



*A Subsidiary of MDU Resources Group, Inc.*

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March 18, 2025

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

Re: Gas Meter Test Results 2024

Mr. Kahl,

Montana-Dakota Utilities Co. (Montana-Dakota) herewith electronically submits the results of its gas meter testing program for the period July 1, 2023 through June 30, 2024, including natural gas meters in the town of Wahpeton that prior to December 1, 2024 were tested in accordance with the Great Plains Natural Gas Co.'s (Great Plains) meter testing tariff. The test results included herein reflect the gas meter testing performed in accordance with Montana-Dakota's Gas Meter Testing Program Rate 105 tariff, as authorized on February 24, 2016, in Case No. PU-13-585, by the North Dakota Public Service Commission (Commission) and Great Plains' Gas Meter Testing Program Rate 101 tariff, as authorized by the Commission effective February 1, 2016 in Case Nos. PU-17-075 and PU-17-490.

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 690 meters during the period July 1, 2023 through June 30, 2024 resulting in an average accuracy of 100.02% at an open test (100% of meter rating) and 99.98% accuracy at a check test (20% of meter rating).
2. Periodic Test – Meters with ratings of greater than 650 cubic feet per hour are tested at a periodic interval of at least once in ten years.
3. Random Test - All other active meters with ratings of 650 cubic feet per hour or less are assigned to lots and are selected for testing via a computer generated random selection process and meters pulled from customers' premises in correlation with service technicians being on site for other service-related work.

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 and are

either retired or given a complete overhaul and re-tested before being placed back in service.

Test 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. With the exception of those meter lots identified herein, all lots were below the maximum allowable defective percentage for this test period.

Three new meter lot groups as well as one repeat meter lot type from 2023 were determined to have defective percentages in 2024 that exceeded the maximum allowable limits. A description of the lot groups impacted along with the number of meters and plans for the group is outlined below:

- Meter Lot AL 425 with install dates of 2000 through 2004: After further analysis, Montana-Dakota identified a subset of 2002 and 2004 vintage meters for removal. A total of 166 meters of 2002 and 2003 vintage will be removed and retired in 2024. Removal of these meters will bring the meter lot back to an acceptable tolerance.
- Meter Lot AL 425 with install dates of 2005 through 2009: After further analysis and reevaluation of previous past test results; Montana-Dakota identified a subset of 2004 and 2005 vintage meters. A total of 146 meters of 2004 and 2005 vintage will be removed and retired. Removal of these meters will bring the meter lot back to an acceptable tolerance.
- Meter Lot AC 630 with install dates of 2005 through 2009: After further analysis, Montana-Dakota identified a subset of 2003 and 2008 vintage meters installed between 2005 through 2009. A total of 123 meters of 2003 and 2008 vintage will be removed and retired. Removal of these meters will bring the meter lot back to an acceptable tolerance.
- Meter Lot 415 with install dates of 2005 through 2009: All five meters from Lot 415 have been removed and retired.

The Periodic test results are provided in Attachment B. As shown in Attachment B page 1, Montana-Dakota tested 518 meters during this review period resulting in an average accuracy of 99.47% at an open test (100% of meter rating) and 100.24% accuracy at a check test (20% of meter rating). In Attachment B page 2, Great Plains tested 65 meters during this review period resulting in an average accuracy of 99.56% at an open test (100% of meter rating) and 99.86% accuracy at a check test (20% of meter rating).

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

Montana-Dakota respectfully requests that this filing be accepted as being in full compliance with the filing requirements of this Commission.

Sincerely,

*/s/ Travis R. Jacobson*

Travis R. Jacobson  
Vice President of Regulatory Affairs

Attachments

**MONTANA - DAKOTA UTILITIES CO.  
MT, ND, SD, WY, GPNG-ND - 2024 TEST YEAR  
RANDOM SAMPLE TEST RESULTS**

Lot Type	Size	Install Year	Count	Minimum Sample*	Defective [%]	Allowable [%]
<b>AC-250</b>	<b>AC250</b>	85-89	249	20	10.49	24.53
		90-94	1674	40	12.57	22.86
		95-99	11449	75	13.23	21.11
		00-04	31270	100	18.97	20.66
		05-09	39110	100	16.61	20.66
		10-13	28247	100	2.92	20.66
<b>AL-425</b>	<b>AL425</b>	95-99	30	5	0.00	33.99
		00-04	502	30	25.52	23.58
		05-09	758	30	25.29	23.58
		10-13	966	35	5.90	22.91
<b>AC-630</b>	<b>AC630</b>	00-04	6	3	0.00	40.47
		05-09	305	25	34.38	23.97
		10-13	672	30	18.24	23.58
<b>AS02</b>	<b>AL175, AL225 &amp; AL250</b>	70-74	107	10	0.00	27.57
		75-79	643	30	14.47	23.58
		80-84	253	20	4.27	24.53
		85-89	974	35	4.88	22.91
		90-94	2836	40	9.95	22.86
		95-99	5294	50	12.83	22.00
		00-04	2038	40	0.37	22.86
		05-09	2674	40	5.79	22.86
		10-13	249	20	3.68	24.53
<b>ER01</b>	<b>175</b>	90-94	215	20	19.19	24.53
		95-99	233	20	15.45	24.53
		00-04	53	7	0.00	30.50
<b>ER02</b>	<b>250</b>	90-94	4982	50	20.03	22.00
		95-99	8003	75	7.91	21.11
		00-04	1852	40	1.69	22.86
		05-09	83	10	11.53	27.57
		10-13	30	5	11.29	33.99

**MONTANA - DAKOTA UTILITIES CO.  
MT, ND, SD, WY, GPNG-ND - 2024 TEST YEAR  
RANDOM SAMPLE TEST RESULTS**

<b>Lot Type</b>	<b>Size</b>	<b>Install Year</b>	<b>Count</b>	<b>Minimum Sample*</b>	<b>Defective [%]</b>	<b>Allowable [%]</b>
<b>ER03</b>	<b>R200 &amp; R275</b>	85-89	522	30	12.222	23.58
		90-94	3150	40	19.68	22.86
		95-99	8267	75	9.86	21.11
		00-04	9457	75	18.19	21.11
		05-09	5383	50	6.06	22.00
		10-13	4054	50	13.01	22.00
<b>NL-250</b>	<b>NL-250</b>	90-94	15	3	0.00	40.47
		95-99	11	3	0.00	40.47
		00-04	46	7	13.30	30.50
		05-09	140	15	15.52	25.61
		10-13	277	20	15.09	24.53
<b>S250</b>	<b>S250</b>	90-94	1098	35	2.29	22.91
		95-99	919	35	1.81	22.91
		00-04	558	30	0.01	23.58
		05-09	465	25	4.13	23.97
		10-13	927	35	0.15	22.91
<b>SL250</b>	<b>SL250</b>	95-99	1284	35	0.38	22.91
		00-04	163	15	3.17	25.61
		05-09	187	20	7.72	24.53
		10-13	501	30	0.09	23.58
<b>S400</b>	<b>S400</b>	10-13	44	7	20.67	30.50
<b>S400A</b>	<b>S400A</b>	95-99	5	3	0.00	40.47
		05-09	15	3	31.30	40.47
		10-13	148	15	5.70	25.61
<b>415</b>	<b>415</b>	05-09	5	3	40.77	40.47
		10-13	879	35	22.03	22.91

\* - Military Standard No. 414, Inspection Level IV with specification limit of  $\pm 2\%$

**Montana-Dakota Utilities Co.  
MT, ND, SD and WY  
July 1, 2023 through June 30, 2024  
Periodic Test Results**

<b>Meter Size</b>	<b>Quantity Tested</b>	<b>Open Accuracy</b>	<b>Check Accuracy</b>
		<b>[%]</b>	<b>[%]</b>
R1000	108	99.21	100.26
R1600	56	98.94	100.44
3000	6	98.1	99.57
5000	2	101.1	101.6
R750	132	99.14	100.31
800	4	99.7	100.19
800A	4	100.97	100.51
AC800	5	99.57	99.84
AL1000	60	99.02	100.11
AL800	141	98.94	99.59
<b>Totals</b>	<b>518</b>	<b>99.47%</b>	<b>100.24%</b>

**Great Plains Natural Gas Co.  
North Dakota  
July 1, 2023 through June 30, 2024  
Periodic Test Results**

<b>Meter Size</b>	<b>Quantity Tested</b>	<b>Open Accuracy</b>	<b>Check Accuracy</b>
		<b>[%]</b>	<b>[%]</b>
R1000	3	100.19	98.06
10000	3	97.23	97.3
R1600	2	99.65	102.05
3000	37	100.28	100.96
R750	4	99.81	99.81
AL1000	5	100.7	101.24
AL1400	1	98.6	98.5
AL800	10	99.99	100.92
<b>Totals</b>	<b>65</b>	<b>99.56%</b>	<b>99.86%</b>