AVISTA UTILITIES

NATURAL GAS METER MEASUREMENT PERFORMANCE REPORT

WASHINGTON – 2010 RESULTS

GAS METER MEASUREMENT PERFORMANCE REPORT

CONTENTS

GAS METER PERFORMANCE FOR THE PERIOD JANUARY 1 – DECEMBER 31, 2010

SCOPE

This report covers the methodology, test results, and proceedings of the Avista gas meter measurement performance testing program for in-service meters for the period from January 1, 2010 thru December 31, 2010.

GENERAL

COMPLIANCE

Gas meter testing requirements for Avista are promulgated by Washington Administrative Code, Chapter 480-90 "Gas companies - operations", Section 333 (Initial accuracy of meters), Section 338 (Metering tolerance), Section 343 (Statement of meter test procedures), and Section 348 (Frequency of periodic meter tests. Avista gas tariff Rule No. 170, Section 20, effective January 1, 2009, has been approved and is in compliance with the requirements of WAC 480-90 and prescribes the minimum inspection and testing requirements.

HISTORY

Avista's current random meter measurement performance program is in accordance with ANSI Z1.9 (Inspection by Variables). Random sampling and testing is completed for all domestic meters 1000 CFH and smaller. The program was revised and upgraded in 2009. The prior program was in accordance with inspection standard ANSI Z1.4 (Inspection by Attributes). The change in inspection standard and programmatic changes were completed in order to enhance the quality and accuracy of the measurement performance program.

METER CATEGORIES

Meter populations exist within the following gas meter categories. Meter category inspection and testing requirements are summarized as follows for installed meters:

- ***Domestic (Diaphragm) Meters 1000 CFH and smaller*** – Random sampling and proof testing per ANSI Z1.9, testing to begin during the 10th test year after meter installation.
- ***Diaphragm Meters 1001 – 3000 CFH*** – Prescriptively inspected and proof tested every ten (10) years or sooner.
- ***Diaphragm Meters >3000 CFH*** - Prescriptively inspected and proof tested every five (5) years or sooner.
- ***Rotary Meters*** – Prescriptively inspected and tested via differential testing every five (5) years or sooner.
- ***Turbine Meters*** – Prescriptively inspected and tested annually via a spin test. .

METER PERFORMANCE REQUIREMENTS

Random Sampling - Meter inspection performance for randomly tested meters is per ANSI Z1.9 with a tolerance of +/- 2%. The intent of the testing standard is to verify the following:

Overall Performance - Verify with approximately 90% certainty, that the portion of non-conforming meters does not exceed 10% of any installed meter population. For overall performance, equal weight is given to both the upper and lower specification limit (fast and slow reads are equally weighted and are averaged). The "standard deviation – double specification limit method with variability unknown" as detailed in the ANSI Z1.9 shall be used to determine the overall acceptability of a meter population. Acceptable Quality Limit (AQL) for analysis will equal 10.0.

Fast Direction Performance- Verify with approximately 90% certainty that the portion of non-conforming fast meters does not exceed 10% of any installed meter population. For testing equal weight is given to both the upper and lower specification limit (fast and slow reads are equally weighted and are averaged). The "standard deviation – single specification limit method with variability unknown" as detailed in the ANSI Z1.9 shall be used to determine the fast direction performance (disadvantageous to the consumer) acceptability of a meter population. Acceptable Quality Limit (AQL) for analysis will equal 10.0.

Prescriptive Testing - Meter inspection performance for diaphragm meters >1000 CFH, rotary, and turbine meters that are proof tested shall be 100% +/- 2%. Rotary meters that are differential tested shall determine that the meter is operating within 150% of the manufactures differential pressure requirements at the metering pressure. Turbine meter spin tests shall exceed the manufactures minimum prescribed spin duration.

ANSI Z1.9 TESTING REQUIREMENTS

A summary of the meter population performance requirements per ANSI Z1.9 are as follows:

- Meters to be included in the meter test population will be selected at random.
- All meters within the meter test population are eligible for testing except that individual meters tested within preceding five (5) years are excluded from random sample selection.
- Annual meter population sampling requirements will be as prescribed by the ANSI Z1.9 and in accordance with appropriate meter testing category the meter population falls within.
- Meter Testing Categories
    - "Normal Inspection" – Default meter population sample category as detailed by the ANSI Z1.9. Meter population sampling shall be switched from "Normal" to "Tightened" or "Normal" to "Reduced" as described below.
    - "Tightened Inspection" – Increased meter population sampling as detailed by the standard when 2 out of 5 preceding annual tests have been found non-conforming. Meter population sampling may be returned to "Normal" from "Tightened" when 5 consecutive batches have been determined acceptable.
    - "Reduced Inspection" – Decreased meter population sampling as detail by ANSI Z1.9. Meters with a 5 year test history are eligible for reduced inspection requirements. Meter population sampling may be switched from "Normal" to "Reduced" when 5 annual tests have been found acceptable. Meter population sampling shall be returned from "Reduced" to "Normal" if a single annual sampling is rejected.

- Failure of a meter population – A meter population shall be deemed failed when:
    - Three (3) consecutive yearly inspections for a population under tightened inspection are found non-conforming for overall performance or;
    - Two (2) consecutive yearly inspections fail tightened inspection as non-conforming for fast meters or;
    - Two (2) consecutive yearly inspections exceed a total of 20% non-conforming meters (total of fast and slow meters) under tightened inspection.

DEFINITIONS

PMC – Refers to Avista's gas meter measurement performance program, commonly referred to as a Planned Meter Change-out (PMC) program.

Meter Population – Group of meters from the same manufacture, same model, purchased in the same year, and installed within the same state jurisdiction.

Open Test – Meter proof test completed at 100% of meter rated capacity or the maximum rated capacity of the test equipment.

Check Test – Meter proof test completed at approximately 20% of the meter rated capacity.

RANDOM SAMPLING METER PERFORMANCE

DOMESTIC METERS 1000 CFH AND SMALLER

RANDOM SAMPLING - SUMMARY

Beginning of Report Year, In-Service Meters 1/1/10		
Total Gas Meter Population In State, Random Testing Models		147762
Total Number of Test Families, Including families not eligible for test	(a)	194
Number of Test Families >= 10 yrs old	(b)	153
Number of Test Families w/ Size More Than 10	(c)	158
Number of Test Families w/ Size Less Than 10		36
Number of Test Families Declared Failed	(d)	24
Number of Test Families >= 10 yrs, Size>10, not declared failed	(e)	121
Failed Family By Historical Results		0
Meter Families That Were Scheduled For Normal Inspection, Report Year		113
Meter Families That Were Scheduled For Reduced Inspection, Report Year		8
Meter Families That Were Scheduled For Tightened Inspection, Report Year		0
Report Year Meter Testing Quantities, End of 2010 Test Results		
Number of Meters Tested		6159
Number of Meters Passed, (+/-) 2%		5391
Number of Meters Failed, (+/-) 2%		747
Number of Meters, Uniquely Defective Test Result, (+/-) 10%		21
Meter Families With an Overall Fail Result		9
Meter Families With a Fast Fail Result		6
Meter Families Retired During Report Year	(f)	21
Transition to 2011 Test Year		
Total Number of Meters, Start of New Test Year		148950
Total Number of Test Families, Start of New Test Year	(a)	180
Number of Test Families >= 10 Years Old, Start of New Test Year	(b)	140
Number of Test Families w/ Size More Than 10, Start of New Test Year	(c)	162
Number of Test Families w/ Size Less Than or Equal to 10, Start of New Test Year	(d)	18
Number of Test Families >= 10 yrs, Size > 10, AND Not Historically Failed, Start of	(e)	127
Number of Test Families Administratively Declared Failed For New Test Year		5
Meter Families Scheduled For Normal Inspection During New Test Year (Accounts For Declared Failed)		118
Meter Families Scheduled For Reduced Inspection During New Test Year		4
Meter Families Scheduled For Tightened Inspection During New Test Year		1
Meter Families, Failed by Historical Results		0

(a) Total number of meter populations includes meter test families that are less than 10 years old and are not yet subject to test requirements.

(b) Number of Meter Test Populations >= 10 years old includes meters manufactured in the year 2000 and earlier for the 2010 test year.

(c) Avista has many test populations with less than 10 members. Random sampling of those populations results in repeated testing of meters with no perceived benefit to customers. Avista has begun a prioritized program which is replacing meters that are more than 20 years old in populations of less than 10 meters. Small populations less than 20 years old are tested but with the restriction that a meter will not be retested within five (5) years.

(d) Number of meter families that were declared failed for administrative reasons. Includes families with less than 10 meters population and meter populations that were observed to be trending towards failure. Meter populations trending towards failure, but not yet failed by test data, were generally older populations that had been mixed with other populations when the testing program was based on last install date rather than manufactured date. The revision in test family grouping uncovered these suspect families which the earlier test family criteria had hidden. In some instances, not enough tests had been performed to statistically declare the family failed; however, manual inspection of results indicated some obvious trend to failure for those groups. Avista has chosen to proactively begin retirement of meter test populations with these characteristics.

(e) Number of meter test families subject to standard random testing procedures: over 10 years old, with more than 10 members, and not a failed family.

(e) Meters populations retired or eliminated by utility for cause: e.g., small aged population, failure trend evident. New testing program does not have sufficient statistical data to declare failure for populations; however, some older populations are showing clear trend towards failure. Utility is taking proactive action to begin replacing those test families.

(f) Meter family gone at the end of test year. Administrative failure or similar

RANDOM SAMPLING METER FAMILIES STATISTICAL RESULTS - DOMESTIC METERS 1000 CFH AND SMALLER

Test Family	Population Size, Start of Report Year	2010 Number of Tests	2010 AVG	2010 STD DEV	2010 Overall Pass/Fail	2010 Overall Est % Non Conform	2010 Fast Pass/Fail	2010 Fast Est % Non Conform
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WA_415ALTC_56	3	2	100	0.212132034	FAIL		PASS	#N/A
WA_415ALTC_58	5	5	99.53	3.004704644	FAIL	54.95	PASS	22.51
WA_415ALTC_59	2	2	100.5	0.212132034	FAIL		PASS	#N/A
WA_415ALTC_60	5	5	100.61	1.766847475	PASS	28.92	PASS	24.11
WA_415ALTC_61	7	7	100.5785714	0.87123339	PASS	3.83	PASS	3.83
WA_415ALTC_62	4	4	101.375	0.497493719	PASS	10	PASS	10
WA_415ALTC_74	1	1	100.65					
WA_415ALTC_75	1	1	101					
WA_5BTC_00	1	0						
WA_5BTC_01	1	0						
WA_5BTC_55	33	6	100.8833333	1.246060459	PASS	20.93	PASS	20.93
WA_5BTC_56	2048	953	101.2400839	1.239590605	FAIL	28.032	FAIL	27.44
WA_5BTC_57	1553	70	101.0521429	1.062586253	FAIL	20.303	FAIL	19.8
WA_5BTC_58	927	46	101.1913043	0.939639668	FAIL	20.271	FAIL	19.82
WA_5BTC_59	1421	74	100.797973	1.277986408	FAIL	19.85	FAIL	18.43
WA_5BTC_60	1003	51	100.3705882	1.279342662	PASS	13.93	PASS	10.5
WA_5BTC_61	1197	52	100.6875	0.90585649	PASS	8.473	PASS	7.97
WA_5BTC_62	1127	48	100.715625	0.628334192	PASS	2.481	PASS	2.03
WA_5BTC_63	827	60	100.4433333	1.295443994	PASS	15.52	PASS	12.47
WA_750ALTC_56	1	1	100.55					
WA_750ALTC_58	2	2	100.375	0.530330086	FAIL		PASS	#N/A
WA_750ALTC_59	1	1	99.75					
WA_750ALTC_61	2	2	100.025	0.671751442	FAIL		PASS	#N/A

Test Family (1)	Population Size, Start of Report Year (2)	2010 Number of Tests (3)	2010 AVG (4)	2010 STD DEV (5)	2010 Overall Pass/Fail (6)	2010 Overall Est % Non Conform (7)	2010 Fast Pass/Fail (8)	2010 Fast Est % Non Conform (9)
WA_750ALTC_62	2	2	100.6	1.060660172	FAIL		PASS	#N/A
WA_AC250TC_00	3997	24	100.6854167	0.373723673	PASS	0.634	PASS	0.317
WA_AC250TC_01	1598	12	100.6375	0.292423261	PASS	0.082	PASS	0.041
WA_AC250TC_02	3442	28	100.9214286	0.761507833	PASS	9.04	PASS	8.66
WA_AC250TC_03	3550	14	101.0464286	0.490864342	PASS	1.791	PASS	1.75
WA_AC250TC_04	4049	21	101.2214286	0.485430589	PASS	6.007	PASS	5.69
WA_AC250TC_05	4226	16	100.89375	0.686506858	PASS	5.754	PASS	5.54
WA_AC250TC_06	4564	13	100.7384615	0.361221219	PASS	0.082	PASS	0.041
WA_AC250TC_07	8166	44	100.8318182	0.43935615	PASS	0.902	PASS	0.451
WA_AC250TC_08	5622	32	100.86875	1.036180175	FAIL	15.101	PASS	14.68
WA_AC250TC_09	1596	12	100.6625	0.549431524	PASS	0.204	PASS	0.163
WA_AC250TC_84	246	15	100.2	0.34692527	PASS	0.428	PASS	0.214
WA_AC250TC_85	574	38	100.3289474	0.717600316	PASS	1.453	PASS	1.002
WA_AC250TC_86	910	41	100.2707317	1.00957761	PASS	5.88	PASS	4.72
WA_AC250TC_87	585	40	100.045	0.388752113	PASS	0.902	PASS	0.451
WA_AC250TC_88	1213	55	100.41	0.735124076	PASS	2.123	PASS	1.62
WA_AC250TC_89	1322	53	100.1424528	0.47346881	PASS	1.006	PASS	0.503
WA_AC250TC_90	4491	102	100.0240196	0.651872034	PASS	1.126	PASS	0.563
WA_AC250TC_91	4770	108	99.76898148	0.694326729	PASS	1.126	PASS	0.563
WA_AC250TC_92	5535	105	100.1847619	0.740877981	PASS	1.318	PASS	0.755
WA_AC250TC_93	6397	109	100.0279817	0.74250674	PASS	1.126	PASS	0.563
WA_AC250TC_94	3436	91	100.3510989	0.678723394	PASS	1.39	PASS	0.847
WA_AC250TC_95	843	40	100.1125	0.45131574	PASS	0.902	PASS	0.451
WA_AC250TC_96	5435	98	100.4964286	1.036132032	PASS	2.857	PASS	2.01
WA_AC250TC_97	6462	109	100.933945	0.712321476	PASS	7.863	PASS	7.3
WA_AC250TC_98	5808	102	100.9210784	0.507295112	PASS	2.503	PASS	1.94

Test Family	Population Size, Start of Report Year	2010 Number of Tests	2010 AVG	2010 STD DEV	2010 Overall Pass/Fail	2010 Overall Est % Non Conform	2010 Fast Pass/Fail	2010 Fast Est % Non Conform
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WA_AC250TC_99	4367	117	100.9089744	0.449310553	PASS	1.433	PASS	0.87
WA_AC630TC_00	137	1	100.85					
WA_AC630TC_01	43	0						
WA_AC630TC_02	73	1	100.35					
WA_AC630TC_03	75	2	102	0.565685425	FAIL		FAIL	#N/A
WA_AC630TC_04	49	0						
WA_AC630TC_05	91	1	100.9					
WA_AC630TC_06	110	0						
WA_AC630TC_07	86	1	101.05					
WA_AC630TC_08	113	0						
WA_AC630TC_09	15	0						
WA_AC630TC_97	4	0						
WA_AC630TC_98	56	7	100.3285714	0.380632306	PASS	0	PASS	0
WA_AC630TC_99	70	6	101.075	0.405894075	PASS	0	PASS	0
WA_AL1000TC_01	72	0						
WA_AL1000TC_04	60	1	99.95					
WA_AL1000TC_05	49	1	101.95					
WA_AL1000TC_06	33	1	100.5					
WA_AL1000TC_07	76	8	100.99375	0.623032618	PASS	4.52	PASS	4.52
WA_AL1000TC_08	79	0						
WA_AL1000TC_09	10	2	101.3	0.424264069	FAIL		PASS	#N/A
WA_AL1000TC_74	1	1	100					
WA_AL1000TC_79	1	1	101					
WA_AL1000TC_80	1	1	100.75					
WA_AL1000TC_83	2	2	100.45	0.777817459	FAIL		PASS	#N/A
WA_AL1000TC_84	3	5	100.32	0.605805249	PASS	0	PASS	0

Test Family	Population Size, Start of Report Year	2010 Number of Tests	2010 AVG	2010 STD DEV	2010 Overall Pass/Fail	2010 Overall Est % Non Conform	2010 Fast Pass/Fail	2010 Fast Est % Non Conform
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WA_AL1000TC_88	15	0						
WA_AL1000TC_89	39	4	100.3125	0.535995958	PASS	0	PASS	0
WA_AL1000TC_90	50	5	100.79	0.744479684	PASS	2.03	PASS	2.03
WA_AL1000TC_91	32	6	100.5166667	0.75740786	PASS	0	PASS	0
WA_AL1000TC_92	102	11	100.2727273	0.403957694	PASS	0.082	PASS	0.041
WA_AL1000TC_93	48	7	100.0642857	1.343104081	PASS	12.26	PASS	6.98
WA_AL1000TC_94	171	19	100.4736842	0.610866511	PASS	0.489	PASS	0.275
WA_AL1000TC_95	52	7	99.77142857	1.21101099	PASS	7.75	PASS	1.65
WA_AL1000TC_96	98	12	100.5333333	0.395045068	PASS	0.082	PASS	0.041
WA_AL1000TC_97	38	4	100.4125	0.193110504	PASS	0	PASS	0
WA_AL1000TC_98	90	8	100.2	0.518927465	PASS	0	PASS	0
WA_AL1000TC_99	166	17	100.6676471	0.657870897	PASS	2.114	PASS	1.9
WA_AL175TC_05	1	0						
WA_AL175TC_64	817	39	100.7730769	0.934066249	PASS	10.921	PASS	10.47
WA_AL175TC_65	2329	84	101.1547619	0.994097612	FAIL	21.763	FAIL	21.22
WA_AL175TC_66	328	21	100.8880952	0.867742007	PASS	10.717	PASS	10.4
WA_AL175TC_67	473	29	100.7327586	1.220383126	PASS	17.04	PASS	15.88
WA_AL175TC_68	686	648	101.1138889	1.56817016	FAIL	31.65	FAIL	29.13
WA_AL175TC_69	2273	67	101.1186567	1.523200275	FAIL	31.29	FAIL	29.19
WA_AL175TC_70	3002	77	100.6558442	0.986753516	PASS	10.173	PASS	9.63
WA_AL175TC_71	2235	70	100.6557143	0.76492601	PASS	4.803	PASS	4.3
WA_AL175TC_72	2816	69	100.4384058	1.124628858	PASS	10.38	PASS	8.76
WA_AL175TC_73	1637	58	100.4551724	0.671322971	PASS	1.574	PASS	1.071
WA_AL175TC_76	127	11	100.15	0.266458252	PASS	0.082	PASS	0.041
WA_AL175TC_77	388	23	100.0326087	0.578125634	PASS	0.634	PASS	0.317
WA_AL175TC_78	151	16	99.8625	0.523927476	PASS	0.428	PASS	0.214

Test Family	Population Size, Start of Report Year	2010 Number of Tests	2010 AVG	2010 STD DEV	2010 Overall Pass/Fail	2010 Overall Est % Non Conform	2010 Fast Pass/Fail	2010 Fast Est % Non Conform
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WA_AL175TC_79	1986	61	99.8352459	0.760336782	PASS	1.302	PASS	0.503
WA_AL175TC_80	473	31	99.68709677	0.746320724	PASS	1.541	PASS	0.421
WA_AL175TC_81	781	37	100.0891892	0.729167632	PASS	0.902	PASS	0.451
WA_AL175TC_83	569	37	100.422973	0.411567902	PASS	0.902	PASS	0.451
WA_AL175TC_84	658	38	100.6815789	0.996576644	PASS	10.021	PASS	9.57
WA_AL425_00	1	0						
WA_AL425_08	1	0						
WA_AL425TC_00	63	1	101.25					
WA_AL425TC_01	71	2	100.7	0.141421356	FAIL		PASS	#N/A
WA_AL425TC_02	42	0						
WA_AL425TC_03	37	1	100.1					
WA_AL425TC_04	79	2	101.25	0	FAIL		PASS	#N/A
WA_AL425TC_05	89	1	101.45					
WA_AL425TC_06	210	0						
WA_AL425TC_07	231	4	100.9875	0.639498501	PASS	0	PASS	0
WA_AL425TC_08	255	3	101.0333333	0.425245027	PASS	0	PASS	0
WA_AL425TC_09	72	0						
WA_AL425TC_11	1	1	99.85					
WA_AL425TC_63	74	6	100.3333333	0.394546153	PASS	0	PASS	0
WA_AL425TC_64	76	7	100.5571429	0.364495738	PASS	0	PASS	0
WA_AL425TC_65	113	12	100.4375	0.418397918	PASS	0.082	PASS	0.041
WA_AL425TC_66	126	13	100.4384615	0.495039496	PASS	0.082	PASS	0.041
WA_AL425TC_67	132	11	100.5909091	0.403000113	PASS	0.082	PASS	0.041
WA_AL425TC_68	116	11	100.3772727	0.860628734	PASS	2.131	PASS	2.09
WA_AL425TC_69	152	19	100.8578947	0.71632999	PASS	5.754	PASS	5.54
WA_AL425TC_70	138	9	101.1333333	1.464795208	FAIL	30.15	FAIL	30.01

Test Family	Population Size, Start of Report Year	2010 Number of Tests	2010 AVG	2010 STD DEV	2010 Overall Pass/Fail	2010 Overall Est % Non Conform	2010 Fast Pass/Fail	2010 Fast Est % Non Conform
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WA_AL425TC_71	84	8	99.8	2.204216738	FAIL	39.36	PASS	17.48
WA_AL425TC_72	140	10	100.665	0.147290341	PASS	0.082	PASS	0.041
WA_AL425TC_73	161	18	100.4388889	0.567387085	PASS	0.428	PASS	0.214
WA_AL425TC_74	55	7	100.4	0.480451177	PASS	0	PASS	0
WA_AL425TC_75	50	6	100.475	0.332791226	PASS	0	PASS	0
WA_AL425TC_76	35	5	100.44	0.506705042	PASS	0	PASS	0
WA_AL425TC_77	73	7	100.0071429	0.647706577	PASS	0	PASS	0
WA_AL425TC_78	73	9	100.2444444	0.595002334	PASS	0	PASS	0
WA_AL425TC_79	185	18	100.2611111	0.717748841	PASS	0.649	PASS	0.435
WA_AL425TC_80	21	3	100.2	0.304138127	PASS	0	PASS	0
WA_AL425TC_81	55	9	100.1333333	0.419076365	PASS	0	PASS	0
WA_AL425TC_82	56	8	100.25625	0.733113468	PASS	0	PASS	0
WA_AL425TC_83	35	5	99.95	0.403112887	PASS	0	PASS	0
WA_AL425TC_84	30	4	100.475	0.29011492	PASS	0	PASS	0
WA_AL425TC_85	59	7	100.3357143	0.302371578	PASS	0	PASS	0
WA_AL425TC_86	25	5	100.32	0.615020325	PASS	0	PASS	0
WA_AL425TC_87	42	6	100.175	0.576844866	PASS	0	PASS	0
WA_AL425TC_88	25	4	100.1875	0.566237583	PASS	0	PASS	0
WA_AL425TC_89	38	7	99.95	0.653834842	PASS	0	PASS	0
WA_AL425TC_90	30	6	99.94166667	0.288819436	PASS	0	PASS	0
WA_AL425TC_91	29	5	100.41	0.272488532	PASS	0	PASS	0
WA_AL425TC_92	161	16	100.190625	0.614605226	PASS	0.428	PASS	0.214
WA_AL425TC_93	47	5	100.07	0.338378486	PASS	0	PASS	0
WA_AL425TC_94	244	18	100.1388889	0.527356213	PASS	0.428	PASS	0.214
WA_AL425TC_95	39	5	100.35	0.231840462	PASS	0	PASS	0
WA_AL425TC_96	128	11	100.0409091	0.42650802	PASS	0.082	PASS	0.041

Test Family	Population Size, Start of Report Year	2010 Number of Tests	2010 AVG	2010 STD DEV	2010 Overall Pass/Fail	2010 Overall Est % Non Conform	2010 Fast Pass/Fail	2010 Fast Est % Non Conform
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WA_AL425TC_97	95	11	100.3727273	0.331182455	PASS	0.082	PASS	0.041
WA_AL425TC_98	71	7	100.3357143	0.318478526	PASS	0	PASS	0
WA_AL425TC_99	158	21	100.3452381	0.45494636	PASS	0.634	PASS	0.317
WA_AL800TC_07	5	0						
WA_AL800TC_63	20	4	101.0625	1.269104015	PASS	26.67	PASS	26.67
WA_AL800TC_64	32	5	100.12	1.143787568	PASS	2.03	PASS	2.03
WA_AL800TC_65	54	7	100.1857143	1.296699106	PASS	11.11	PASS	7.92
WA_AL800TC_66	51	7	100.4142857	0.500594884	PASS	0	PASS	0
WA_AL800TC_67	61	8	100.1625	1.034666958	PASS	2.37	PASS	2.11
WA_AL800TC_68	102	11	100.5818182	0.599279871	PASS	0.274	PASS	0.233
WA_AL800TC_69	66	8	100.5625	1.108973142	PASS	9.981	PASS	9.98
WA_AL800TC_70	70	7	99.48571429	1.59653643	FAIL	23.42	PASS	4.52
WA_AL800TC_71	94	10	100.225	0.570209513	PASS	0.082	PASS	0.041
WA_AL800TC_72	61	8	100.45	0.639754417	PASS	0	PASS	0
WA_AL800TC_73	54	7	100.05	0.391578004	PASS	0	PASS	0
WA_AL800TC_74	67	8	100.26875	0.837060119	PASS	0.43	PASS	0.43
WA_AL800TC_75	7	7	99.97857143	0.893894635	PASS	0.075	PASS	0.015
WA_AL800TC_76	32	6	100.5916667	0.52480155	PASS	0	PASS	0
WA_AL800TC_77	39	5	100.37	0.783102803	PASS	0	PASS	0
WA_AL800TC_78	15	2	100.825	0.247487373	FAIL		PASS	#N/A
WA_AL800TC_79	53	11	100.1727273	0.551073333	PASS	0.082	PASS	0.041
WA_AL800TC_80	41	6	100.6166667	0.42031734	PASS	0	PASS	0
WA_AL800TC_81	74	9	100.6611111	0.62438859	PASS	0.14	PASS	0.14
WA_AL800TC_82	2	2	99.95	1.343502884	FAIL		PASS	#N/A
WA_AL800TC_83	11	3	100.0833333	0.152752523	PASS	0	PASS	0
WA_AL800TC_84	18	4	100.4625	0.788854655	PASS	0	PASS	0

Test Family (1)	Population Size, Start of Report Year (2)	2010 Number of Tests (3)	2010 AVG (4)	2010 STD DEV (5)	2010 Overall Pass/Fail (6)	2010 Overall Est % Non Conform (7)	2010 Fast Pass/Fail (8)	2010 Fast Est % Non Conform (9)
WA_AL800TC_85	60	9	101.1388889	0.592546294	PASS	6.98	PASS	6.98
WA_AL800TC_86	1	1	100.5					
WA_AL800TC_87	31	6	100.6166667	0.361478446	PASS	0	PASS	0
WA_AL800TC_90	1	0						
WA_AL800TC_91	1	0						
WA_AL800TC_94	1	0						
WA_AL800TC_97	5	0						
WA_R275TC_00	5	0						
WA_R275TC_02	1	0						
WA_R275TC_03	385	8	99.94375	0.687353881	PASS	0	PASS	0
WA_R275TC_05	887	5	101	0.605185922	PASS	2.03	PASS	2.03
WA_R275TC_93	1087	42	100.9642857	0.538209057	PASS	3.421	PASS	2.97
WA_R275TC_94	7781	124	100.8665323	1.009804009	PASS	14.113	PASS	13.55
WA_R275TC_95	1894	58	101.0482759	0.730774974	PASS	11.003	PASS	10.5
WA_R275TC_96	2952	65	100.9061538	0.942093235	PASS	14.043	PASS	13.54

(1) Family: Name of test family: Compilation of state where installed, manufacturer model number, and year manufactured.

(2) System Population Size, Test Year: Count of number of meters in test family at the start of the test year being reported.

(3) 2010_Number of Tests: Number of meters tested for a test family during the report year.

(4) 2010_Average: Check and Open test results are averaged to give the final test result to be used as the data point. This field is average of those data points for the meters tested for the test family in the report year.

(5) 2010_STD DEV: Computed standard deviation of the test family data points.

(6) 2010_Overall Pass/Fail: Overall test result considers both fast and slow performance standard. Test family passes Overall standard if AQL meets the requirements of ANSI Z1.9 for double specification limit.

(7) 2010_Overall Est % Non Conform: Estimated percentage of test family population that would test outside of +/- 2% accuracy limit.

(8) 2010_Fast Pass/Fail: Overall test result considers only fast performance standard. The family passes Overall standard if AQL meets the requirements of ANSI Z1.9 for single specification limit.

(9) 2010_Fast Est % Non Conform: Estimated percentage of test family population that would test outside of +2% accuracy limit.

METER PERFORMANCE SUMMARY

PRESCRIPTIVE TESTING SUMMARIES

DIAPHRAGM METERS 1001 - 3000 CFH – See test results in section "Large Diaphragm Meters Data"

10-Year Periodic Testing	
Meter population [(1)]	875
Meters tested and adjusted, 2010 test year[(2)]	74
Meters failed [(2)]	6
Meters uniquely defective[(2)]	2
Number of meters overdue for 10 year test[(2)]	0

[(1)]As of 1/1/10
[(2)]As of 12/31/10

DIAPHRAGM METERS GREATER THAN 3000 CFH – See test results in section "Large Diaphragm Meters Data"

5-Year Periodic Testing	
Meter population [(1)]	140
Meters tested and adjusted, 2010 test year[(2)]	31
Meters failed [(2)]	2
Meters uniquely defective[(2)]	0
Number of meters overdue for 5 year test[(3)]	0

[(1)]As of 1/1/10
[(2)]As of 12/31/10
[(3)]All diaphragm meters over 3000 CFH capacity in Washington are being updated to newer models in 2011.

METER PERFORMANCE SUMMARY

PRESCRIPTIVE TESTING DATA

Diaphragm Meters 1001-3000 CFH

SERIAL NUM	MANUF. TYPE	TEST DTE	TEST YEAR	STATE CDE	AS FND OPEN ACCUR	AS FND CHK ACCUR	AS LEFT OPEN ACCUR	AS LEFT CHK ACCUR	AS FOUND AVERAGE	PASS/FAIL
00042666	AL1400TC	23-Jun-10	2010	WA	97	99.8	101.2	99.6	98.4	pass
00043303	AL1400TC	22-Jun-10	2010	WA	100.5	99.5	100	100	100	pass
00045528	AL1400TC	07-Jun-10	2010	WA	97.1	99.8	99.8	99.8	98.45	pass
00047811	AL1400TC	22-Jun-10	2010	WA	102.7	100.3	100.3	100.3	101.5	pass
00077882	AL1400TC	19-Jul-10	2010	WA	98.4	99.6	99.8	100.1	99	pass
00086779	AL1400TC	22-Jul-10	2010	WA	98.1	99.7	100.3	100.3	98.9	pass
00086919	AL1400TC	22-Sep-10	2010	WA	96	100	100.4	0.2	98	pass
00089373	AL2300TC	17-May-10	2010	WA	0	0	0	0	0	Unique Defect
00089481	AL1400TC	25-Jun-10	2010	WA	99.9	100.2	99.9	99.8	100.05	pass
00089770	AL1400TC	11-Aug-10	2010	WA	99.2	99.6	99.8	100.1	99.4	pass
00089783	AL1400TC	09-Jun-10	2010	WA	99.2	99.7	100.2	100	99.45	pass
00089845	AL1400TC	09-Jun-10	2010	WA	103.1	101.3	99.6	99.6	102.2	fail
00089848	AL1400TC	09-Jun-10	2010	WA	99.7	99.3	100	99.7	99.5	pass
00089849	AL1400TC	10-Aug-10	2010	WA	101.1	101.9	99.7	99.7	101.5	pass
00089851	AL1400TC	18-Jun-10	2010	WA	100.9	100.5	100.1	100.1	100.7	pass
00089939	AL1400TC	14-May-10	2010	WA	99.7	101.2	100.2	100.1	100.45	pass
00090423	AL1400TC	01-Sep-10	2010	WA	99.6	100.3	100.1	100	99.95	pass
00091147	AL1400TC	23-Jun-10	2010	WA	101	101.6	100.1	99.7	101.3	pass
00091152	AL1400TC	20-May-10	2010	WA	97.8	102.3	100.3	99.9	100.05	pass
00091187	AL1400TC	09-Jun-10	2010	WA	102.3	102.6	99.7	99.8	102.45	fail
00094356	AL1400TC	14-Jun-10	2010	WA	100.4	100.4	100	100.1	100.4	pass
00094361	AL1400TC	16-Aug-10	2010	WA	99.5	99.9	100	100.1	99.7	pass
00097313	AL2300TC	14-Apr-10	2010	WA	101.9	101.1	100.4	100.3	101.5	pass
00097319	AL1400TC	25-Aug-10	2010	WA	99.2	100.3	100	100	99.75	pass
00097324	AL2300TC	20-Apr-10	2010	WA	99.8	99.4	100.4	100.4	99.6	pass
00097326	AL2300TC	08-Apr-10	2010	WA	100.1	99.9	100.2	99.9	100	pass
00099076	AL1400TC	25-Aug-10	2010	WA	99.9	101.6	100.4	100.4	100.75	pass

SERIAL NUM	MANUF. TYPE	TEST DTE	TEST YEAR	STATE CDE	AS FND OPEN ACCUR	AS FND CHK ACCUR	AS LEFT OPEN ACCUR	AS LEFT CHK ACCUR	AS FOUND AVERAGE	PASS/FAIL
00099209	AL1400TC	10-Jun-10	2010	WA	99.8	101	100.1	99.7	100.4	pass
00099211	AL1400TC	18-Jun-10	2010	WA	99.8	101.2	100.1	100.2	100.5	pass
00099212	AL1400TC	26-Aug-10	2010	WA	98.1	99.3	100.5	100.4	98.7	pass
00099213	AL1400TC	11-Aug-10	2010	WA	98.6	99.4	99.8	99.8	99	pass
00099229	AL1400TC	10-Aug-10	2010	WA	0	0	0	0	0	Unique Defect
00100403	AL1400TC	14-Sep-10	2010	WA	98.4	99.4	100.1	99.9	98.9	pass
00100410	AL1400TC	19-Jul-10	2010	WA	98.3	100.2	100	100.3	99.25	pass
00100423	AL1400TC	24-Jun-10	2010	WA	98.8	90	99.9	99.6	94.4	fail
00100426	AL1400TC	15-Jul-10	2010	WA	99.4	99.8	100.4	100.2	99.6	pass
00102428	AL1400TC	23-Aug-10	2010	WA	99	99.1	99.7	100	99.05	pass
00102441	AL1400TC	09-Jun-10	2010	WA	101	100.4	100.1	100.1	100.7	pass
00103675	AL2300TC	24-Mar-10	2010	WA	99.6	99.5	99.7	100	99.55	pass
00104680	AL1400TC	09-Jun-10	2010	WA	100.9	100.7	100	99.9	100.8	pass
00104742	AL1400TC	09-Jun-10	2010	WA	102.2	102.4	100.2	100	102.3	fail
00104747	AL1400TC	03-Jun-10	2010	WA	97	98.2	100.5	100.4	97.6	fail
00104764	AL1400TC	31-Aug-10	2010	WA	98.7	99.6	100	100.3	99.15	pass
00104768	AL1400TC	25-Jun-10	2010	WA	99.5	101.2	99.9	99.6	100.35	pass
00106372	AL1400TC	10-Jun-10	2010	WA	98.8	98.5	100	99.8	98.65	pass
00106422	AL1400TC	20-May-10	2010	WA	100.3	101.3	99.8	99.6	100.8	pass
00108006	AL1400TC	08-Oct-10	2010	WA	100.5	101.5	100	99.7	101	pass
00114279	AL2300TC	21-Apr-10	2010	WA	97.3	99.1	100.3	100.1	98.2	pass
00114280	AL2300TC	07-Jan-10	2010	WA	100.1	100.2	100.1	100.2	100.15	pass
00114281	AL2300TC	30-Mar-10	2010	WA	99.3	100.8	100.1	100.2	100.05	pass
00115785	AL2300TC	07-Apr-10	2010	WA	99.6	99.7	99.7	99.7	99.65	pass
00115787	AL2300TC	25-Mar-10	2010	WA	97	100.1	100.4	100.1	98.55	pass
00117792	AL1400TC	19-Jul-10	2010	WA	97.8	98.6	100.3	100.2	98.2	pass
00133042	AL2300TC	16-Mar-10	2010	WA	100.5	101.3	100.1	100.5	100.9	pass
00133044	AL2300TC	16-Mar-10	2010	WA	100.2	99.8	0	0	100	pass
00140015	AL1400TC	09-Jun-10	2010	WA	100.5	101.2	99.9	100.1	100.85	pass
00149837	AL1400TC	31-Aug-10	2010	WA	98.9	101	100.1	99.8	99.95	pass
00149838	AL1400TC	10-Jun-10	2010	WA	98.1	99.4	100	100.2	98.75	pass
00149839	AL1400TC	21-Jun-10	2010	WA	98.9	100.1	100.7	99.7	99.5	pass

SERIAL NUM	MANUF. TYPE	TEST DTE	TEST YEAR	STATE CDE	AS FND OPEN ACCUR	AS FND CHK ACCUR	AS LEFT OPEN ACCUR	AS LEFT CHK ACCUR	AS FOUND AVERAGE	PASS/FAIL
00149840	AL1400TC	06-Oct-10	2010	WA	98.6	100.5	100	100.5	99.55	pass
00151533	AL1400TC	29-Jul-10	2010	WA	100.1	101.4	99.8	99.9	100.75	pass
00151728	AL1400TC	18-Jun-10	2010	WA	98.1	99.1	100.3	100.2	98.6	pass
00300056	AL1400TC	18-Jun-10	2010	WA	99.4	99.5	100.4	100.4	99.45	pass
00300058	AL1400TC	04-Oct-10	2010	WA	99	100.3	100	100.3	99.65	pass
00300059	AL1400TC	12-Aug-10	2010	WA	99.7	100.7	99.6	99.6	100.2	pass
00300101	AL1400TC	23-Jun-10	2010	WA	97.4	98.5	99.8	99.9	97.95	fail
00300106	AL1400TC	28-Jun-10	2010	WA	101.7	101.7	100.1	0.5	101.7	pass
00300142	AL2300TC	08-Apr-10	2010	WA	97.4	99.3	99.7	100.1	98.35	pass
00300147	AL1400TC	09-Jun-10	2010	WA	101.6	101.2	100	100.2	101.4	pass
00300152	AL1400TC	09-Jun-10	2010	WA	101.5	101	100.2	100	101.25	pass
00300162	AL1400TC	29-Dec-10	2010	WA	100.4	100.6	99.9	100.2	100.5	pass
00300165	AL1400TC	17-May-10	2010	WA	99.7	100	0	0	99.85	pass
00300773	AL2300TC	06-Aug-10	2010	WA	99.6	100	100.5	100.4	99.8	pass
05603758	AL1400TC	09-Jun-10	2010	WA	101.5	101.6	100.1	100	101.55	pass

Diaphragm Meters Over 3000 CFH

SERIAL NUM	MANUFACTURER TYP	TEST DTE	TEST YEAR	STATE CDE	AS FND OPEN ACCUR	AS FND CHK ACCUR	AS LEFT OPEN ACCUR	AS LEFT CHK ACCUR	AS FOUND AVERAGE	PASS/FAIL
00047844	AL5000TC	08-Jun-10	2010	WA	100.4	98.6	100	99.8	99.5	pass
00057092	AL5000TC	23-Jun-10	2010	WA	101.3	100.5	100.1	99.8	100.9	pass
00057093	AL5000TC	10-Aug-10	2010	WA	99.5	98.3	100.1	100.2	98.9	pass
00061526	AL5000TC	15-Jul-10	2010	WA	100.4	99.6	100	100.2	100	pass
00061549	AL5000TC	08-Jun-10	2010	WA	100.2	98.2	99.9	99.9	99.2	pass
00064172	AL5000TC	19-Jul-10	2010	WA	101.4	100.2	100	99.7	100.8	pass
00065948	AL5000TC	29-Sep-10	2010	WA	99.9	99.8	100.3	100.3	99.85	pass
00065949	AL5000TC	07-Jun-10	2010	WA	101.2	99	100.3	99.9	100.1	pass
00066803	AL5000TC	11-Aug-10	2010	WA	100.6	99.4	100.1	99.9	100	pass
00066807	AL5000TC	06-Oct-10	2010	WA	100.5	100.3	100.3	100.3	100.4	pass
00067663	AL5000TC	07-Oct-10	2010	WA	100.6	100.6	100.2	99.9	100.6	pass
00078044	AL5000TC	26-Aug-10	2010	WA	100.9	99.8	100.2	100	100.35	pass
00084367	AL5000TC	10-Jun-10	2010	WA	101.1	102.3	100	100.3	101.7	pass
00089854	AL5000TC	22-Jul-10	2010	WA	99.8	98.9	100.2	100.3	99.35	pass
00089858	AL5000TC	12-Aug-10	2010	WA	100.6	99.2	99.9	100.1	99.9	pass

00089951	AL5000TC	23-Mar-10	2010	WA	102.2	100.3	99.7	99.6	101.25	pass
00097328	AL5000TC	24-Mar-10	2010	WA	99	98.3	100.1	99.9	98.65	pass
00097329	AL5000TC	18-Mar-10	2010	WA	100.7	100.7	100.2	100.2	100.7	pass
00097330	AL5000TC	23-Mar-10	2010	WA	99.8	99.8	100.2	100.3	99.8	pass
00097331	AL5000TC	19-Apr-10	2010	WA	100.6	99.9	100.4	100.4	100.25	pass
00097333	AL5000TC	19-Apr-10	2010	WA	100.2	100.3	100.2	100	100.25	pass
00097486	AL5000TC	22-Mar-10	2010	WA	102.6	102	99.9	99.7	102.3	fail
00100315	AL5000TC	16-Aug-10	2010	WA	100.4	100.1	100.2	99.9	100.25	pass
00100316	AL5000TC	19-May-10	2010	WA	101.7	101.6	100.2	99.8	101.65	pass
00100417	AL5000TC	20-Apr-10	2010	WA	99.6	98.3	100.4	100.4	98.95	pass
00102553	AL5000TC	08-Jun-10	2010	WA	100.1	98.5	99.9	100.2	99.3	pass
00114270	AL5000TC	30-Mar-10	2010	WA	98.4	98.1	100.2	100.1	98.25	pass
00114272	AL5000TC	26-Aug-10	2010	WA	100.8	100.1	100.3	100.3	100.45	pass
00125433	AL5000TC	19-Apr-10	2010	WA	101.3	100.4	100.1	100.2	100.85	pass
00125436	AL5000TC	22-Jul-10	2010	WA	101	100.2	100.5	100.2	100.6	pass
00133045	AL5000TC	19-Mar-10	2010	WA	102.5	101.8	100	100.1	102.15	fail

(1) Serial Num: Avista assigned meter identifying number. Not manufacturer serial number
(2) Manufacturer Typ: Manufacturer model number
(3) Test Dte: Test date during report year
(4) Test Year: Test year derived from Test_Dte
(5) State CDE: State where installed
(6) As Fnd Open Accur: Meter "full-flow" accuracy before any adjustments
(7) As Fnd Check Accur: Meter "low-flow" accuracy before any adjustments
(8) As Left Open Accur: Meter "full-flow" accuracy after any adjustments
(9) As Left Check Accur: Meter "low-flow" accuracy after any adjustments
(10) As Found Average: Average of the two as found test results
(11) Pass/Fail:
   a. Pass = Meter within +/- 2% of 100% accurate
   b. Fail = Meter not within +/- 2% of 100% accurate

METER PERFORMANCE SUMMARY

SUMMARY ROTARY METERS

ROTARY METERS – Individual test results included for reference.

In-Service Meters 1/1/10	**477**
Number of Tests	108
Number of Failed Tests	2
Number of Passing Tests	106
Number of Retirements	2
In-Service Meters 12/31/10 -	493

METER PERFORMANCE SUMMARY

ROTARY METERS - DATA

SERIAL_NUM (1)	MANUFACTURER_TYP (2)	EQUIP_STATUS_CDE (3)	MaxOfTEST_DTE (4)	RETIREMENT_DTE (5)
00006627	RM11TC	A	15-Feb-10	
00007176	RM5TC	A	24-Aug-10	
00007816	RM16TC	A	02-Aug-10	
00011912	RT11TC	A	23-Aug-10	
00011935	RM3TC	A	24-Aug-10	
00011947	RM11TC	A	25-Jan-10	
00012491	RM3TC	A	04-Nov-10	
00014775	RM5TC	A	01-Feb-10	
00014922	RM7TC	A	18-Aug-10	
00014926	RM3TC	A	16-Aug-10	
00015419	RM5TC	A	21-May-10	
00017275	RM11TC	A	18-Jan-10	
00019779	RM11TC	A	26-Oct-10	
00021110	RM3TC	A	04-Nov-10	
00023579	RM5TC	A	16-Aug-10	
00023581	RM5TC	A	20-Oct-10	
00024601	RM7TC	A	05-Feb-10	
00024665	RM3TC	A	08-Oct-10	
00026055	16M125	A	29-Jan-10	
00028872	RM3TC	A	24-Aug-10	
00029604	RM5TC	A	15-Feb-10	
00031142	RM11TC	A	17-Dec-10	
00032564	RM7TC	A	18-Jan-10	
00032587	RM7TC	A	19-Feb-10	
00033297	RT5TC	S	26-Aug-10	
00033589	RM3	R	08-Dec-10	08-Dec-10
00034009	RM5TC	A	09-Jul-10	
00034171	RM5TC	A	05-Feb-10	
00036655	RM2TC	A	13-Apr-10	
00036676	RM5TC	A	24-Aug-10	
00036713	RM16TC	A	12-Feb-10	
00037212	RM7TC	A	04-Feb-10	
00037821	RM7TC	A	28-Dec-10	
00040049	RM11TC	A	10-Mar-10	
00042222	RM5TC	A	14-Jul-10	
00042223	RM5TC	A	21-May-10	
00056666	RM7TC	A	09-Jul-10	
00226144	RT11TC	A	03-Feb-10	

SERIAL_NUM (1)	MANUFACTURER_TYP (2)	EQUIP_STATUS_CDE (3)	MaxOfTEST_DTE (4)	RETIREMENT_DTE (5)
00323440	RT2TC	S	18-Nov-10	
00336194	RT2TC	A	25-Jan-10	
00340588	RT3TC	A	08-Apr-10	
00340592	RT3TC	A	22-Feb-10	
00340593	RT3TC	A	19-Feb-10	
00629604	RT3TC	A	20-Oct-10	
00652734	RT7TC	A	08-Nov-10	
00652736	RT16TC	A	20-Dec-10	
00653751	AM3.5TC	A	28-May-10	
00724691	RT3TC	A	20-Oct-10	
00746422	RT11TC	A	12-Oct-10	
00746435	RT7TC	A	07-Dec-10	
00751415	RT3TC	A	20-Oct-10	
00751425	RT5TC	A	20-Oct-10	
00836813	RT3TC	A	03-Feb-10	
00848553	RT16TC	A	04-Nov-10	
00848555	RT23TC	A	03-Feb-10	
00848556	RT23TC	A	03-Feb-10	
00862999	RT5TC	A	20-Oct-10	
00863008	RT11TC	A	13-Oct-10	
00940704	RT5TC	A	20-Oct-10	
00940709	RT5TC	A	20-Oct-10	
00967801	RM23TC	R	26-Aug-10	19-Nov-10
01038350	RT3TC	A	18-Aug-10	
01038362	RT11TC	A	18-Aug-10	
06990213	RM3TC	A	02-Feb-10	
06990222	RM3TC	A	25-Jan-10	
06990233	RM5TC	A	28-Apr-10	
06990245	RM11TC	A	18-Aug-10	
06990272	RM3TC	A	01-Feb-10	
06990274	RM3TC	A	23-Apr-10	
09422211	RT11TC	A	04-Nov-10	
09545004	RT3TC	A	25-Jan-10	
09545294	RT7TC	A	26-May-10	
09545296	RT7TC	A	27-Oct-10	
09620821	RT11TC	A	01-Mar-10	
09620823	RT11TC	A	04-Nov-10	
09620826	RT5TC	A	02-Nov-10	
09620835	RT3TC	A	04-Feb-10	
09623408	RT3TC	A	09-Jul-10	
09623409	RT3TC	A	30-Jul-10	
09623411	RT3TC	A	12-May-10	

SERIAL_NUM (1)	MANUFACTURER_TYP (2)	EQUIP_STATUS_CDE (3)	MaxOfTEST_DTE (4)	RETIREMENT_DTE (5)
09623422	RT5TC	A	23-Aug-10	
09623425	RT5TC	A	30-Jul-10	
09637945	RT16TC	A	09-Jul-10	
09645990	RT7TC	A	08-Oct-10	
09645991	RT7TC	A	15-Dec-10	
09648326	RT3TC	A	22-Feb-10	
09649412	RT5TC	A	23-Feb-10	
09649413	RT5TC	A	21-Jul-10	
09650079	RT11TC	A	23-Aug-10	
09650085	RT3TC	A	22-Feb-10	
09650087	RT3TC	A	22-Jan-10	
09650088	RT7TC	A	22-Jan-10	
09650089	RT7TC	A	29-Oct-10	
09650091	RT7TC	A	23-Feb-10	
09725148	RT3TC	A	01-Feb-10	
09734793	RT5TC	A	02-Feb-10	
09734794	RT5TC	A	23-Aug-10	
09734800	RT3TC	A	02-Feb-10	
09740646	RT5TC	A	09-Jun-10	
09825187	RT3TC	A	14-Oct-10	
09825193	RT3TC	A	09-Aug-10	
09825196	RT3TC	A	13-Apr-10	
09825198	RT3TC	A	02-Mar-10	
09825215	RT7TC	A	23-Feb-10	
09825218	RT11TC	A	13-Oct-10	
09850945	RT11TC	A	13-Apr-10	
09850949	RT16TC	S	26-Aug-10	
09853863	RT16TC	A	15-Dec-10	

(1) Serial_Num: Avista assigned meter identifying number. Not manufacturer serial number
(2) Manufacturer_Typ: Manufacturer model number
(3) Equip_Status_Cde: Equipment current status
   a. R = retired
   b. A = Active
   c. S = Storeroom
   d. P =
(4) MaxOfTest_DTE: Most recent test date
(5) Retirement_DTE: Date retired if status changed during report year

METER PERFORMANCE SUMMARY

TURBINE METER SUMMARY

Summary Results

In-Service Meters 1/1/10	**31**
Meters Tested	31
Meters Passing	29
Meters Failed/Replaced	4
Retired Meters	4
In-Service Meters 12/31/10 -	31

Meter Details

Serial_Num (1)	Manufacturer_Typ (2)	Equip_Cde (3)	Test_Dte (4)	Retirement_Dte (5)
00957276	3" American	A	4-14-10	
00114224	3" American	A	8-31-10	
00967870	3" American	A	3-8-10	
16129326	4" Rockwell	A	9-30-10	
16129324	4" Rockwell	A	9-30-10	
16129325	4" Rockwell	A	10-28-10	
16604858	4" Rockwell	A	6-17-10	
08996855	4" Rockwell	A	3-24-10	
00033546	4" Rockwell	A	10-15-10	
16604857	4" Rockwell	A	10-14-10	
06848033	4" Rockwell	A	9-30-10	
08996021	4" Rockwell	A	7-28-10	
00034874	4" Rockwell	A	7-19-10	
00033376	4" Rockwell	A	7-29-10	
04111226	4" Rockwell	A	9-2-10	
00032583	4" Rockwell	A	9-14-10	
00025800	4" Rockwell	A	9-15-10	
16307880	4" Rockwell	A	6-9-10	
08996023	6" Rockwell	A	10-14-10	
16129327	6" Rockwell	A	10-28-10	
00035174	6" Rockwell	A	10-28-10	
00032798	6" Rockwell	A	11-2-10	
00033363	6" Rockwell	A	4-14-10	
16129323	6" Rockwell	A	6-27-10	
16129328	6" Rockwell	A	10-20-10	
00614989	6" Rockwell	A	10-15-10	
00025063	6" Rockwell	A	8-30-10	
00025499	8" Rockwell	A	9-30-10	

00025201	8" Rockwell	A	10-5-10	
08996022	8" Rockwell	A	10-19-10	
00032586	8" Rockwell	A	10-18-10	
00024947	4" Rockwell	R	6-24-10	10-12-10
00032881	6" Rockwell	R	9-20-10	10-7-10
00110027	6" Rockwell	R	11-11-09	11-11-09
00032744	12" Rockwwell	R	10-16-08	7-16-10

(1) – Meter serial number
(2) – Meter type
(3) – Meter Status: A=Active, R = Retired
(4) – Date Meter Tested
(5) – Meter Retirement Date

COMPLIANCE DOCUMENTS

- TARIFF – Rule 170, Section 20, Effective January 1, 2009
- WAC 480-90 (Gas Companies - Operations)