



MONTANA-DAKOTA

UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

August 9, 2013

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

Re: Case No. 11,006 (Therm Billing)
Monthly Report – June 2013

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 July 2013.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our supplier for the month of June, 2013. There is a report for each of the 17 thermal zones for the month.
3. Attachment C is a listing which states the type of measuring device in place at each zone.
4. Attachment D is a monthly list of the heating value data, by zone, for the most recent 12-month period and an average thereof. It is being provided pursuant to a Staff request.
5. Attachment E provides a brief explanation of the thermal variances, where applicable, for the month of June 2013.

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
Director of Regulatory Affairs

Montana-Dakota Utilities Co.
Therm Billing Factors- North Dakota
July 2013

MDU-303-ALEXANDER	025	1.122067
MDU-308-ARNEGARD	025	1.122067
MDU-314-APPLE VALLEY	271	1.141439
MDU-318-BEACH	032	1.011003
MDU-319-BELFIELD	032	1.018430
MDU-323-BERTHOLD	262	1.111678
MDU-327-BISMARCK	028	1.140474
MDU-330-BOWMAN	034	1.028345
MDU-337-BURLINGTON	262	1.135650
MDU-343-CARRINGTON	273	1.142404
MDU-344-CLEVELAND	272	1.133407
MDU-364-CAVALIER	273	1.159620
MDU-365-DAWSON	271	1.133407
MDU-368-DES LACS	262	1.123473
MDU-369-DICKINSON	031	1.059615
MDU-374-FT TOTTEN	273	1.150441
MDU-375-DEVILS LAKE	273	1.150441
MDU-379-BARLOW	273	1.142404
MDU-384-EPPING	264	1.129623
MDU-387-ELDRIDGE	272	1.141439
MDU-407-GLADSTONE	031	1.059615
MDU-411-GLEN ULLIN	311	1.036118
MDU-413-GOLVA	032	1.001613
MDU-416-GARRISON	262	1.123473
MDU-417-GRAFTON	273	1.174555
MDU-429-HEBRON	311	1.036118
MDU-432-HETTINGER	903	2.387549
MDU-449-JAMESTOWN	272	1.149469
MDU-459-KILLDEER	033	1.114511
MDU-463-LANGDON	273	1.142404
MDU-469-LEFOR	031	1.059615
MDU-474-LIGNITE	263	1.072104
MDU-475-LINTON	802	0.999603
MDU-478-LINCOLN	028	1.140474
MDU-494-MEDINA	271	1.133407
MDU-498-MANDAN	028	1.140474
MDU-500-MARMARTH	034	1.035954
MDU-505-MINOT	262	1.139509
MDU-510-MOTT	031	1.059615
MDU-512-MAX	262	1.115456
MDU-522-NEW ENGLAND	031	1.051943
MDU-524-NEW SALEM	028	1.116400
MDU-532-NEW ROCKFORD	273	1.142404
MDU-539-PARK RIVER	273	1.166517
MDU-540-PALERMO	262	1.115456
MDU-558-RAY	264	1.129623
MDU-561-REGENT	031	1.059615
MDU-563-RHAME	034	1.020734
MDU-564-RICHARDTON	311	1.021223
MDU-568-ROSS	261	1.083995
MDU-572-RUTHVILLE	262	1.139509
MDU-574-SANBORN	272	1.149469
MDU-583-SENTINEL BUTTE	032	1.016547
MDU-588-SOUTH HEART	031	1.051943

MDU-717-SPIRITWOOD	272	1.149469
MDU-590-SPRINGBROOK	264	1.129623
MDU-591-STANLEY	261	1.091843
MDU-593-STEELE	271	1.133407
MDU-598-SHEYENNE	273	1.150441
MDU-605-SURREY	262	1.139509
MDU-610-TAPPEN	271	1.133407
MDU-611-TAYLOR	031	1.051943
MDU-616-TIOGA	261	1.099691
MDU-619-TURTLE LAKE	262	1.123473
MDU-620-TRENTON	024	1.137743
MDU-624-UNDERWOOD	262	1.123473
MDU-625-VALLEY CITY	272	1.157500
MDU-629-WALHALLA	273	1.166517
MDU-632-WATFORD CITY	025	1.122067
MDU-636-WHEELOCK	264	1.121504
MDU-637-WHITE EARTH	261	1.091843
MDU-642-WILLISTON	024	1.137743
MDU-646-WASHBURN	262	1.131491
MDU-647-WILTON	262	1.111678
MDU-664-RIVERDALE	262	1.123473
MDU-691-FAIRVIEW	241	1.146304
MDU-712-MINOT AFB	262	1.139509
MDU-732-MSR SITE	273	1.135650

GQ Source Daily Summary

June 2013

Number: 251 Pressure Base: 14.730 Contract Day: 1
 Name: SIDNEY BORDER-MONDAK JNCTN-SIDNEY 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	0.7371	1189.4	1210.4	1.151	3.659	68.424	21.977	4.418	0.122	0.223	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1409.82	
2	0.7371	1189.1	1210.1	1.156	3.668	68.537	21.744	4.522	0.123	0.225	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1409.49	
3	0.7344	1184.7	1205.7	1.165	3.669	68.667	21.987	4.183	0.109	0.198	0.011	0.009	0.002	0.000	0.000	0.000	0.000	1406.89	
4	0.7337	1183.7	1204.6	1.153	3.684	68.798	21.891	4.111	0.119	0.220	0.012	0.010	0.002	0.000	0.000	0.000	0.000	1406.33	
5	0.7330	1182.2	1203.1	1.161	3.698	68.941	21.724	4.117	0.117	0.218	0.012	0.010	0.002	0.000	0.000	0.000	0.000	1405.24	
6	0.7333	1182.5	1203.4	1.165	3.695	69.033	21.494	4.256	0.117	0.217	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1405.36	
7	0.7339	1183.8	1204.8	1.164	3.670	68.974	21.514	4.327	0.114	0.213	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1406.39	
8	0.7348	1185.9	1206.9	1.149	3.655	68.798	21.689	4.355	0.116	0.214	0.012	0.010	0.002	0.000	0.000	0.000	0.000	1407.97	
9	0.7372	1189.7	1210.7	1.147	3.647	68.675	21.476	4.691	0.119	0.219	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1410.17	
10	0.7350	1185.7	1206.7	1.155	3.672	68.866	21.498	4.457	0.116	0.211	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1407.57	
11	0.7375	1190.1	1211.2	1.155	3.643	68.541	21.669	4.637	0.117	0.215	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1410.36	
12	0.7373	1189.0	1210.0	1.171	3.665	68.598	21.581	4.629	0.117	0.215	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1409.21	
13	0.7372	1188.8	1209.8	1.164	3.677	68.700	21.399	4.696	0.120	0.220	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1409.09	
14	0.7354	1186.0	1207.0	1.159	3.693	68.711	21.699	4.385	0.115	0.213	0.012	0.010	0.003	0.000	0.000	0.000	0.000	1407.43	
15	0.7359	1186.6	1207.6	1.153	3.707	68.624	21.770	4.385	0.118	0.218	0.012	0.010	0.002	0.000	0.000	0.000	0.000	1407.75	
16	0.7363	1187.5	1208.5	1.147	3.706	68.545	21.848	4.385	0.120	0.225	0.012	0.010	0.002	0.000	0.000	0.000	0.000	1408.34	
17	0.7383	1190.8	1211.8	1.155	3.680	68.289	21.982	4.524	0.120	0.225	0.012	0.010	0.002	0.000	0.000	0.000	0.000	1410.34	
18	0.7410	1195.3	1216.5	1.149	3.659	68.188	21.693	4.918	0.128	0.238	0.013	0.011	0.003	0.000	0.000	0.000	0.000	1413.19	
19	0.7477	1206.2	1227.5	1.143	3.629	67.714	21.440	5.562	0.168	0.306	0.019	0.016	0.005	0.000	0.000	0.000	0.000	1419.61	
20	0.7403	1194.2	1215.3	1.177	3.620	68.101	21.995	4.768	0.111	0.204	0.012	0.009	0.003	0.000	0.000	0.000	0.000	1412.52	
21	0.7391	1192.5	1213.7	1.167	3.627	68.279	21.872	4.716	0.112	0.205	0.012	0.010	0.001	0.000	0.000	0.000	0.000	1411.68	
22	0.7390	1192.5	1213.6	1.155	3.633	68.375	21.714	4.778	0.114	0.209	0.012	0.010	0.000	0.000	0.000	0.000	0.000	1411.78	
23	0.7408	1195.2	1216.3	1.158	3.640	68.239	21.597	5.022	0.116	0.208	0.012	0.010	0.000	0.000	0.000	0.000	0.000	1413.16	
24	0.7410	1195.7	1216.9	1.165	3.614	68.329	21.441	5.079	0.123	0.225	0.013	0.011	0.000	0.000	0.000	0.000	0.000	1413.59	
25	0.7408	1195.4	1216.6	1.148	3.631	68.304	21.540	4.989	0.128	0.235	0.014	0.011	0.000	0.000	0.000	0.000	0.000	1413.52	
26	0.7425	1198.4	1219.6	1.151	3.608	68.077	21.634	5.168	0.120	0.219	0.013	0.010	0.000	0.000	0.000	0.000	0.000	1415.40	
27	0.7417	1197.1	1218.3	1.153	3.613	68.378	21.211	5.263	0.128	0.230	0.013	0.011	0.000	0.000	0.000	0.000	0.000	1414.56	
28	0.7467	1204.3	1225.6	1.158	3.623	67.950	21.231	5.505	0.181	0.308	0.022	0.021	0.000	0.000	0.000	0.000	0.000	1418.38	
29	0.7429	1199.5	1220.7	1.143	3.592	68.154	21.479	5.227	0.136	0.242	0.015	0.013	0.000	0.000	0.000	0.000	0.000	1416.21	
30	0.7369	1189.8	1210.8	1.147	3.614	68.578	21.796	4.497	0.119	0.222	0.014	0.012	0.000	0.000	0.000	0.000	0.000	1410.57	
Avg	0.7383	1191.0	1212.1	1.156	3.653	68.480	21.653	4.686	0.123	0.225	0.013	0.011	0.002	0.000	0.000	0.000	0.000	1410.73	

Zone 211

GQ Source Daily Summary

June 2013

Number: 372 Pressure Base: 14.730 Contract Day: 1
 Name: NESSON PLANT-CHARBONNEAU STATION 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	0.7083	1173.0	1193.7	0.778	2.511	73.504	19.022	3.831	0.124	0.210	0.007	0.007	0.004	0.000	0.000	0.000	0.000	1418.42	
2	0.7068	1166.6	1187.3	0.723	2.848	72.873	20.132	3.139	0.095	0.170	0.007	0.007	0.006	0.000	0.000	0.000	0.000	1412.24	
3	0.7013	1156.2	1176.7	0.629	3.112	73.033	20.589	2.420	0.068	0.128	0.006	0.006	0.011	0.000	0.000	0.000	0.000	1405.15	
4	0.7078	1167.3	1188.0	0.758	2.851	72.656	20.386	3.048	0.094	0.177	0.009	0.010	0.011	0.000	0.000	0.000	0.000	1412.05	
5	0.7084	1169.1	1189.8	0.752	2.803	72.753	20.117	3.272	0.100	0.181	0.007	0.007	0.006	0.000	0.000	0.000	0.000	1413.63	
6	0.7169	1179.1	1200.0	0.770	2.960	71.865	20.222	3.680	0.140	0.300	0.022	0.026	0.015	0.000	0.000	0.000	0.000	1417.25	
7	0.7077	1166.2	1186.8	0.756	2.909	72.974	19.757	3.257	0.107	0.205	0.011	0.013	0.011	0.000	0.000	0.000	0.000	1410.78	
8	0.7128	1173.5	1194.3	0.791	2.887	72.153	20.358	3.476	0.108	0.203	0.009	0.009	0.006	0.000	0.000	0.000	0.000	1414.60	
9	0.7090	1171.6	1192.3	0.794	2.639	73.029	19.648	3.570	0.111	0.193	0.007	0.006	0.003	0.000	0.000	0.000	0.000	1416.07	
10	0.7108	1175.8	1196.6	0.783	2.570	72.972	19.518	3.788	0.127	0.222	0.008	0.008	0.004	0.000	0.000	0.000	0.000	1419.31	
11	0.7101	1172.6	1193.3	0.764	2.734	72.750	19.898	3.508	0.115	0.208	0.008	0.008	0.007	0.000	0.000	0.000	0.000	1416.11	
12	0.7158	1176.6	1197.4	0.773	3.015	71.459	21.020	3.363	0.112	0.224	0.012	0.013	0.008	0.000	0.000	0.000	0.000	1415.25	
13	0.7174	1179.1	1200.0	0.783	2.991	71.493	20.783	3.489	0.128	0.275	0.020	0.024	0.014	0.000	0.000	0.000	0.000	1416.72	
14	0.7176	1180.8	1201.7	0.778	2.916	71.549	20.712	3.575	0.132	0.281	0.019	0.023	0.012	0.000	0.000	0.000	0.000	1418.53	
15	0.7179	1180.5	1201.4	0.783	2.955	71.544	20.692	3.504	0.138	0.309	0.025	0.031	0.017	0.000	0.000	0.000	0.000	1417.86	
16	0.7164	1177.7	1198.5	0.795	2.970	71.463	20.955	3.444	0.112	0.224	0.013	0.014	0.009	0.000	0.000	0.000	0.000	1415.97	
17	0.7175	1180.1	1201.0	0.775	2.955	71.532	20.681	3.615	0.130	0.267	0.016	0.018	0.010	0.000	0.000	0.000	0.000	1417.80	
18	0.7165	1178.9	1199.8	0.779	2.926	71.715	20.525	3.636	0.126	0.253	0.015	0.016	0.009	0.000	0.000	0.000	0.000	1417.38	
19	0.7193	1183.3	1204.2	0.782	2.917	71.560	20.366	3.881	0.144	0.297	0.019	0.022	0.012	0.000	0.000	0.000	0.000	1419.82	
20	0.7149	1175.6	1196.4	0.783	2.967	71.895	20.458	3.487	0.119	0.246	0.016	0.018	0.011	0.000	0.000	0.000	0.000	1415.04	
21	0.7154	1177.8	1198.7	0.780	2.887	71.965	20.393	3.511	0.134	0.284	0.020	0.024	0.002	0.000	0.000	0.000	0.000	1417.16	
22	0.7095	1168.6	1189.3	0.772	2.905	72.410	20.514	3.087	0.098	0.190	0.011	0.012	0.000	0.000	0.000	0.000	0.000	1411.96	
23	0.7115	1170.0	1190.7	0.787	2.987	72.038	20.735	3.150	0.097	0.188	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1411.63	
24	0.7134	1173.3	1194.1	0.780	2.974	71.907	20.687	3.308	0.105	0.210	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1413.74	
25	0.7152	1175.5	1196.4	0.774	3.016	71.641	20.834	3.360	0.111	0.231	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1414.63	
26	0.7183	1180.5	1201.4	0.766	3.014	71.529	20.608	3.588	0.137	0.304	0.024	0.030	0.000	0.000	0.000	0.000	0.000	1417.50	
27	0.7164	1177.4	1198.3	0.746	3.053	71.846	20.346	3.511	0.135	0.302	0.026	0.033	0.000	0.000	0.000	0.000	0.000	1415.74	
28	0.7160	1177.0	1197.9	0.759	3.023	71.774	20.529	3.460	0.126	0.276	0.023	0.028	0.000	0.000	0.000	0.000	0.000	1415.62	
29	0.7164	1176.9	1197.7	0.798	3.004	71.640	20.725	3.388	0.124	0.272	0.021	0.026	0.000	0.000	0.000	0.000	0.000	1415.12	
30	0.7186	1179.6	1200.5	0.793	3.051	71.388	20.796	3.488	0.132	0.296	0.025	0.032	0.000	0.000	0.000	0.000	0.000	1416.23	
Avg	0.7135	1175.0	1195.5	0.769	2.912	72.097	20.400	3.428	0.118	0.238	0.015	0.017	0.006	0.000	0.000	0.000	0.000	1415.31	

Zone 24, 264

GQ Source Analysis

WBI Energy Transmission, Inc.

GQ Source Number:	0602230	Specific Gravity:	0.7073
GQ Source Name:	WATFORD CITY BORDER	Dry Heat Value:	1187.66
Effective Date:	6/1/2013 9:00:00 AM	Wet Heat Value:	1166.99
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1187.66
Pressure Base:	14.730	Sample Pressure:	410.00
Viscosity:		Sample Temperature:	

		<u>Mol %</u>	<u>Liquid Content</u>			<u>Mol %</u>
C1	Methane	72.951		C02	Carbon Dioxide	0.771
C2	Ethane	19.725	5.2596	N2	Nitrogen	2.761
C3	Propane	3.448	0.9471	O2	Oxygen	0.000
IC4	Isobutane	0.114	0.0372	He	Helium	
NC4	n-Butane	0.207	0.0653	H2	Hydrogen	
IC5	Isopentane	0.011	0.0041	H2S	Hydrogen Sulfide	
NC5	n-Pentane	0.012	0.0042	Ar	Argon	
C6	Hexanes	0.000	0.0000	CO	Carbon Monoxide	
C7	Heptanes			H2	Water	
C8	Octanes			Neo-C5	Neopentane	
C9	Nonanes					
C10	Decanes					

Totals 100.000% 6.318 GPM

Sample Date: 7/1/2013 12:00:00 AM
Sample Type: Spot
Sample Tech: PP
H2S: ppm

Sample Remarks:

Analysis Tech: MB

Analysis Remarks:

Zone 25

GQ Source Analysis

WBI Energy Transmission, Inc.

GQ Source Number:	0602160	Specific Gravity:	0.7338
GQ Source Name:	FAIRVIEW BORDER	Dry Heat Value:	1205.45
Effective Date:	6/1/2013 9:00:00 AM	Wet Heat Value:	1184.47
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1205.45
Pressure Base:	14.730	Sample Pressure:	340.00
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>			<u>Mol %</u>	
C1	Methane	68.789		CO2	Carbon Dioxide	1.165
C2	Ethane	21.605	5.7608	N2	Nitrogen	3.592
C3	Propane	4.503	1.2371	O2	Oxygen	0.000
IC4	Isobutane	0.117	0.0383	He	Helium	
NC4	n-Butane	0.207	0.0650	H2	Hydrogen	
IC5	Isopentane	0.011	0.0039	H2S	Hydrogen Sulfide	
NC5	n-Pentane	0.012	0.0042	Ar	Argon	
C6	Hexanes	0.000	0.0000	CO	Carbon Monoxide	
C7	Heptanes			H2	Water	
C8	Octanes			Neo-C5	Neopentane	
C9	Nonanes					
C10	Decanes					

Totals 100.000% 7.109 GPM

Sample Date: 7/1/2013 12:00:00 AM
Sample Type: Spot
Sample Tech: RR
H2S: ppm

Sample Remarks:

Analysis Tech: MB

Analysis Remarks:

Zone 241

GQ Source Daily Summary

June 2013

Number: 163

Pressure Base: 14.730

Contract Day: 1

Name: NORTH TIOGA TRANSFER-PALERMO BORDER LI

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	0.6823	1130.9	1151.0	0.259	3.437	75.337	19.357	1.508	0.030	0.065	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1393.40	
2	0.6770	1124.1	1144.0	0.133	3.549	75.940	19.031	1.299	0.015	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1390.38	
3	0.6656	1106.7	1126.3	0.004	3.730	77.365	18.272	0.624	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1380.63	
4	0.6736	1116.5	1136.3	0.117	3.717	76.465	18.481	1.171	0.015	0.032	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1384.47	
5	0.6820	1128.9	1148.8	0.198	3.633	75.339	19.130	1.626	0.024	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1391.09	
6	0.6813	1126.7	1146.6	0.197	3.693	75.701	18.555	1.724	0.035	0.084	0.004	0.006	0.000	0.000	0.000	0.000	0.000	1389.18	
7	0.6796	1124.8	1144.7	0.180	3.681	75.844	18.567	1.652	0.022	0.051	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1388.52	
8	0.6836	1129.4	1149.4	0.266	3.639	75.194	19.133	1.661	0.034	0.073	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1390.21	
9	0.6858	1132.8	1152.8	0.291	3.611	74.826	19.424	1.754	0.030	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1392.03	
10	0.6856	1133.5	1153.5	0.285	3.556	74.973	19.257	1.818	0.032	0.074	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1393.10	
11	0.6812	1127.3	1147.2	0.241	3.587	75.552	18.934	1.607	0.025	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1389.98	
12	0.6759	1119.4	1139.2	0.213	3.606	76.244	18.632	1.215	0.027	0.061	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1385.74	
13	0.6796	1128.2	1148.2	0.189	3.458	76.001	18.612	1.629	0.031	0.074	0.002	0.004	0.000	0.000	0.000	0.000	0.000	1392.76	
14	0.6754	1125.0	1145.0	0.122	3.354	76.554	18.465	1.446	0.018	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.21	
15	0.6754	1125.0	1145.0	0.122	3.354	76.554	18.465	1.446	0.018	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.21	
16	0.6754	1125.0	1145.0	0.122	3.354	76.554	18.465	1.446	0.018	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.21	
17	0.6754	1125.0	1145.0	0.122	3.354	76.554	18.465	1.446	0.018	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.21	
18	0.6742	1120.2	1140.0	0.233	3.370	76.295	19.221	0.763	0.032	0.079	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1388.44	
19	0.6752	1140.5	1160.7	0.324	3.193	76.203	20.275	0.001	0.000	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1412.47	
20	0.6937	1151.2	1171.6	0.268	3.514	74.378	19.284	2.390	0.040	0.091	0.008	0.026	0.000	0.000	0.000	0.000	0.000	1406.76	
21	0.6996	1155.7	1176.2	0.240	3.570	73.730	19.157	3.118	0.049	0.114	0.009	0.011	0.000	0.000	0.000	0.000	0.000	1406.22	
22	0.6968	1151.8	1172.2	0.214	3.584	74.015	19.062	3.022	0.030	0.064	0.005	0.006	0.000	0.000	0.000	0.000	0.000	1404.32	
23	0.6939	1146.6	1166.9	0.231	3.606	74.260	19.112	2.685	0.031	0.066	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1400.86	
24	0.6946	1147.5	1167.8	0.231	3.623	74.225	19.068	2.723	0.036	0.079	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1401.17	
25	0.6932	1148.0	1168.3	0.168	3.551	74.429	19.015	2.720	0.032	0.070	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1403.24	
26	0.6995	1158.0	1178.5	0.188	3.495	73.881	19.181	2.939	0.078	0.186	0.024	0.029	0.000	0.000	0.000	0.000	0.000	1409.16	
27	0.6972	1155.9	1176.4	0.168	3.440	74.030	19.169	3.062	0.035	0.077	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1408.90	
28	0.6995	1160.8	1181.3	0.167	3.359	73.792	19.262	3.298	0.033	0.073	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1412.52	
29	0.6993	1160.3	1180.9	0.164	3.378	73.748	19.357	3.237	0.031	0.069	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1412.12	
30	0.6982	1156.3	1176.7	0.176	3.500	73.949	19.074	3.167	0.035	0.080	0.008	0.010	0.000	0.000	0.000	0.000	0.000	1408.31	
Avg	0.6850	1136.0	1156.2	0.195	3.517	75.264	18.983	1.940	0.029	0.064	0.004	0.005	0.000	0.000	0.000	0.000	0.000	1396.96	

Zone 261



GQ Source Daily Summary

June 2013

Number: 091 Pressure Base: 14.730 Contract Day: 1
 Name: MINOT BRDR-PALERMO BRDR-BISMARCK STATI 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	0.7048	1149.3	1169.7	0.442	4.150	71.809	21.058	2.346	0.061	0.129	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1393.27	
2	0.7058	1149.6	1169.9	0.385	4.321	71.589	21.078	2.446	0.057	0.122	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1392.54	
3	0.7150	1157.9	1178.4	0.475	4.543	70.257	21.663	2.825	0.072	0.155	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1393.52	
4	0.7044	1143.6	1163.9	0.329	4.640	71.626	20.915	2.311	0.057	0.121	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1386.67	
5	0.7070	1146.0	1166.3	0.370	4.668	71.356	20.923	2.486	0.062	0.132	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1387.12	
6	0.7108	1150.8	1171.1	0.412	4.675	70.840	21.183	2.673	0.067	0.143	0.004	0.003	0.000	0.000	0.000	0.000	0.000	1389.08	
7	0.7168	1158.0	1178.5	0.471	4.709	70.016	21.585	2.979	0.074	0.158	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1391.93	
8	0.7177	1158.8	1179.3	0.489	4.707	69.980	21.519	3.047	0.078	0.170	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1392.14	
9	0.7166	1157.4	1177.9	0.478	4.711	70.149	21.389	3.017	0.076	0.167	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1391.44	
10	0.7149	1156.4	1176.8	0.488	4.602	70.356	21.423	2.892	0.073	0.157	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1391.82	
11	0.7162	1158.1	1178.6	0.509	4.583	70.159	21.587	2.910	0.077	0.165	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1392.71	
12	0.7150	1157.5	1178.0	0.501	4.521	70.326	21.551	2.870	0.071	0.153	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1393.14	
13	0.7113	1150.8	1171.2	0.489	4.602	71.069	20.736	2.862	0.074	0.159	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1388.60	
14	0.7135	1152.7	1173.1	0.489	4.689	70.594	21.147	2.838	0.075	0.160	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1388.82	
15	0.7162	1156.0	1176.5	0.491	4.735	70.113	21.533	2.862	0.080	0.174	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1390.22	
16	0.7193	1162.2	1182.8	0.489	4.650	69.771	21.691	3.126	0.082	0.178	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1394.67	
17	0.7211	1165.9	1186.5	0.490	4.599	69.618	21.702	3.293	0.087	0.193	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1397.25	
18	0.7192	1161.7	1182.3	0.488	4.680	69.757	21.690	3.111	0.081	0.178	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1394.07	
19	0.7202	1163.5	1184.1	0.491	4.662	69.688	21.626	3.273	0.079	0.170	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1395.21	
20	0.7225	1167.3	1188.0	0.507	4.613	69.521	21.580	3.500	0.084	0.182	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1397.65	
21	0.7215	1166.2	1186.8	0.504	4.596	69.639	21.555	3.435	0.081	0.177	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1397.20	
22	0.7235	1169.1	1189.8	0.506	4.598	69.461	21.514	3.636	0.084	0.185	0.007	0.009	0.000	0.000	0.000	0.000	0.000	1398.84	
23	0.7237	1169.2	1189.9	0.503	4.623	69.455	21.438	3.709	0.081	0.176	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1398.64	
24	0.7257	1171.6	1192.4	0.507	4.649	69.157	21.626	3.769	0.086	0.189	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1399.72	
25	0.7247	1170.0	1190.7	0.494	4.674	69.246	21.590	3.734	0.079	0.170	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1398.75	
26	0.7239	1168.8	1189.5	0.502	4.663	69.327	21.600	3.651	0.078	0.168	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1398.02	
27	0.7238	1168.3	1189.0	0.501	4.683	69.307	21.633	3.619	0.078	0.167	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1397.59	
28	0.7241	1167.8	1188.5	0.509	4.728	69.295	21.576	3.608	0.085	0.183	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1396.72	
29	0.7247	1170.0	1190.7	0.484	4.692	69.272	21.557	3.699	0.087	0.190	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1398.70	
30	0.7265	1171.7	1192.5	0.496	4.735	69.024	21.691	3.714	0.097	0.216	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1399.05	
Avg	0.7177	1161.0	1181.1	0.476	4.623	70.059	21.445	3.141	0.077	0.166	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1394.17	

Zone 262

Attachment B
Page 6 of 16

GQ Source Analysis

WBI Energy Transmission, Inc.

GQ Source Number:	2501030	Specific Gravity:	0.6674
GQ Source Name:	LIGNITE PLANT	Dry Heat Value:	1127.18
Effective Date:	6/1/2013 9:00:00 AM	Wet Heat Value:	1107.56
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1127.18
Pressure Base:	14.730	Sample Pressure:	470.00
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>		<u>Mol %</u>
C1 Methane	77.412		CO2 Carbon Dioxide	0.090
C2 Ethane	17.639	4.7033	N2 Nitrogen	3.691
C3 Propane	1.164	0.3198	O2 Oxygen	0.000
IC4 Isobutane	0.003	0.0009	He Helium	
NC4 n-Butane	0.000	0.0000	H2 Hydrogen	
IC5 Isopentane	0.000	0.0000	H2S Hydrogen Sulfide	
NC5 n-Pentane	0.000	0.0000	Ar Argon	
C6 Hexanes	0.000	0.0000	CO Carbon Monoxide	
C7 Heptanes			H2 Water	
C8 Octanes			Neo-C5 Neopentane	
C9 Nonanes				
C10 Decanes				

Totals 99.997% 5.024 GPM

Sample Date: 7/1/2013 12:00:00 AM
Sample Type: Spot
Sample Tech: PP
H2S: ppm

Sample Remarks:

Analysis Tech: MB

Analysis Remarks:

Zone 263

*** End of Report ***

GQ Source Daily Summary

June 2013

Number: 043

Pressure Base: 14.730

Contract Day: 1

Name: BISMARCK STATION-CLEVELAND STATION

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	0.7047	1148.6	1169.0	0.385	4.273	71.866	20.893	2.372	0.055	0.118	0.006	0.007	0.025	0.000	0.000	0.000	0.000	0.000	1392.50
2	0.7145	1157.1	1177.6	0.495	4.504	70.534	21.369	2.821	0.073	0.158	0.010	0.010	0.025	0.000	0.000	0.000	0.000	0.000	1393.16
3	0.7082	1149.6	1170.0	0.384	4.538	71.381	20.869	2.599	0.060	0.130	0.007	0.007	0.024	0.000	0.000	0.000	0.000	0.000	1390.29
4	0.7039	1142.6	1162.8	0.351	4.614	71.893	20.631	2.291	0.057	0.122	0.006	0.006	0.027	0.000	0.000	0.000	0.000	0.000	1385.99
5	0.7108	1150.7	1171.1	0.433	4.642	71.032	20.945	2.692	0.067	0.145	0.008	0.009	0.027	0.000	0.000	0.000	0.000	0.000	1389.06
6	0.7162	1157.5	1178.0	0.485	4.658	70.308	21.282	2.995	0.073	0.158	0.009	0.009	0.024	0.000	0.000	0.000	0.000	0.000	1391.92
7	0.7160	1156.7	1177.2	0.489	4.675	70.490	20.983	3.058	0.080	0.178	0.011	0.012	0.023	0.000	0.000	0.000	0.000	0.000	1391.22
8	0.7145	1155.9	1176.4	0.470	4.619	70.580	21.123	2.939	0.071	0.156	0.009	0.010	0.024	0.000	0.000	0.000	0.000	0.000	1391.67
9	0.7153	1157.3	1177.8	0.513	4.537	70.460	21.311	2.903	0.075	0.162	0.009	0.009	0.022	0.000	0.000	0.000	0.000	0.000	1392.67
10	0.7127	1155.1	1175.6	0.491	4.467	70.822	21.155	2.814	0.068	0.146	0.008	0.008	0.020	0.000	0.000	0.000	0.000	0.000	1392.46
11	0.7082	1145.2	1165.5	0.489	4.649	71.793	19.964	2.819	0.076	0.166	0.010	0.011	0.023	0.000	0.000	0.000	0.000	0.000	1384.87
12	0.7149	1155.9	1176.4	0.491	4.625	70.416	21.353	2.845	0.073	0.159	0.009	0.009	0.020	0.000	0.000	0.000	0.000	0.000	1391.29
13	0.7159	1155.9	1176.4	0.490	4.721	70.246	21.406	2.843	0.080	0.177	0.010	0.011	0.018	0.000	0.000	0.000	0.000	0.000	1390.31
14	0.7186	1161.2	1181.8	0.490	4.645	69.986	21.485	3.087	0.082	0.183	0.011	0.012	0.019	0.000	0.000	0.000	0.000	0.000	1394.12
15	0.7207	1165.5	1186.1	0.495	4.573	69.797	21.537	3.279	0.084	0.190	0.011	0.013	0.021	0.000	0.000	0.000	0.000	0.000	1397.18
16	0.7199	1163.1	1183.7	0.498	4.640	69.841	21.533	3.172	0.083	0.187	0.011	0.012	0.021	0.000	0.000	0.000	0.000	0.000	1395.08
17	0.7205	1164.2	1184.8	0.498	4.632	69.760	21.535	3.288	0.077	0.170	0.009	0.010	0.020	0.000	0.000	0.000	0.000	0.000	1395.83
18	0.7226	1167.8	1188.5	0.507	4.594	69.639	21.420	3.526	0.085	0.187	0.011	0.012	0.020	0.000	0.000	0.000	0.000	0.000	1398.12
19	0.7214	1166.5	1187.2	0.511	4.557	69.828	21.340	3.444	0.085	0.189	0.011	0.012	0.022	0.000	0.000	0.000	0.000	0.000	1397.68
20	0.7237	1169.4	1190.1	0.496	4.617	69.593	21.239	3.762	0.079	0.173	0.010	0.011	0.022	0.000	0.000	0.000	0.000	0.000	1398.94
21	0.7246	1170.9	1191.6	0.505	4.595	69.474	21.394	3.736	0.083	0.186	0.011	0.012	0.022	0.000	0.000	0.000	0.000	0.000	1399.86
22	0.7259	1172.1	1192.9	0.503	4.642	69.253	21.535	3.766	0.085	0.192	0.011	0.012	0.020	0.000	0.000	0.000	0.000	0.000	1400.13
23	0.7245	1170.3	1191.0	0.494	4.633	69.421	21.461	3.723	0.077	0.170	0.010	0.010	0.020	0.000	0.000	0.000	0.000	0.000	1399.31
24	0.7232	1167.8	1188.5	0.500	4.655	69.546	21.439	3.597	0.077	0.168	0.009	0.009	0.020	0.000	0.000	0.000	0.000	0.000	1397.61
25	0.7238	1167.9	1188.6	0.511	4.693	69.485	21.423	3.603	0.082	0.181	0.010	0.011	0.020	0.000	0.000	0.000	0.000	0.000	1397.08
26	0.7234	1168.1	1188.8	0.478	4.689	69.573	21.336	3.635	0.082	0.183	0.011	0.012	0.020	0.000	0.000	0.000	0.000	0.000	1397.76
27	0.7272	1173.1	1193.9	0.498	4.715	69.118	21.571	3.714	0.103	0.239	0.018	0.021	0.020	0.000	0.000	0.000	0.000	0.000	1399.98
28	0.7272	1173.6	1194.4	0.498	4.677	69.066	21.612	3.851	0.084	0.188	0.011	0.013	0.020	0.000	0.000	0.000	0.000	0.000	1400.70
29	0.7284	1175.4	1196.2	0.499	4.685	68.879	21.716	3.929	0.083	0.186	0.011	0.012	0.020	0.000	0.000	0.000	0.000	0.000	1401.58
30	0.7285	1174.8	1195.6	0.501	4.731	68.842	21.713	3.917	0.084	0.188	0.011	0.012	0.020	0.000	0.000	0.000	0.000	0.000	1400.73
Avg	0.7187	1162.0	1182.6	0.482	4.616	70.097	21.286	3.234	0.078	0.171	0.010	0.011	0.015	0.000	0.000	0.000	0.000	0.000	1394.97

Zone 271

GQ Source Daily Summary

June 2013

Number: 063

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND STATION-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	0.7032	1148.6	1169.0	0.376	4.144	72.096	20.890	2.282	0.056	0.118	0.006	0.007	0.023	0.000	0.000	0.000	0.000	1393.99	
2	0.7151	1158.9	1179.4	0.485	4.471	70.382	21.573	2.814	0.071	0.156	0.009	0.010	0.026	0.000	0.000	0.000	0.000	1394.69	
3	0.7132	1156.2	1176.7	0.451	4.510	70.577	21.500	2.709	0.068	0.146	0.008	0.008	0.023	0.000	0.000	0.000	0.000	1393.26	
4	0.7049	1144.6	1164.9	0.340	4.603	71.692	20.836	2.316	0.056	0.120	0.007	0.007	0.026	0.000	0.000	0.000	0.000	1387.47	
5	0.7093	1149.3	1169.6	0.403	4.634	71.166	20.988	2.564	0.064	0.138	0.008	0.008	0.027	0.000	0.000	0.000	0.000	1388.79	
6	0.7159	1157.4	1177.9	0.472	4.658	70.246	21.461	2.893	0.072	0.156	0.009	0.009	0.025	0.000	0.000	0.000	0.000	1392.06	
7	0.7186	1160.6	1181.2	0.502	4.660	69.988	21.467	3.079	0.080	0.177	0.011	0.011	0.023	0.000	0.000	0.000	0.000	1393.44	
8	0.7166	1157.9	1178.4	0.476	4.678	70.246	21.320	2.997	0.075	0.165	0.010	0.011	0.022	0.000	0.000	0.000	0.000	1392.11	
9	0.7161	1158.2	1178.7	0.505	4.571	70.290	21.449	2.908	0.075	0.161	0.009	0.009	0.023	0.000	0.000	0.000	0.000	1392.93	
10	0.7159	1158.9	1179.5	0.511	4.505	70.281	21.555	2.880	0.073	0.158	0.009	0.009	0.020	0.000	0.000	0.000	0.000	1393.96	
11	0.7152	1159.2	1179.7	0.480	4.464	70.428	21.470	2.891	0.072	0.156	0.009	0.009	0.021	0.000	0.000	0.000	0.000	1395.00	
12	0.7090	1145.8	1166.0	0.465	4.723	71.606	20.103	2.820	0.077	0.165	0.010	0.010	0.023	0.000	0.000	0.000	0.000	1384.80	
13	0.7149	1155.6	1176.1	0.477	4.663	70.347	21.464	2.768	0.077	0.166	0.009	0.009	0.020	0.000	0.000	0.000	0.000	1390.94	
14	0.7175	1159.2	1179.7	0.491	4.668	70.053	21.533	2.950	0.082	0.181	0.011	0.012	0.019	0.000	0.000	0.000	0.000	1392.72	
15	0.7203	1164.9	1185.5	0.496	4.576	69.759	21.654	3.215	0.081	0.177	0.010	0.011	0.020	0.000	0.000	0.000	0.000	1396.81	
16	0.7214	1166.3	1187.0	0.503	4.578	69.672	21.653	3.259	0.088	0.197	0.013	0.014	0.023	0.000	0.000	0.000	0.000	1397.51	
17	0.7194	1161.9	1182.5	0.511	4.648	69.829	21.617	3.103	0.079	0.172	0.010	0.011	0.021	0.000	0.000	0.000	0.000	1394.14	
18	0.7218	1167.0	1187.7	0.505	4.569	69.704	21.475	3.448	0.081	0.176	0.011	0.011	0.021	0.000	0.000	0.000	0.000	1397.95	
19	0.7219	1166.7	1187.3	0.514	4.583	69.688	21.473	3.444	0.081	0.176	0.011	0.011	0.020	0.000	0.000	0.000	0.000	1397.48	
20	0.7240	1170.1	1190.8	0.527	4.553	69.508	21.465	3.629	0.086	0.187	0.011	0.012	0.023	0.000	0.000	0.000	0.000	1399.50	
21	0.7241	1170.2	1190.9	0.511	4.587	69.508	21.406	3.713	0.079	0.172	0.010	0.011	0.002	0.000	0.000	0.000	0.000	1399.44	
22	0.7259	1173.0	1193.7	0.518	4.570	69.308	21.519	3.776	0.089	0.195	0.012	0.014	0.000	0.000	0.000	0.000	0.000	1401.11	
23	0.7250	1171.0	1191.7	0.498	4.643	69.295	21.587	3.712	0.077	0.167	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1399.54	
24	0.7242	1169.7	1190.4	0.508	4.621	69.404	21.565	3.641	0.076	0.164	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1398.91	
25	0.7241	1169.3	1190.0	0.506	4.645	69.383	21.594	3.607	0.077	0.166	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1398.43	
26	0.7228	1166.4	1187.1	0.499	4.708	69.550	21.481	3.483	0.082	0.178	0.010	0.011	0.000	0.000	0.000	0.000	0.000	1396.27	
27	0.7276	1175.0	1195.8	0.495	4.642	69.082	21.620	3.806	0.098	0.220	0.018	0.020	0.000	0.000	0.000	0.000	0.000	1401.85	
28	0.7259	1171.3	1192.0	0.494	4.704	69.189	21.644	3.648	0.090	0.201	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1399.16	
29	0.7290	1176.4	1197.2	0.514	4.660	68.807	21.781	3.936	0.087	0.191	0.012	0.013	0.000	0.000	0.000	0.000	0.000	1402.16	
30	0.7287	1175.8	1196.6	0.502	4.683	68.785	21.849	3.895	0.083	0.181	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1401.80	
Avg	0.7190	1163.0	1183.4	0.484	4.597	69.996	21.433	3.206	0.078	0.169	0.010	0.011	0.015	0.000	0.000	0.000	0.000	1395.61	

Zone 272

Attachment B
Page 9 of 16

GQ Source Daily Summary

June 2013

Number: 061

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND STATION-GRAFTON BORDER

Temperature Base:

Contract Hour: 9

Day	Relative Density	Heating Value Wet	Heating Value Dry	CO2																Wobbe	CCT
				CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10				
1	0.7032	1148.6	1169.0	0.377	4.144	72.091	20.890	2.287	0.056	0.118	0.006	0.007	0.022	0.000	0.000	0.000	0.000	1393.98			
2	0.7150	1158.7	1179.3	0.485	4.468	70.395	21.573	2.810	0.071	0.155	0.009	0.010	0.024	0.000	0.000	0.000	0.000	1394.63			
3	0.7132	1156.2	1176.6	0.453	4.510	70.572	21.504	2.709	0.068	0.146	0.008	0.008	0.021	0.000	0.000	0.000	0.000	1393.23			
4	0.7049	1144.8	1165.1	0.337	4.598	71.686	20.844	2.320	0.056	0.120	0.007	0.007	0.026	0.000	0.000	0.000	0.000	1387.69			
5	0.7091	1149.1	1169.4	0.403	4.632	71.177	20.987	2.560	0.064	0.138	0.008	0.008	0.024	0.000	0.000	0.000	0.000	1388.71			
6	0.7159	1157.4	1177.9	0.469	4.660	70.252	21.453	2.897	0.072	0.156	0.009	0.009	0.024	0.000	0.000	0.000	0.000	1392.11			
7	0.7187	1160.8	1181.4	0.497	4.665	69.974	21.479	3.078	0.081	0.178	0.011	0.012	0.026	0.000	0.000	0.000	0.000	1393.56			
8	0.7169	1158.3	1178.8	0.480	4.676	70.220	21.331	3.000	0.076	0.167	0.010	0.011	0.028	0.000	0.000	0.000	0.000	1392.30			
9	0.7161	1158.3	1178.8	0.502	4.572	70.292	21.444	2.909	0.075	0.161	0.009	0.009	0.027	0.000	0.000	0.000	0.000	1393.02			
10	0.7159	1158.9	1179.4	0.510	4.508	70.295	21.530	2.887	0.073	0.157	0.009	0.009	0.021	0.000	0.000	0.000	0.000	1393.88			
11	0.7152	1159.3	1179.8	0.478	4.460	70.423	21.482	2.888	0.072	0.157	0.009	0.009	0.022	0.000	0.000	0.000	0.000	1395.13			
12	0.7091	1145.8	1166.1	0.463	4.731	71.587	20.112	2.822	0.077	0.167	0.009	0.010	0.023	0.000	0.000	0.000	0.000	1384.78			
13	0.7150	1155.9	1176.3	0.478	4.660	70.327	21.485	2.769	0.077	0.166	0.009	0.009	0.021	0.000	0.000	0.000	0.000	1391.11			
14	0.7175	1159.2	1179.7	0.492	4.668	70.059	21.528	2.948	0.082	0.181	0.011	0.011	0.019	0.000	0.000	0.000	0.000	1392.67			
15	0.7204	1165.0	1185.6	0.496	4.574	69.750	21.669	3.211	0.081	0.177	0.010	0.011	0.020	0.000	0.000	0.000	0.000	1396.88			
16	0.7215	1166.4	1187.0	0.503	4.579	69.669	21.651	3.262	0.088	0.198	0.013	0.014	0.023	0.000	0.000	0.000	0.000	1397.52			
17	0.7195	1162.0	1182.6	0.508	4.655	69.824	21.609	3.108	0.079	0.173	0.012	0.012	0.022	0.000	0.000	0.000	0.000	1394.19			
18	0.7218	1167.0	1187.7	0.505	4.570	69.702	21.476	3.447	0.081	0.176	0.010	0.011	0.021	0.000	0.000	0.000	0.000	1397.92			
19	0.7219	1166.8	1187.4	0.513	4.580	69.694	21.460	3.453	0.081	0.176	0.011	0.011	0.021	0.000	0.000	0.000	0.000	1397.57			
20	0.7239	1170.1	1190.9	0.523	4.550	69.509	21.477	3.621	0.085	0.187	0.012	0.012	0.023	0.000	0.000	0.000	0.000	1399.63			
21	0.7241	1170.1	1190.8	0.513	4.589	69.512	21.400	3.711	0.079	0.172	0.011	0.011	0.002	0.000	0.000	0.000	0.000	1399.34			
22	0.7258	1172.8	1193.5	0.514	4.573	69.322	21.518	3.762	0.088	0.195	0.013	0.014	0.000	0.000	0.000	0.000	0.000	1401.02			
23	0.7251	1170.9	1191.6	0.498	4.647	69.297	21.576	3.715	0.077	0.167	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1399.45			
24	0.7242	1169.8	1190.5	0.506	4.623	69.399	21.571	3.640	0.077	0.165	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1398.95			
25	0.7241	1169.2	1189.9	0.504	4.647	69.399	21.577	3.610	0.077	0.166	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1398.42			
26	0.7227	1166.3	1186.9	0.500	4.712	69.557	21.471	3.478	0.082	0.178	0.010	0.011	0.000	0.000	0.000	0.000	0.000	1396.12			
27	0.7276	1175.0	1195.8	0.494	4.639	69.083	21.625	3.804	0.098	0.220	0.017	0.019	0.000	0.000	0.000	0.000	0.000	1401.91			
28	0.7259	1171.6	1192.3	0.493	4.698	69.177	21.660	3.649	0.090	0.201	0.015	0.016	0.000	0.000	0.000	0.000	0.000	1399.38			
29	0.7290	1176.4	1197.2	0.514	4.658	68.809	21.778	3.938	0.087	0.191	0.012	0.013	0.000	0.000	0.000	0.000	0.000	1402.20			
30	0.7286	1175.7	1196.5	0.502	4.685	68.791	21.839	3.896	0.083	0.181	0.011	0.011	0.000	0.000	0.000	0.000	0.000	1401.74			
Avg	0.7191	1163.0	1183.5	0.484	4.598	69.995	21.433	3.206	0.078	0.170	0.010	0.011	0.015	0.000	0.000	0.000	0.000	1395.63			

Zone 213

GQ Source Daily Summary

June 2013

Number: 041

Pressure Base: 14.730

Contract Day: 1

Name: BISMARCK STATION-GLEN ULLIN STATION

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	0.7045	1148.4	1168.7	0.388	4.264	71.900	20.884	2.354	0.055	0.118	0.006	0.007	0.025	0.000	0.000	0.000	0.000	1392.39	
2	0.7144	1156.9	1177.4	0.496	4.503	70.552	21.360	2.812	0.073	0.159	0.010	0.010	0.026	0.000	0.000	0.000	0.000	1393.05	
3	0.7086	1150.3	1170.6	0.390	4.528	71.322	20.916	2.612	0.061	0.131	0.007	0.007	0.024	0.000	0.000	0.000	0.000	1390.65	
4	0.7038	1142.3	1162.5	0.350	4.621	71.913	20.612	2.286	0.057	0.121	0.007	0.007	0.028	0.000	0.000	0.000	0.000	1385.80	
5	0.7106	1150.5	1170.9	0.430	4.644	71.057	20.930	2.683	0.067	0.145	0.008	0.009	0.027	0.000	0.000	0.000	0.000	1388.95	
6	0.7162	1157.4	1177.9	0.485	4.657	70.314	21.279	2.990	0.073	0.158	0.009	0.009	0.025	0.000	0.000	0.000	0.000	1391.90	
7	0.7158	1156.4	1176.8	0.489	4.678	70.519	20.962	3.048	0.080	0.177	0.011	0.012	0.024	0.000	0.000	0.000	0.000	1391.01	
8	0.7146	1156.0	1176.4	0.470	4.622	70.570	21.129	2.939	0.071	0.156	0.009	0.010	0.024	0.000	0.000	0.000	0.000	1391.67	
9	0.7150	1156.9	1177.4	0.510	4.541	70.506	21.268	2.897	0.075	0.162	0.009	0.009	0.022	0.000	0.000	0.000	0.000	1392.43	
10	0.7131	1155.5	1176.0	0.491	4.476	70.769	21.182	2.829	0.068	0.147	0.008	0.009	0.021	0.000	0.000	0.000	0.000	1392.60	
11	0.7073	1144.5	1164.8	0.482	4.618	71.894	19.969	2.761	0.073	0.159	0.009	0.010	0.023	0.000	0.000	0.000	0.000	1384.90	
12	0.7142	1154.5	1175.0	0.488	4.643	70.568	21.187	2.843	0.073	0.160	0.009	0.009	0.021	0.000	0.000	0.000	0.000	1390.35	
13	0.7158	1155.6	1176.1	0.491	4.727	70.260	21.392	2.833	0.080	0.177	0.010	0.011	0.018	0.000	0.000	0.000	0.000	1390.06	
14	0.7183	1160.8	1181.3	0.488	4.653	70.020	21.458	3.074	0.082	0.183	0.011	0.012	0.020	0.000	0.000	0.000	0.000	1393.80	
15	0.7205	1165.1	1185.7	0.495	4.579	69.811	21.536	3.261	0.084	0.189	0.012	0.013	0.021	0.000	0.000	0.000	0.000	1396.92	
16	0.7200	1163.3	1183.9	0.498	4.638	69.828	21.536	3.181	0.083	0.189	0.012	0.013	0.022	0.000	0.000	0.000	0.000	1395.23	
17	0.7203	1163.8	1184.4	0.497	4.633	69.795	21.515	3.273	0.078	0.171	0.010	0.010	0.020	0.000	0.000	0.000	0.000	1395.63	
18	0.7224	1167.4	1188.1	0.508	4.597	69.673	21.397	3.511	0.084	0.187	0.011	0.012	0.021	0.000	0.000	0.000	0.000	1397.85	
19	0.7211	1166.0	1186.7	0.509	4.562	69.866	21.314	3.434	0.084	0.187	0.011	0.012	0.022	0.000	0.000	0.000	0.000	1397.39	
20	0.7236	1169.2	1189.9	0.496	4.621	69.607	21.235	3.744	0.079	0.175	0.010	0.011	0.022	0.000	0.000	0.000	0.000	1398.75	
21	0.7239	1169.8	1190.5	0.504	4.595	69.541	21.402	3.667	0.082	0.183	0.011	0.012	0.004	0.000	0.000	0.000	0.000	1399.27	
22	0.7259	1172.1	1192.9	0.504	4.640	69.259	21.527	3.766	0.086	0.193	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1400.12	
23	0.7244	1170.1	1190.8	0.493	4.637	69.434	21.452	3.718	0.077	0.169	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1399.19	
24	0.7232	1167.8	1188.5	0.500	4.656	69.550	21.437	3.593	0.077	0.168	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1397.57	
25	0.7235	1167.4	1188.1	0.509	4.692	69.533	21.397	3.584	0.082	0.181	0.010	0.011	0.000	0.000	0.000	0.000	0.000	1396.86	
26	0.7229	1167.3	1188.0	0.479	4.699	69.623	21.311	3.604	0.081	0.180	0.011	0.012	0.000	0.000	0.000	0.000	0.000	1397.16	
27	0.7272	1173.1	1193.8	0.499	4.714	69.133	21.551	3.721	0.103	0.238	0.018	0.021	0.000	0.000	0.000	0.000	0.000	1399.96	
28	0.7269	1173.2	1194.0	0.497	4.676	69.101	21.602	3.827	0.084	0.189	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1400.50	
29	0.7282	1175.0	1195.8	0.498	4.687	68.917	21.687	3.918	0.083	0.187	0.011	0.012	0.000	0.000	0.000	0.000	0.000	1401.37	
30	0.7285	1174.8	1195.6	0.501	4.724	68.846	21.721	3.913	0.084	0.187	0.011	0.012	0.000	0.000	0.000	0.000	0.000	1400.84	
Avg	0.7185	1162.0	1182.3	0.481	4.618	70.123	21.272	3.223	0.077	0.171	0.010	0.011	0.015	0.000	0.000	0.000	0.000	1394.81	

Zone 28



GQ Source Daily Summary

June 2013

Number: 271

Pressure Base: 14,730

Contract Day: 1

Name: DICKINSON STN-BELFIELD TSF-GLENULLIN STN

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	0.6827	1152.8	1173.2	0.000	2.549	73.919	23.022	0.498	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.88	
2	0.6479	1089.2	1108.4	0.063	3.048	81.046	15.332	0.487	0.011	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1376.89	
3	0.6351	1066.1	1085.0	0.113	3.172	83.651	12.598	0.435	0.014	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1361.44	
4	0.6453	1077.0	1096.1	0.308	3.168	82.541	12.839	1.014	0.046	0.075	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1364.38	
5	0.6500	1080.4	1099.5	0.396	3.270	82.051	12.787	1.322	0.060	0.101	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1363.73	
6	0.6556	1091.4	1110.8	0.258	3.330	80.739	14.191	1.319	0.053	0.097	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1371.81	
7	0.6652	1105.5	1125.0	0.234	3.411	78.898	15.795	1.523	0.048	0.083	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1379.46	
8	0.6568	1089.2	1108.4	0.189	3.689	80.724	13.575	1.644	0.056	0.108	0.006	0.008	0.000	0.000	0.000	0.000	0.000	1367.63	
9	0.6473	1075.6	1094.7	0.188	3.621	82.236	12.466	1.406	0.035	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1360.59	
10	0.6496	1080.0	1099.1	0.175	3.588	81.809	12.896	1.447	0.034	0.050	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1363.71	
11	0.6556	1090.5	1109.8	0.155	3.549	80.552	14.219	1.440	0.034	0.050	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1370.55	
12	0.6590	1091.0	1110.3	0.245	3.692	80.256	13.984	1.714	0.042	0.065	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1367.78	
13	0.6626	1105.6	1125.2	0.134	3.318	78.864	16.410	1.209	0.026	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1382.27	
14	0.6792	1145.5	1165.8	0.012	2.644	74.800	21.874	0.650	0.009	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.50	
15	0.6814	1149.9	1170.2	0.003	2.595	74.234	22.615	0.540	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.67	
16	0.6664	1119.3	1139.1	0.065	2.954	77.549	18.647	0.754	0.013	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1395.36	
17	0.6741	1134.6	1154.7	0.039	2.779	75.881	20.619	0.659	0.010	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1406.40	
18	0.6824	1151.6	1172.0	0.000	2.591	74.006	22.870	0.521	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.74	
19	0.6828	1152.9	1173.3	0.000	2.547	73.963	22.931	0.546	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.96	
20	0.6831	1152.9	1173.3	0.000	2.572	73.937	22.894	0.583	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.68	
21	0.6832	1153.5	1174.0	0.000	2.543	73.915	22.955	0.574	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.35	
22	0.6826	1152.6	1173.1	0.000	2.542	73.991	22.924	0.530	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.86	
23	0.6830	1153.0	1173.4	0.000	2.560	73.898	23.004	0.526	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.87	
24	0.6839	1154.1	1174.6	0.000	2.580	73.718	23.149	0.541	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.27	
25	0.6623	1110.1	1129.7	0.742	2.093	79.371	17.097	0.560	0.058	0.043	0.025	0.011	0.000	0.000	0.000	0.000	0.000	1387.76	
26	0.6361	1064.0	1082.9	1.298	1.578	85.813	10.484	0.551	0.115	0.082	0.054	0.025	0.000	0.000	0.000	0.000	0.000	1357.78	
27	0.6361	1064.0	1082.9	1.298	1.578	85.813	10.484	0.551	0.115	0.082	0.054	0.025	0.000	0.000	0.000	0.000	0.000	1357.78	
28	0.6367	1064.7	1083.5	1.291	1.608	85.703	10.537	0.583	0.115	0.083	0.054	0.025	0.000	0.000	0.000	0.000	0.000	1357.92	
29	0.6662	1095.3	1114.7	1.011	2.940	80.843	12.678	2.171	0.129	0.157	0.045	0.025	0.000	0.000	0.000	0.000	0.000	1365.64	
30	0.6590	1085.5	1104.7	1.108	2.708	82.303	11.572	1.926	0.139	0.163	0.051	0.029	0.000	0.000	0.000	0.000	0.000	1360.86	
Avg	0.6630	1110.0	1129.6	0.311	2.827	78.901	16.915	0.941	0.040	0.049	0.011	0.006	0.000	0.000	0.000	0.000	0.000	1387.02	

Zone 31,

GQ Source Analysis

WBI Energy Transmission, Inc.

GQ Source Number:	0202080	Specific Gravity:	0.6474
GQ Source Name:	RICHARDTON-GLEN ULLIN COMPRE	Dry Heat Value:	1097.20
Effective Date:	6/1/2013 9:00:00 AM	Wet Heat Value:	1078.10
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1097.20
Pressure Base:	14.730	Sample Pressure:	
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>			<u>Mol %</u>	
C1	Methane	82.912		CO2	Carbon Dioxide	0.743
C2	Ethane	12.502	3.3340	N2	Nitrogen	2.631
C3	Propane	0.980	0.2690	O2	Oxygen	
IC4	Isobutane	0.076	0.0250	He	Helium	
NC4	n-Butane	0.072	0.0230	H2	Hydrogen	
IC5	Isopentane	0.028	0.0100	H2S	Hydrogen Sulfide	
NCS	n-Pentane	0.014	0.0050	Ar	Argon	
C6	Hexanes	0.040	0.0160	CO	Carbon Monoxide	
C7	Heptanes			H2	Water	
C8	Octanes			Neo-C5	Neopentane	0.002
C9	Nonanes					
C10	Decanes					

Totals 100.000% 3.682 GPM

Sample Date:

Sample Type:

Sample Tech:

H2S: ppm

Sample Remarks:

Analysis Tech:

Analysis Remarks:

Zone 311

GQ Source Analysis

WBI Energy Transmission, Inc.

GQ Source Number:	1202160	Specific Gravity:	0.8019
GQ Source Name:	BOWMAN BORDER	Dry Heat Value:	1121.18
Effective Date:	6/1/2013 9:00:00 AM	Wet Heat Value:	1101.67
Effective End Date:	1/18/2038 9:14:07 PM	As Deliv. Heat Value:	1121.18
Pressure Base:	14.730	Sample Pressure:	122.00
Viscosity:		Sample Temperature:	

	<u>Mol %</u>	<u>Liquid Content</u>		<u>Mol %</u>	
C1	Methane	53.393	CO2	Carbon Dioxide	2.311
C2	Ethane	27.597	N2	Nitrogen	13.368
C3	Propane	2.941	O2	Oxygen	0.000
IC4	Isobutane	0.084	He	Helium	
NC4	n-Butane	0.257	H2	Hydrogen	
IC5	Isopentane	0.011	H2S	Hydrogen Sulfide	
NC5	n-Pentane	0.031	Ar	Argon	
C6	Hexanes	0.007	CO	Carbon Monoxide	
C7	Heptanes		H2	Water	
C8	Octanes		Neo-C5	Neopentane	
C9	Nonanes				
C10	Decanes				

Totals 100.000% 8.293 GPM

Sample Date: 4/30/2013 12:00:00 AM
Sample Type: Composite
Sample Tech: sampler
H2S: ppm

Sample Remarks:

Analysis Tech: Lab

Analysis Remarks:

Zone 34

NORTH DAKOTA HEATING VALUE ZONES		
ZONES	MEASURING DEVICE	LOCATION
211	Chromatograph	Sidney Area
24	Chromatograph	Williston Area
241	Monthly Sampler	Fairview Area
25	Monthly Sampler	Watford City Area
261	Chromatograph	Williston – Tioga – Minot Line
262	Chromatograph	Minot Area
263	Monthly Sampler	Tioga – Portal
264	Chromatograph	Williston – Ray
271	Chromatograph	Bismarck – Cleveland
272	Chromatograph	Cleveland – Mapleton
273	Chromatograph	Cleveland – Grafton
28	Chromatograph	Bismarck
31	Chromatograph	Dickinson
311	Chromatograph	Taylor Take-Off – Glen Ullin Comp
32	Chromatograph	Cabin Creek – Dickinson
33	Chromatograph	Killdeer
34	Monthly Sampler	Bowman Area

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	JUNE 13	MAY 13	APR 13	MAR 13	FEB 13	JAN 13	DEC 12	NOV 12	OCT 12	SEPT 12	AUG 12	JULY 12	ZONE
MT/ND	211	Sidney Area	1203	1212	1201	1213	1206	1202	1203	1200	1201	1200	1202	1197	1197	211
ND	24	Williston Area	1201	1196	1197	1216	1204	1204	1204	1203	1199	1195	1197	1198	1203	24
ND	25	Watford City Area	1186	1188	1154	1200	1201	1196	1192	1192	1188	1176	1183	1184	1176	25
ND/MT	241	Fairview Area	1194	1205	1203	1203	1195	1196	1191	1191	1192	1189	1191	1187	1185	241
ND	261	Williston - Tioga - Minot Line	1156	1156	1159	1163	1123	1139	1160	1162	1162	1164	1170	1151	1161	261
ND	262	Minot Area	1171	1181	1177	1172	1170	1168	1163	1165	1165	1171	1175	1179	1163	262
ND	263	Tioga - Portal	1119	1127	1123	1117	1116	1116	1069	1069	1135	1140	1142	1143	1132	263
ND	264	Williston - Ray	1201	1196	1197	1216	1204	1204	1204	1203	1199	1195	1197	1198	1203	264
ND	271	Bismarck - Cleveland	1161	1183	1175	1167	1145	1144	1137	1147	1154	1170	1173	1178	1161	271
ND	272	Cleveland - Mapleton	1163	1183	1178	1169	1147	1145	1138	1148	1155	1171	1175	1180	1162	272
ND	273	Cleveland - Grafton	1163	1184	1177	1169	1146	1145	1138	1149	1155	1171	1175	1180	1162	273
ND	28	Bismarck - Cabin Creek	1138	1182	1173	1117	1102	1100	1108	1114	1104	1149	1173	1178	1160	28
ND	31	Dickinson Area	1118	1130	1163	1117	1103	1098	1105	1110	1111	1152	1074	1102	1150	31
ND	311	Taylor Take-Off - Glen Ullin Comp		1097	1163	1117	1103	1098	1105	1110						
ND/MT	32	Cabin Creek - Dickinson	1105	1094	1100	1088	1089	1086	1094	1099	1056	1121	1131	1135	1164	32
ND	33	Killdeer	1178	1180	1179	1177	1176	1177	1177	1176	1177	1177	1180	1179	1181	33
ND	34	Bowman Area	1138	1121	1136	1146	1144	1147	1143	1142	1142	1140	1136	1130	1126	34
ND	35	Baker Field - North Dakota	979	0	0	0	0	0	979	979	979	979	979	979	979	35

**THERMAL ZONE VARIANCE
DOCUMENTATION**

June 2013

<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
25	34	Back to normal BTU, Red Wing plant back on
31	-33	Mix of gas in the area, gas flowing both directions
311	-66	Mix of gas in the area, gas flowing both directions