



MONTANA-DAKOTA

UTILITIES CO.

A Division of MDU Resources Group, Inc.

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

August 23, 2011

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

Re: Gas Meter Test Results

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., herewith submits the results of its gas meter testing program for the period April 1, 2010 through March 31, 2011.

Montana-Dakota's meter testing program consists of the following three categories:

1. New Test - New meters purchased were tested and found to be satisfactory prior to release. 100% of new meters were tested at the factory. Montana-Dakota tested 535 meters during the period April 1, 2010 through March 31, 2011 resulting in an average accuracy of 100.0% at an open test (100% of meter rating) and 99.8% accuracy at a check test (20% of meter rating).
2. Periodic Test – Meters with ratings of 630 cubic feet per hour or greater are tested at a periodic interval of at least once in eight years. 151 meters were tested during this review period resulting in an average accuracy of 99.8% at an open test (100% of meter rating) and 100% accuracy at a check test (20% of meter rating).
3. Random Test - All other active meters, with ratings of 630 cubic feet per hour or less, are assigned to lots and are randomly computer selected for test each year.

All damaged or non-registering meters are incapable of measuring gas accurately due to damaged indexes, mechanical malfunctions, or break(s) in the meter body. These damaged meters are either retired or given a complete overhaul and re-tested before being placed back in service.

Calculations of all lots in the Random Sample Program are made in accordance with the program detailed in Department of Defense Bulletin dated June 11, 1957, entitled

"Military Standard Sampling Procedure & Tables for Inspections by Variable for Percent Defective," as approved in Case No. I-5083.

The Random Test results are provided in Attachment A. Two groups that failed in the last test cycle were re-sampled. The results of this re-sampling are summarized below:

1. Meter Lot S400-, install date of 1997 through 2001 (16 meters): This group did not fail for a second time, but the group will continue to be tested as part of the 2011 random program.
2. Meter Lot S400A- install date of 1992 through 1996 (23 meters): This group failed for a second time. Therefore, the entire group of meters will be removed from service by December 31, 2011 with meters recalibrated for reuse when appropriate and any remaining meters retired.

Five Meter Lots experienced a first year failure. A description of the affected Meter Lots, the number of meters impacted and the plan to address each failed Meter Lot is identified below:

1. Meter Lot AS02- install date of 1976 through 1980 (114 meters): This is a first time failure for this group and the group will be re-sampled as part of the 2011 random program.
2. Meter Lot ER02- install date of 1986 through 1990 (766 meters): This is a first time failure for this group and the group will be re-sampled as part of the 2011 random program.
3. Meter Lot ER03- install date of 1986 through 1990 (2,268 meters): This is a first time failure for this group of meters. Using test data from the last two program test cycles, a sub-group of meters with certain vintage dates was identified as having a high percentage of error that exceeded $\pm 2\%$. Montana-Dakota proposes to remove this sub-group of 338 meters from active service by December 31, 2011 for recalibration when appropriate with any remaining meters retired. The meters remaining meters in Meter Lot ER03 installed in 1986-1990 will be re-sampled for the 2011 random program.
4. Meter Lot ER03- install date of 1991 through 1995 (4,390 meters): This is a first time failure for this group of meters. Using test data from the last two program test cycles, a sub-group of meters with certain vintage dates was identified as having a high percentage of error that exceeded $\pm 2\%$. Montana-Dakota proposes to remove this sub-group of 536 meters from active service by

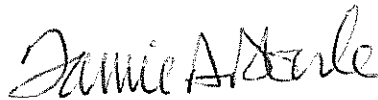
December 31, 2011 for recalibration when appropriate with any remaining meters retired. The meters remaining meters in Meter Lot ER03 installed in 1991-1995 will be re-sampled in the 2011 random program.

5. Meter Lot S400A- install date of 1997 through 2001(60 meters): This is a first time failure for this group and this group will be re-sampled in the 2011 random program.

Please contact me if you have questions regarding the gas meter testing results.

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.

Sincerely,



Tamie A. Aberle
Regulatory Affairs Manager

Attachment

MONTANA-DAKOTA UTILITIES CO.
NORTH DAKOTA- APRIL 1, 2010- MARCH 31, 2011 TEST YEAR
RANDOM SAMPLE TEST RESULTS

LOT TYPE	INSTALL YEAR	Count	Sample	Percent	
			Size	Defective	Allowable
			(min.)	[%]	[%]
	ND	ND	ND		
ER03	86 - 90	2,268	40	25.48	22.86
	91 - 95	4,390	50	23.19	22
	96 - 00	7,934	50	18.51	22
	01 - 05	10,173	75	0.75	21.11
	06 - 08	3,742	50	0.36	22
		28,507			
NL-250	93 - 97	265	20	15.71	24.53
	98 - 02	156	15	2.49	25.61
	03 - 07	387	25	6.37	23.97
	08	84	10	7.24	27.57
		892			
S250	87 - 91	285	20	0	24.53
	92 - 96	1,065	35	8.53	22.91
	97 - 01	745	30	0.29	23.58
	02 - 06	1,128	35	0	22.91
	07 - 08	312	25	0.01	23.97
		3,535			
SL250	92 - 96	198	20	4.22	24.53
	97 - 01	239	20	0.08	24.53
	02 - 06	589	30	0.05	23.58
	07 - 08	164	15	0	25.61
		1,190			
S400	97 - 01	16	5	5.01	25.61
	02 - 06	51	7	9.38	30.5
	07 - 08	20	5	0	33.99
		87			
S400A	92 - 96	23	5	>50.0	33.99
	97 - 01	60	7	32.43	30.5
	02 - 06	132	15	11.11	25.61
	07 - 08	38	5	27.72	33.99
		253			

MONTANA-DAKOTA UTILITIES CO.
NORTH DAKOTA- MARCH 1, 2010- APRIL 30, 2011 TEST YEAR
RANDOM SAMPLE TEST RESULTS

LOT TYPE	Size (in CIS)	INSTALL YEAR	Count	Sample Size (min.)	Percent Defective [%]	Allowable [%]
		ND	ND	ND		
415	415	96 - 00	111	15	10.82	25.61
		01 - 05	177	15	14.85	25.61
		06 - 08	2122	40	9.62	22.86
			2410			
AC-250	AC250	90 - 94	56	10	0.97	27.57
		95 - 99	1925	40	0.65	22.86
		00 - 04	11885	75	1.36	21.11
		05 - 08	15615	75	1.32	21.11
			29481			
AL-425	AL425	91 - 95	20	5	0	33.99
		96 - 00	138	15	0.13	25.61
		01 - 05	373	25	0.04	23.97
		06 - 08	272	20	0.02	24.53
			803			
AS02	AL175	76 - 80	114	15	28.13	25.61
	AL225	81 - 85	10	3	0	40.47
	AL250	86 - 90	570	30	3.11	23.58
		91 - 95	1423	40	6.86	22.86
		96 - 00	1964	40	1.75	22.86
		01 - 05	1128	35	2.11	22.91
		06 - 08	310	25	0.06	23.97
			5519			
ER01	175	91 - 95	22	5	0	33.99
		96 - 00	170	15	0.08	25.61
		01 - 05	229	20	0.01	24.53
		06 - 08	22	5	0	33.99
			443			
ER02	250	76 - 80	63	7	26.34	30.5
	310	81 - 85	0			0
		86 - 90	766	30	29.94	23.58
		91 - 95	5087	50	14.58	22
		96 - 00	5573	50	2.28	22
		01 - 05	2100	40	4.68	22.86
		06 - 08	207	20	0.41	24.53
			13796			