S	Hydrogen Sulfide	
AR	Argon	
CO	Carbon Monoxide	
H2O	Water	
Neo-C5	Neo-Pentane	

Totals 99.996% 4.171 GPM

Sample Date: 11/30/2010 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

November 2010

Number: 043 **Pressure Base:** 14.730 **Contract Day:** 1

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

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7314	1174.3	1195.1	0.594	4.890	68.301	21.980	3.892	0.101	0.208	0.012	0.013	0.010	0.000	0.000	0.000	0.000	1397.41	
2	0.7309	1173.0	1193.8	0.536	5.010	68.464	21.628	3.991	0.117	0.224	0.010	0.010	0.009	0.000	0.000	0.000	0.000	1396.35	
3	0.7190	1155.9	1176.4	0.520	4.957	70.033	20.923	3.270	0.089	0.179	0.010	0.010	0.010	0.000	0.000	0.000	0.000	1387.36	
4	0.7177	1154.1	1174.5	0.527	4.937	70.270	20.720	3.263	0.085	0.170	0.009	0.010	0.010	0.000	0.000	0.000	0.000	1386.46	
5	0.7158	1152.8	1173.2	0.517	4.860	70.325	21.045	2.996	0.074	0.156	0.009	0.009	0.010	0.000	0.000	0.000	0.000	1386.68	
6	0.7178	1152.5	1172.9	0.533	5.035	70.108	20.901	3.146	0.080	0.168	0.009	0.009	0.010	0.000	0.000	0.000	0.000	1384.44	
7	0.7177	1152.6	1173.0	0.535	5.016	70.178	20.805	3.187	0.081	0.168	0.010	0.010	0.011	0.000	0.000	0.000	0.000	1384.66	
8	0.7221	1157.7	1178.2	0.550	5.102	69.404	21.342	3.326	0.081	0.167	0.009	0.009	0.010	0.000	0.000	0.000	0.000	1386.47	
9	0.7187	1154.6	1175.0	0.519	5.023	69.909	21.117	3.154	0.083	0.169	0.009	0.009	0.009	0.000	0.000	0.000	0.000	1385.97	
10	0.7104	1146.1	1166.4	0.507	4.774	71.437	20.028	2.991	0.078	0.160	0.008	0.008	0.008	0.000	0.000	0.000	0.000	1383.81	
11	0.7250	1166.2	1186.9	0.545	4.860	69.359	21.170	3.733	0.104	0.200	0.010	0.009	0.009	0.000	0.000	0.000	0.000	1393.85	
12	0.7211	1163.5	1184.1	0.530	4.676	69.998	20.927	3.525	0.105	0.208	0.010	0.010	0.010	0.000	0.000	0.000	0.000	1394.48	
13	0.7274	1169.7	1190.4	0.531	4.887	69.106	21.245	3.831	0.119	0.244	0.013	0.013	0.011	0.000	0.000	0.000	0.000	1395.77	
14	0.7283	1170.6	1191.3	0.543	4.896	68.902	21.427	3.866	0.113	0.221	0.011	0.011	0.010	0.000	0.000	0.000	0.000	1396.02	
15	0.7264	1168.4	1189.1	0.541	4.863	69.062	21.482	3.724	0.100	0.198	0.010	0.010	0.010	0.000	0.000	0.000	0.000	1395.13	
16	0.7277	1170.8	1191.5	0.579	4.776	69.036	21.411	3.842	0.108	0.215	0.011	0.012	0.010	0.000	0.000	0.000	0.000	1396.79	
17	0.7184	1159.3	1179.8	0.471	4.773	70.441	20.437	3.571	0.101	0.184	0.008	0.008	0.008	0.000	0.000	0.000	0.000	1391.93	
18	0.7153	1156.1	1176.5	0.484	4.650	71.027	20.054	3.474	0.098	0.186	0.009	0.009	0.008	0.000	0.000	0.000	0.000	1391.17	
19	0.7054	1142.1	1162.3	0.456	4.620	72.487	19.109	3.090	0.078	0.140	0.007	0.006	0.007	0.000	0.000	0.000	0.000	1383.91	
20	0.6785	1110.2	1129.8	0.385	4.150	77.096	15.870	2.308	0.064	0.109	0.007	0.006	0.006	0.000	0.000	0.000	0.000	1371.61	
21	0.6951	1128.8	1148.8	0.527	4.352	74.382	17.783	2.678	0.081	0.164	0.012	0.011	0.010	0.000	0.000	0.000	0.000	1377.95	
22	0.6924	1127.4	1147.4	0.516	4.197	75.034	17.193	2.798	0.081	0.153	0.010	0.009	0.008	0.000	0.000	0.000	0.000	1378.94	
23	0.6944	1129.0	1149.0	0.511	4.302	74.689	17.351	2.876	0.087	0.160	0.009	0.008	0.008	0.000	0.000	0.000	0.000	1378.82	
24	0.7019	1140.8	1161.0	0.553	4.222	73.833	17.805	3.176	0.114	0.236	0.020	0.024	0.017	0.000	0.000	0.000	0.000	1385.72	
25	0.7010	1139.6	1159.7	0.538	4.234	73.784	18.030	3.055	0.097	0.199	0.019	0.022	0.022	0.000	0.000	0.000	0.000	1385.16	
26	0.7072	1148.6	1168.9	0.540	4.264	72.671	19.016	3.103	0.103	0.225	0.022	0.029	0.026	0.000	0.000	0.000	0.000	1390.02	
27	0.7265	1171.6	1192.3	0.553	4.657	69.609	20.809	3.898	0.129	0.272	0.022	0.027	0.026	0.000	0.000	0.000	0.000	1398.85	
28	0.7241	1168.8	1189.5	0.546	4.615	69.730	21.054	3.626	0.111	0.245	0.021	0.027	0.024	0.000	0.000	0.000	0.000	1397.80	
29	0.7027	1141.0	1161.2	0.535	4.316	73.282	18.548	2.987	0.089	0.188	0.017	0.020	0.018	0.000	0.000	0.000	0.000	1385.17	
30	0.6942	1129.4	1149.4	0.504	4.263	74.584	17.671	2.709	0.078	0.154	0.012	0.013	0.012	0.000	0.000	0.000	0.000	1379.60	
Avg	0.7132	1152.0	1172.2	0.522	4.665	71.319	19.893	3.283	0.094	0.188	0.012	0.013	0.012	0.000	0.000	0.000	0.000	1387.96	

Zone 271

GQ Source Daily Summary

November 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	0.7302	1172.1	1192.8	0.589	4.923	68.475	21.811	3.858	0.103	0.214	0.013	0.014	0.001	0.000	0.000	0.000	0.000	1395.88	
2	0.7308	1172.7	1193.5	0.558	4.986	68.460	21.652	3.986	0.114	0.221	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1396.06	
3	0.7217	1159.6	1180.1	0.511	4.998	69.728	20.934	3.511	0.100	0.198	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1389.19	
4	0.7183	1154.3	1174.8	0.524	4.990	70.130	20.780	3.295	0.087	0.175	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1386.06	
5	0.7158	1153.2	1173.6	0.523	4.824	70.414	20.893	3.091	0.078	0.160	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1387.17	
6	0.7172	1152.6	1173.0	0.521	4.995	70.168	20.915	3.136	0.080	0.167	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1385.10	
7	0.7172	1151.3	1171.7	0.535	5.055	70.170	20.847	3.116	0.082	0.174	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1383.50	
8	0.7194	1155.0	1175.4	0.534	5.034	69.866	21.038	3.257	0.081	0.170	0.009	0.009	0.001	0.000	0.000	0.000	0.000	1385.83	
9	0.7213	1156.7	1177.2	0.527	5.118	69.537	21.211	3.330	0.084	0.175	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1386.07	
10	0.7124	1147.1	1167.4	0.496	4.913	71.020	20.280	3.037	0.079	0.160	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1383.15	
11	0.7199	1158.3	1178.8	0.548	4.852	70.194	20.533	3.558	0.102	0.195	0.009	0.008	0.001	0.000	0.000	0.000	0.000	1389.35	
12	0.7184	1159.2	1179.7	0.536	4.681	70.355	20.700	3.415	0.097	0.195	0.010	0.010	0.001	0.000	0.000	0.000	0.000	1391.88	
13	0.7280	1170.2	1190.9	0.534	4.908	69.113	21.090	3.934	0.130	0.265	0.013	0.013	0.000	0.000	0.000	0.000	0.000	1395.79	
14	0.7266	1167.8	1188.5	0.531	4.925	69.119	21.270	3.806	0.109	0.218	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1394.32	
15	0.7268	1168.5	1189.2	0.541	4.895	69.082	21.312	3.832	0.109	0.209	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1394.86	
16	0.7269	1169.2	1189.9	0.561	4.824	69.074	21.397	3.812	0.104	0.206	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1395.68	
17	0.7207	1161.2	1181.7	0.514	4.801	70.115	20.598	3.648	0.104	0.200	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1392.07	
18	0.7157	1155.9	1176.3	0.471	4.723	70.975	19.982	3.529	0.103	0.197	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1390.50	
19	0.7070	1143.7	1164.0	0.465	4.660	72.174	19.335	3.135	0.077	0.140	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1384.28	
20	0.6856	1118.6	1138.4	0.369	4.323	75.921	16.583	2.593	0.073	0.125	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1374.92	
21	0.6877	1119.7	1139.5	0.507	4.245	75.612	16.921	2.465	0.075	0.150	0.011	0.010	0.005	0.000	0.000	0.000	0.000	1374.11	
22	0.6947	1129.4	1149.4	0.516	4.295	74.577	17.517	2.830	0.081	0.159	0.011	0.010	0.004	0.000	0.000	0.000	0.000	1379.04	
23	0.6914	1125.1	1145.1	0.505	4.264	75.207	16.962	2.791	0.087	0.164	0.010	0.009	0.002	0.000	0.000	0.000	0.000	1377.07	
24	0.6981	1134.9	1155.0	0.536	4.249	74.253	17.601	3.023	0.100	0.200	0.016	0.017	0.006	0.000	0.000	0.000	0.000	1382.38	
25	0.7015	1139.8	1160.0	0.536	4.267	73.798	17.896	3.106	0.107	0.224	0.021	0.026	0.018	0.000	0.000	0.000	0.000	1385.00	
26	0.6994	1138.9	1159.1	0.522	4.150	73.977	18.068	2.916	0.097	0.205	0.021	0.026	0.018	0.000	0.000	0.000	0.000	1385.94	
27	0.7238	1167.2	1187.9	0.566	4.644	70.065	20.476	3.768	0.126	0.275	0.024	0.031	0.024	0.000	0.000	0.000	0.000	1396.30	
28	0.7249	1169.1	1189.8	0.540	4.673	69.721	20.870	3.743	0.122	0.264	0.022	0.027	0.019	0.000	0.000	0.000	0.000	1397.47	
29	0.7093	1149.1	1169.4	0.538	4.437	72.204	19.256	3.197	0.097	0.210	0.020	0.024	0.016	0.000	0.000	0.000	0.000	1388.52	
30	0.6960	1131.1	1151.1	0.519	4.313	74.297	17.825	2.760	0.081	0.166	0.014	0.015	0.010	0.000	0.000	0.000	0.000	1379.77	
Avg	0.7130	1151.0	1171.4	0.520	4.691	71.356	19.819	3.297	0.095	0.192	0.012	0.013	0.004	0.000	0.000	0.000	0.000	1387.29	

Zone 272

GQ Source Daily Summary

November 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	0.7307	1172.9	1193.7	0.588	4.918	68.414	21.843	3.890	0.103	0.215	0.013	0.013	0.001	0.000	0.000	0.000	0.000	1396.42	
2	0.7308	1172.9	1193.7	0.556	4.977	68.454	21.672	3.982	0.114	0.223	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1396.32	
3	0.7217	1159.7	1180.2	0.512	4.994	69.719	20.956	3.501	0.100	0.199	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1389.27	
4	0.7183	1154.4	1174.9	0.524	4.982	70.130	20.794	3.287	0.087	0.176	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1386.20	
5	0.7159	1153.4	1173.8	0.526	4.815	70.405	20.910	3.088	0.078	0.161	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1387.31	
6	0.7172	1152.8	1173.2	0.522	4.984	70.155	20.950	3.123	0.080	0.168	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1385.28	
7	0.7173	1151.6	1172.0	0.533	5.050	70.152	20.865	3.122	0.082	0.174	0.010	0.011	0.000	0.000	0.000	0.000	0.000	1383.75	
8	0.7199	1155.6	1176.1	0.537	5.037	69.806	21.067	3.263	0.085	0.186	0.009	0.009	0.001	0.000	0.000	0.000	0.000	1386.14	
9	0.7212	1156.4	1176.9	0.538	5.111	69.536	21.232	3.309	0.083	0.173	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1385.83	
10	0.7125	1147.3	1167.6	0.503	4.905	71.001	20.296	3.040	0.079	0.160	0.008	0.008	0.000	0.000	0.000	0.000	0.000	1383.22	
11	0.7205	1158.9	1179.4	0.570	4.840	70.110	20.590	3.573	0.103	0.195	0.009	0.009	0.001	0.000	0.000	0.000	0.000	1389.48	
12	0.7185	1159.6	1180.2	0.535	4.664	70.333	20.753	3.399	0.097	0.197	0.010	0.010	0.001	0.000	0.000	0.000	0.000	1392.32	
13	0.7280	1170.3	1191.0	0.535	4.902	69.109	21.102	3.927	0.130	0.268	0.013	0.013	0.001	0.000	0.000	0.000	0.000	1395.90	
14	0.7271	1168.9	1189.6	0.532	4.907	69.036	21.344	3.829	0.110	0.219	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1395.14	
15	0.7275	1169.9	1190.6	0.541	4.877	68.973	21.403	3.867	0.109	0.209	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1395.83	
16	0.7273	1170.0	1190.7	0.563	4.811	69.016	21.447	3.827	0.105	0.207	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1396.21	
17	0.7212	1162.2	1182.8	0.514	4.787	70.040	20.662	3.671	0.105	0.201	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1392.80	
18	0.7161	1156.7	1177.2	0.472	4.708	70.903	20.057	3.542	0.103	0.196	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1391.13	
19	0.7073	1144.3	1164.6	0.466	4.644	72.135	19.379	3.144	0.077	0.141	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1384.82	
20	0.6856	1118.9	1138.7	0.370	4.307	75.924	16.593	2.595	0.073	0.125	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1375.21	
21	0.6880	1120.4	1140.3	0.508	4.230	75.565	16.962	2.481	0.076	0.152	0.011	0.010	0.005	0.000	0.000	0.000	0.000	1374.69	
22	0.6951	1130.3	1150.3	0.517	4.285	74.505	17.579	2.847	0.082	0.160	0.010	0.010	0.004	0.000	0.000	0.000	0.000	1379.63	
23	0.6917	1125.8	1145.7	0.506	4.253	75.159	17.009	2.798	0.087	0.165	0.010	0.009	0.003	0.000	0.000	0.000	0.000	1377.55	
24	0.6978	1134.5	1154.6	0.536	4.244	74.267	17.626	3.002	0.098	0.194	0.014	0.015	0.003	0.000	0.000	0.000	0.000	1382.17	
25	0.7020	1140.9	1161.1	0.536	4.251	73.731	17.948	3.132	0.108	0.227	0.022	0.027	0.019	0.000	0.000	0.000	0.000	1385.77	
26	0.6995	1139.3	1159.4	0.522	4.133	73.977	18.080	2.920	0.097	0.206	0.021	0.026	0.018	0.000	0.000	0.000	0.000	1386.33	
27	0.7242	1168.1	1188.7	0.567	4.631	70.008	20.528	3.783	0.126	0.276	0.025	0.031	0.025	0.000	0.000	0.000	0.000	1396.88	
28	0.7252	1169.7	1190.4	0.540	4.663	69.674	20.917	3.750	0.122	0.266	0.022	0.027	0.019	0.000	0.000	0.000	0.000	1397.92	
29	0.7098	1149.9	1170.3	0.538	4.429	72.131	19.316	3.217	0.097	0.211	0.020	0.024	0.016	0.000	0.000	0.000	0.000	1389.07	
30	0.6963	1131.6	1151.7	0.520	4.304	74.257	17.862	2.770	0.082	0.167	0.014	0.015	0.010	0.000	0.000	0.000	0.000	1380.17	
Avg	0.7132	1152.0	1171.9	0.522	4.680	71.318	19.858	3.303	0.096	0.193	0.012	0.013	0.004	0.000	0.000	0.000	0.000	1387.67	

Zone 273

GQ Source Daily Summary

November 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	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7089	1145.9	1166.2	0.502	4.645	72.055	19.290	3.223	0.085	0.170	0.011	0.011	0.008	0.000	0.000	0.000	0.000	1385.05	
2	0.7182	1157.0	1177.5	0.488	4.865	70.564	20.142	3.611	0.106	0.198	0.009	0.009	0.008	0.000	0.000	0.000	0.000	1389.43	
3	0.6695	1096.9	1116.3	0.304	4.238	78.455	14.857	1.991	0.052	0.088	0.005	0.005	0.005	0.000	0.000	0.000	0.000	1364.27	
4	0.6581	1084.9	1104.1	0.320	3.872	80.426	13.618	1.653	0.040	0.061	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1361.05	
5	0.6513	1078.5	1097.6	0.303	3.648	81.744	12.637	1.551	0.045	0.062	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1359.99	
6	0.7021	1134.3	1154.4	0.456	4.793	72.797	18.961	2.754	0.072	0.143	0.008	0.008	0.009	0.000	0.000	0.000	0.000	1377.68	
7	0.7179	1153.0	1173.4	0.535	5.015	70.159	20.800	3.211	0.081	0.168	0.010	0.010	0.011	0.000	0.000	0.000	0.000	1384.87	
8	0.7214	1157.1	1177.6	0.545	5.078	69.544	21.232	3.325	0.081	0.166	0.009	0.009	0.010	0.000	0.000	0.000	0.000	1386.46	
9	0.6494	1073.9	1092.9	0.270	3.796	81.994	12.361	1.469	0.042	0.057	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1356.25	
10	0.6428	1065.8	1084.6	0.300	3.626	83.307	11.277	1.381	0.043	0.055	0.005	0.003	0.003	0.000	0.000	0.000	0.000	1352.85	
11	0.6440	1067.6	1086.5	0.250	3.707	82.964	11.606	1.370	0.040	0.051	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1353.86	
12	0.6493	1076.0	1095.0	0.199	3.768	81.965	12.464	1.497	0.041	0.055	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1358.96	
13	0.6508	1078.5	1097.6	0.194	3.762	81.704	12.689	1.539	0.043	0.059	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1360.60	
14	0.6527	1082.0	1101.2	0.190	3.733	81.501	12.751	1.701	0.047	0.066	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1363.01	
15	0.6517	1080.2	1099.3	0.187	3.756	81.562	12.801	1.581	0.044	0.060	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1361.74	
16	0.6522	1080.4	1099.5	0.190	3.785	81.497	12.800	1.610	0.045	0.063	0.005	0.004	0.003	0.000	0.000	0.000	0.000	1361.51	
17	0.6537	1084.5	1103.7	0.189	3.677	81.150	13.315	1.555	0.045	0.059	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1365.08	
18	0.6526	1082.1	1101.3	0.197	3.709	81.440	12.906	1.634	0.044	0.059	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1363.23	
19	0.6513	1079.3	1098.4	0.207	3.744	81.687	12.640	1.609	0.044	0.059	0.004	0.003	0.003	0.000	0.000	0.000	0.000	1361.03	
20	0.6436	1068.4	1087.3	0.327	3.499	83.304	11.278	1.473	0.046	0.060	0.005	0.004	0.003	0.000	0.000	0.000	0.000	1355.30	
21	0.6300	1046.9	1065.5	0.487	3.282	85.926	9.071	1.127	0.042	0.049	0.007	0.005	0.006	0.000	0.000	0.000	0.000	1342.38	
22	0.6318	1050.2	1068.8	0.442	3.323	85.609	9.294	1.211	0.046	0.056	0.007	0.005	0.007	0.000	0.000	0.000	0.000	1344.64	
23	0.6331	1052.3	1070.9	0.432	3.334	85.346	9.545	1.223	0.046	0.058	0.007	0.005	0.006	0.000	0.000	0.000	0.000	1345.90	
24	0.6268	1045.1	1063.6	0.536	3.022	86.650	8.579	1.091	0.046	0.054	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1343.43	
25	0.6286	1047.6	1066.1	0.515	3.072	86.285	8.891	1.112	0.048	0.054	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1344.66	
26	0.6291	1047.7	1066.2	0.528	3.091	86.204	8.931	1.124	0.046	0.054	0.008	0.005	0.008	0.000	0.000	0.000	0.000	1344.27	
27	0.6278	1045.6	1064.1	0.538	3.077	86.464	8.704	1.095	0.046	0.053	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1343.05	
28	0.6293	1048.2	1066.7	0.512	3.101	86.155	8.991	1.113	0.048	0.056	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1344.75	
29	0.6310	1050.6	1069.2	0.498	3.136	85.798	9.308	1.139	0.046	0.054	0.008	0.006	0.008	0.000	0.000	0.000	0.000	1346.02	
30	0.6300	1047.8	1066.4	0.477	3.246	85.904	9.150	1.113	0.042	0.048	0.007	0.005	0.007	0.000	0.000	0.000	0.000	1343.50	
Avg	0.6528	1078.0	1097.1	0.366	3.716	81.659	12.469	1.650	0.050	0.073	0.006	0.005	0.005	0.000	0.000	0.000	0.000	1357.92	

Zone 28

GQ Source Daily Summary

November 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	0.6421	1062.6	1081.4	0.187	3.918	83.083	11.461	1.287	0.029	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1349.50	
2	0.6471	1071.4	1090.4	0.152	3.900	82.112	12.393	1.385	0.026	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1355.50	
3	0.6429	1066.9	1085.8	0.242	3.642	83.003	11.775	1.277	0.027	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1354.18	
4	0.6450	1070.5	1089.5	0.382	3.409	82.934	11.779	1.401	0.041	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1356.54	
5	0.6413	1063.0	1081.9	0.225	3.753	83.344	11.308	1.291	0.034	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1350.97	
6	0.6424	1065.3	1084.2	0.271	3.651	83.262	11.363	1.364	0.039	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1352.66	
7	0.6422	1065.6	1084.5	0.292	3.583	83.273	11.459	1.310	0.038	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1353.25	
8	0.6455	1070.3	1089.3	0.179	3.779	82.545	12.013	1.397	0.036	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1355.73	
9	0.6424	1064.5	1083.4	0.217	3.780	83.233	11.278	1.401	0.039	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1351.67	
10	0.6421	1064.5	1083.3	0.312	3.613	83.356	11.283	1.346	0.040	0.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1351.92	
11	0.6467	1071.9	1090.9	0.186	3.780	82.416	12.044	1.484	0.038	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1356.53	
12	0.6488	1075.8	1094.9	0.181	3.751	82.042	12.397	1.530	0.041	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1359.25	
13	0.6502	1078.1	1097.2	0.177	3.750	81.848	12.499	1.622	0.043	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1360.61	
14	0.6499	1077.2	1096.3	0.176	3.777	81.870	12.482	1.592	0.042	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1359.84	
15	0.6497	1078.6	1097.7	0.170	3.676	81.826	12.734	1.499	0.039	0.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1361.88	
16	0.6535	1087.2	1106.4	0.152	3.541	81.014	13.728	1.475	0.037	0.053	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1368.68	
17	0.6505	1080.0	1099.2	0.178	3.655	81.786	12.677	1.601	0.044	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1362.82	
18	0.6503	1078.4	1097.5	0.182	3.734	81.835	12.518	1.632	0.041	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1360.91	
19	0.6492	1076.5	1095.6	0.205	3.702	82.091	12.280	1.622	0.042	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1359.78	
20	0.6350	1055.1	1073.8	0.427	3.340	84.913	9.944	1.278	0.042	0.055	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1347.45	
21	0.6300	1047.9	1066.4	0.449	3.277	85.850	9.163	1.172	0.040	0.048	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.53	
22	0.6306	1048.6	1067.1	0.427	3.323	85.754	9.192	1.205	0.043	0.055	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.79	
23	0.6300	1048.0	1066.6	0.469	3.235	85.911	9.102	1.183	0.044	0.055	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.76	
24	0.6264	1044.5	1063.0	0.524	3.020	86.654	8.611	1.093	0.044	0.052	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.18	
25	0.6274	1045.6	1064.1	0.512	3.074	86.431	8.773	1.112	0.044	0.052	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.41	
26	0.6266	1044.0	1062.5	0.532	3.059	86.607	8.610	1.095	0.043	0.050	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1342.29	
27	0.6276	1045.9	1064.4	0.507	3.081	86.402	8.799	1.109	0.046	0.055	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.56	
28	0.6292	1047.1	1065.7	0.500	3.162	86.044	9.095	1.102	0.044	0.052	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1343.54	
29	0.6298	1048.9	1067.5	0.485	3.140	85.948	9.173	1.159	0.042	0.051	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1345.05	
30	0.6294	1044.7	1063.2	0.389	3.503	85.800	9.119	1.111	0.035	0.042	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1340.13	
Avg	0.6401	1063.0	1081.8	0.314	3.507	83.797	10.951	1.340	0.040	0.052	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1352.15	

Zone 31

GQ Source Daily Summary

November 2010

Number: 051 **Pressure Base:** 14.730 **Contract Day:** 1

Name: CABIN CR-DICKINSON **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6421	1062.3	1081.1	0.191	3.943	83.184	11.260	1.343	0.032	0.040	0.003	0.003	0.002	0.000	0.000	0.000	0.000	1349.14	
2	0.6458	1068.1	1087.0	0.158	3.983	82.455	11.911	1.425	0.028	0.035	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1352.65	
3	0.6376	1058.0	1076.7	0.452	3.381	84.412	10.393	1.268	0.039	0.047	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1348.42	
4	0.6467	1069.5	1088.4	0.275	3.809	82.613	11.654	1.533	0.045	0.062	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1353.39	
5	0.6402	1059.3	1078.0	0.268	3.825	83.731	10.724	1.352	0.039	0.052	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1347.32	
6	0.6405	1060.9	1079.7	0.317	3.679	83.793	10.715	1.387	0.045	0.054	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1349.09	
7	0.6413	1062.2	1081.0	0.294	3.715	83.574	10.931	1.380	0.042	0.054	0.005	0.003	0.002	0.000	0.000	0.000	0.000	1349.86	
8	0.6437	1065.3	1084.2	0.192	3.904	83.030	11.320	1.449	0.041	0.056	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1351.30	
9	0.6399	1060.6	1079.4	0.318	3.645	83.938	10.580	1.405	0.045	0.058	0.005	0.003	0.002	0.000	0.000	0.000	0.000	1349.25	
10	0.6413	1062.0	1080.8	0.261	3.769	83.569	10.895	1.400	0.041	0.054	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1349.71	
11	0.6460	1069.7	1088.6	0.204	3.834	82.668	11.658	1.526	0.043	0.058	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1354.46	
12	0.6485	1073.9	1092.9	0.202	3.811	82.234	12.056	1.579	0.045	0.062	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1357.20	
13	0.6500	1076.6	1095.7	0.198	3.797	82.045	12.145	1.690	0.047	0.067	0.005	0.004	0.002	0.000	0.000	0.000	0.000	1359.00	
14	0.6498	1076.2	1095.3	0.194	3.806	81.996	12.270	1.615	0.045	0.064	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1358.75	
15	0.6512	1078.8	1097.9	0.192	3.785	81.736	12.531	1.638	0.045	0.064	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1360.49	
16	0.6494	1075.9	1094.9	0.203	3.778	82.084	12.205	1.609	0.047	0.064	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1358.67	
17	0.6507	1078.3	1097.4	0.203	3.752	81.879	12.380	1.666	0.047	0.063	0.005	0.004	0.002	0.000	0.000	0.000	0.000	1360.42	
18	0.6498	1076.4	1095.5	0.203	3.776	82.071	12.162	1.669	0.046	0.063	0.004	0.003	0.002	0.000	0.000	0.000	0.000	1359.04	
19	0.6478	1073.4	1092.4	0.228	3.739	82.484	11.781	1.646	0.047	0.065	0.005	0.004	0.002	0.000	0.000	0.000	0.000	1357.28	
20	0.6290	1044.7	1063.2	0.516	3.277	86.237	8.669	1.184	0.045	0.056	0.007	0.005	0.005	0.000	0.000	0.000	0.000	1340.63	
21	0.6298	1046.8	1065.3	0.459	3.318	86.044	8.833	1.227	0.046	0.055	0.007	0.005	0.006	0.000	0.000	0.000	0.000	1342.37	
22	0.6303	1047.4	1065.9	0.443	3.356	85.939	8.899	1.238	0.047	0.060	0.007	0.005	0.006	0.000	0.000	0.000	0.000	1342.58	
23	0.6268	1043.7	1062.2	0.510	3.148	86.673	8.389	1.154	0.047	0.058	0.008	0.005	0.007	0.000	0.000	0.000	0.000	1341.60	
24	0.6258	1043.0	1061.5	0.537	3.054	86.883	8.289	1.110	0.048	0.056	0.009	0.006	0.007	0.000	0.000	0.000	0.000	1341.78	
25	0.6267	1043.5	1062.0	0.537	3.104	86.710	8.399	1.126	0.047	0.055	0.008	0.006	0.008	0.000	0.000	0.000	0.000	1341.53	
26	0.6256	1041.6	1060.1	0.551	3.093	86.949	8.169	1.112	0.048	0.056	0.009	0.006	0.009	0.000	0.000	0.000	0.000	1340.29	
27	0.6267	1043.7	1062.1	0.525	3.118	86.707	8.390	1.129	0.049	0.059	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1341.65	
28	0.6274	1044.4	1062.9	0.513	3.156	86.527	8.555	1.124	0.047	0.055	0.009	0.006	0.008	0.000	0.000	0.000	0.000	1341.87	
29	0.6282	1045.2	1063.7	0.507	3.186	86.377	8.661	1.152	0.045	0.052	0.008	0.005	0.007	0.000	0.000	0.000	0.000	1342.11	
30	0.6299	1043.3	1061.8	0.360	3.694	85.779	8.879	1.190	0.039	0.047	0.005	0.003	0.004	0.000	0.000	0.000	0.000	1337.76	
Avg	0.6388	1060.0	1078.5	0.339	3.562	84.177	10.429	1.379	0.044	0.057	0.006	0.004	0.004	0.000	0.000	0.000	0.000	1349.33	

Zone 32

GQ Source Daily Summary

November 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	0.6843	1157.3	1177.8	0.000	2.416	73.676	23.360	0.530	0.007	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1423.80	
2	0.6842	1157.1	1177.6	0.000	2.421	73.693	23.325	0.545	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.65	
3	0.6851	1158.6	1179.1	0.000	2.414	73.665	23.216	0.686	0.007	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1424.52	
4	0.6824	1154.1	1174.5	0.000	2.436	74.006	23.049	0.495	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.80	
5	0.6854	1158.7	1179.2	0.000	2.437	73.455	23.535	0.558	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.38	
6	0.6844	1157.5	1178.0	0.000	2.419	73.632	23.403	0.531	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.89	
7	0.6836	1156.2	1176.7	0.000	2.420	73.777	23.281	0.507	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.16	
8	0.6844	1157.6	1178.1	0.000	2.415	73.626	23.421	0.522	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.97	
9	0.6830	1155.0	1175.4	0.000	2.438	73.884	23.167	0.495	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.27	
10	0.6833	1155.3	1175.8	0.000	2.440	73.853	23.175	0.518	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.44	
11	0.6838	1156.2	1176.7	0.000	2.441	73.754	23.252	0.538	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.94	
12	0.6846	1157.7	1178.2	0.000	2.424	73.633	23.355	0.571	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.94	
13	0.6832	1155.5	1176.0	0.000	2.427	73.826	23.250	0.483	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.72	
14	0.6845	1157.6	1178.1	0.000	2.417	73.606	23.436	0.526	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.99	
15	0.6851	1157.9	1178.5	0.000	2.456	73.506	23.465	0.558	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.73	
16	0.6852	1158.6	1179.1	0.000	2.423	73.491	23.529	0.540	0.007	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1424.45	
17	0.6847	1158.3	1178.8	0.000	2.393	73.574	23.494	0.523	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.64	
18	0.6743	1156.2	1176.7	0.000	2.419	73.844	23.149	0.573	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1434.22	
19	0.6823	1154.0	1174.5	0.000	2.434	73.947	23.173	0.432	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.79	
20	0.6833	1155.3	1175.8	0.000	2.448	73.724	23.402	0.412	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.37	
21	0.6837	1155.9	1176.4	0.000	2.450	73.660	23.453	0.422	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.64	
22	0.6833	1155.3	1175.7	0.000	2.447	73.760	23.341	0.438	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1422.34	
23	0.6837	1156.5	1177.0	0.000	2.406	73.695	23.438	0.446	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.49	
24	0.6820	1153.9	1174.3	0.000	2.410	73.960	23.252	0.364	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.98	
25	0.6837	1156.6	1177.1	0.000	2.407	73.750	23.320	0.509	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.52	
26	0.6836	1156.2	1176.7	0.000	2.419	73.778	23.276	0.512	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.17	
27	0.6846	1157.8	1178.3	0.000	2.417	73.540	23.550	0.478	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1424.06	
28	0.6837	1156.8	1177.3	0.000	2.395	73.689	23.456	0.445	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.76	
29	0.6842	1157.2	1177.7	0.000	2.420	73.588	23.525	0.452	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.70	
30	0.6835	1156.3	1176.8	0.000	2.399	73.746	23.389	0.452	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.46	
Avg	0.6836	1157.0	1177.0	0.000	2.424	73.713	23.348	0.501	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1423.69	

Zone 33

GQ Source Daily Summary

November 2010

Number: 331 **Pressure Base:** 14.730 **Contract Day:** 1

Name: MARMARTH PLANT **Temperature Base:** **Contract Hour:** 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.8011	1144.1	1164.3	2.135	10.967	53.570	30.089	2.947	0.066	0.198	0.008	0.020	0.002	0.000	0.000	0.000	0.000	1300.89	
2	0.8049	1146.2	1166.5	2.326	10.908	52.983	30.551	2.936	0.067	0.198	0.008	0.020	0.002	0.000	0.000	0.000	0.000	1300.20	
3	0.8032	1149.6	1170.0	2.059	10.943	52.944	30.916	2.864	0.063	0.184	0.007	0.018	0.002	0.000	0.000	0.000	0.000	1305.51	
4	0.7971	1150.0	1170.3	1.722	10.861	53.694	30.761	2.696	0.061	0.178	0.007	0.018	0.002	0.000	0.000	0.000	0.000	1310.86	
5	0.8019	1152.5	1172.9	1.918	10.856	53.130	30.934	2.876	0.065	0.192	0.008	0.020	0.002	0.000	0.000	0.000	0.000	1309.85	
6	0.8015	1146.6	1166.9	2.061	10.962	53.498	30.177	2.991	0.070	0.208	0.009	0.022	0.002	0.000	0.000	0.000	0.000	1303.45	
7	0.8012	1145.4	1165.7	2.081	10.976	53.537	30.138	2.964	0.069	0.203	0.008	0.021	0.002	0.000	0.000	0.000	0.000	1302.32	
8	0.7950	1133.3	1153.4	1.998	11.256	54.910	28.349	3.165	0.075	0.215	0.008	0.021	0.002	0.000	0.000	0.000	0.000	1293.53	
9	0.7914	1119.5	1139.3	2.217	11.430	56.023	26.632	3.378	0.077	0.215	0.008	0.019	0.002	0.000	0.000	0.000	0.000	1280.67	
10	0.7976	1135.1	1155.2	2.124	11.203	54.350	28.958	3.073	0.068	0.197	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1293.45	
11	0.8008	1145.2	1165.5	2.066	10.978	53.409	30.426	2.852	0.062	0.180	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1302.39	
12	0.8015	1148.6	1169.0	2.054	10.850	53.347	30.565	2.912	0.063	0.183	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1305.74	
13	0.8030	1149.3	1169.7	2.089	10.896	53.074	30.749	2.924	0.062	0.180	0.007	0.017	0.001	0.000	0.000	0.000	0.000	1305.30	
14	0.8079	1140.6	1160.8	2.736	10.904	53.063	29.794	3.184	0.073	0.215	0.008	0.021	0.002	0.000	0.000	0.000	0.000	1291.51	
15	0.8056	1139.3	1159.5	2.692	10.837	53.095	30.233	2.867	0.063	0.185	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1291.83	
16	0.8045	1151.3	1171.7	2.141	10.840	52.816	31.028	2.900	0.063	0.186	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1306.31	
17	0.8052	1151.3	1171.6	2.208	10.804	52.812	30.941	2.952	0.065	0.191	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1305.72	
18	0.8058	1153.9	1174.4	2.211	10.692	52.660	31.247	2.914	0.064	0.186	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1308.28	
19	0.8049	1150.0	1170.3	2.203	10.867	52.780	30.972	2.903	0.064	0.185	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1304.47	
20	0.8027	1144.8	1165.0	2.205	10.976	53.257	30.348	2.934	0.065	0.189	0.007	0.018	0.002	0.000	0.000	0.000	0.000	1300.31	
21	0.8037	1147.9	1168.2	2.178	10.918	53.014	30.688	2.931	0.063	0.183	0.007	0.017	0.001	0.000	0.000	0.000	0.000	1303.09	
22	0.8008	1147.2	1167.5	2.096	10.808	53.407	30.625	2.797	0.062	0.179	0.007	0.017	0.001	0.000	0.000	0.000	0.000	1304.71	
23	0.7974	1149.6	1169.9	1.826	10.763	53.597	30.983	2.567	0.061	0.177	0.007	0.017	0.002	0.000	0.000	0.000	0.000	1310.12	
24	0.8027	1150.5	1170.9	2.041	10.868	53.056	30.887	2.873	0.064	0.186	0.007	0.018	0.001	0.000	0.000	0.000	0.000	1306.92	
25	0.8048	1152.3	1172.7	2.106	10.857	53.095	30.489	3.088	0.081	0.245	0.010	0.026	0.002	0.000	0.000	0.000	0.000	1307.18	
26	0.8041	1151.6	1172.0	2.184	10.721	53.006	30.867	2.937	0.065	0.191	0.007	0.019	0.002	0.000	0.000	0.000	0.000	1306.96	
27	0.8037	1147.8	1168.1	2.196	10.897	53.147	30.476	2.985	0.068	0.200	0.008	0.020	0.002	0.000	0.000	0.000	0.000	1302.96	
28	0.8008	1148.6	1169.0	2.097	10.724	53.494	30.560	2.839	0.066	0.191	0.008	0.019	0.002	0.000	0.000	0.000	0.000	1306.28	
29	0.8008	1149.7	1170.0	2.027	10.764	53.303	30.890	2.749	0.062	0.179	0.007	0.018	0.002	0.000	0.000	0.000	0.000	1307.50	
30	0.7997	1153.0	1173.4	1.797	10.809	53.190	31.277	2.669	0.060	0.172	0.007	0.017	0.002	0.000	0.000	0.000	0.000	1312.19	
Avg	0.8019	1147.0	1166.9	2.126	10.902	53.369	30.395	2.921	0.066	0.192	0.008	0.019	0.002	0.000	0.000	0.000	0.000	1303.09	

*** End of Report***

Zone 34

GQ Source Analysis

Williston Basin Interstate Pipeline Co.

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:	

		Mol %	GPM
C1	Methane	95.949	
C2	Ethane	0.311	0.083
C3	Propane	0.009	0.003
IC4	Iso-Butane	0.007	0.002
NC4	N-Butane	0.000	0.000
IC5	Iso-Pentane	0.000	0.000
NC5	N-Pentane	0.000	0.000
C6	Hexane	0.000	0.000
C7	Heptane		
C8	Octane		
C9	Nonane		
C10	Decane		

		Mol %
CO2	Carbon Dioxide	0.088
N2	Nitrogen	3.635
O2	Oxygen	0.000
HE	Helium	
H2	Hydrogen	
H2S	Hydrogen Sulfide	
AR	Argon	
CO	Carbon Monoxide	
H2O	Water	
Neo-C5	Neo-Pentane	

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	NOV 10	OCT 10	SEPT 10	AUG 10	JULY 10	JUNE 10	MAY 10	APR 10	MAR 10	FEB 10	JAN 10	DEC 09	ZONE
MT/ND	211	Sidney Area	1189	1210	1206	1209	1208	1204	1197	1199	1197	1193	1132	1155	1152	21
ND	24	Williston Area	1190	1208	1193	1200	1212	1208	1171	1186	1192	1200	1161	1176	1173	24
ND	25	Watford City Area	1131	1133	1130	1133	1129	1130	1134	1132	1128	1132	1125	1132	1131	25
ND	261	Williston - Tioga - Minot Line	1146	1135	1140	1145	1161	1160	1147	1134	1150	1156	1144	1141	1142	261
ND	262	Minot Area	1181	1186	1190	1191	1189	1193	1188	1187	1184	1175	1164	1163	1163	262
ND	263	Tioga - Portal	1105	1107	1120	1133	1127	1124	1104	1102	1110	1090	1078	1073	1090	263
ND	264	Williston - Ray	1190	1208	1193	1200	1212	1208	1171	1186	1192	1200	1161	1176	1173	264
ND	271	Bismarck - Cleveland	1169	1172	1190	1191	1187	1193	1186	1185	1183	1164	1117	1135	1128	271
ND	272	Cleveland - Mapleton	1169	1171	1190	1190	1187	1193	1187	1186	1182	1163	1115	1134	1128	272
ND	273	Cleveland - Grafton	1169	1172	1190	1190	1187	1193	1187	1186	1182	1163	1116	1135	1128	273
ND	28	Bismarck - Cabin Creek	1125	1097	1173	1191	1182	1193	1186	1174	1178	1055	1023	1025	1018	28
ND	31	Dickinson Area	1046	1082	1088	1056	1065	1023	1053	1066	1033	1029	1021	1017	1019	31
ND/MT	32	Cabin Creek - Dickinson	1027	1079	1075	1040	1031	986	1043	1005	996	1022	1019	1015	1017	32
ND	33	Killdeer	1171	1177	1179	1179	1177	1177	1172	1169	1168	1169	1163	1160	1158	33
ND	34	Bowman Area	1162	1167	1163	1157	1157	1156	1165	1162	1170	1169	1172	1161	1150	34
ND	35	Baker Field - North Dakota	979	979	979	979	979	979	979	978	978	978	978	978	978	35

THERMAL ZONE VARIANCE DOCUMENTATION November 2010		
ZONE	***BTU VARIANCE***	***REASON***
28	-76	Lower BTU gas coming from West