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June 24, 2009

Bruce Smith
Tri-District Water System
7035 SE 69th St.
Berryton, Kansas 66409

Bruce;

This letter is in follow-up to the meter testing conducted for the Tri-District water system. The results of that visit are below.

The industry standards for the Rockwell 4-inch type of meter used to register water sold to Shawnee RWD 8 is to register in an operating range of 98.5% to 101.5% at the tested flow rates. Under these standards, the meter failed all of the testes conducted on it.

The industry standards for the Neptune 4-inch type of meter used to register flow to Shawnee RWD 8 is to register in an operating range of 98.5% to 101.5% at the tested flow rates. Under these standards, the meter pasted the testes conducted on it.

The industry standards for the Sensus 3-inch type of meter is to register in an operating range of 98.5% to 101.5% at the tested flow rates. Under these standards, the meter failed three of the four testes conducted on it.

The industry standards for the ABB T3000 4-inch compound type of meter used to register sales to Osage RWD 5 is to register in an operating range of 95.0% to 101.0% at the low flow rate, operate within a range of 90.0% to 103.0% at the change over point and within a range of 97.0% to 103.0% at the high flow test rate. Under the listed standards, the meter failed one of the three conducted on it.

The most likely cause for the failure of these meters to pass the tests conducted on them is that they are not installed according to manufacturers' specifications.

Just as soon as KRWA's large meter tester is back from being recertified, I will contact you and set up a date to test the meters at the water plant and conduct a retest of the master meter used to sell water to Shawnee RWD 8 as you requested.

Please call Kansas Rural Water Association if we can be of further assistance. Also, visit the KRWA website www.krwa.net for news and information concerning water and wastewater utilities, upcoming training opportunities and other KRWA programs.

Sincerely,

Gary Armentrout
Circuit Rider

Enclosure
C: Dennis Schwartz, Chairman

Meter Test
Tri-District Water System

June 2009

Meter: ABB 4-inch Compound T3000; SN:17979947; Dated: Sep, 2007; Location: Sales to Osage RWD 5						
Test Number	Test Flow rate gallons per min.	Meter Volume (entity's meter)	Tester Volume (KRWA's tester)	Entity's meter accuracy (compared to KRWA)	(flow curve adjustment) on test meter	Adjusted Accuracy
1	0.25	5	4.8	104.2%	99.2%	103.3%
2	10	100	101.9	98.1%	99.2%	97.4%
3	100	500	505	99.0%	98.6%	97.6%
Meter: Sensus 3-inch; SN:64040371; Dated: May, 2005; Location: Osage RWD 5 on 93rd St.						
Test Number	Test Flow rate gallons per min.	Meter Volume (entity's meter)	Tester Volume (KRWA's tester)	Entity's meter accuracy (compared to KRWA)	(flow curve adjustment) on test meter	Adjusted Accuracy
1	3	50	75.6	66.1%	100.4%	66.4%
2	5	50	52.5	95.2%	99.5%	94.8%
3	20	200	196	102.0%	101.3%	103.4%
4	350	2000	1966	101.7%	98.6%	100.3%
Meter: Neptune 4-inch; SN: 70086140 ; Dated: Jan, 2001; Location: Shawnee RWD 8 on Stanley Rd.						
Test Number	Test Flow rate gallons per min.	Meter Volume (entity's meter)	Tester Volume (KRWA's tester)	Entity's meter accuracy (compared to KRWA)	(flow curve adjustment) on test meter	Adjusted Accuracy
1	130	1000	994	100.6%	98.9%	99.5%
2	250	2000	1995	100.3%	98.6%	98.8%
Meter: Rockwell 4-inch; SN: 1564520; Dated: Unk.; Location: Shawnee RWD 8 on 45th St.						
Test Number	Test Flow rate gallons per min.	Meter Volume (entity's meter)	Tester Volume (KRWA's tester)	Entity's meter accuracy (compared to KRWA)	(flow curve adjustment) on test meter	Adjusted Accuracy
1	125	1000	1275	78.4%	98.9%	77.6%
2	285	3000	4079	73.5%	98.5%	72.4%