



In the November 24, 2009 issue of the Water Quality update:

- Well Status Report
- Water Quality Test Results – October 2009
- System Changes on the Far East Side
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Well Status Report

- All seasonal wells are now out of service for the winter. The wells include Wells 6, 8, 10, 17, 23, 27, and 28.
- Well 7 is temporarily out of service for maintenance. The well will remain off-line until repairs are complete.

Water Quality Test Results – October 2009

MICROBIOLOGY – In October, Water Utility staff collected 415 water samples from Water Utility facilities and representative sample locations in the distribution system. The samples were tested for coliform bacteria – indicators of potential water contamination. None of the samples collected in October showed the presence of coliform bacteria.

IRON & MANGANESE – The utility also collected samples from six wells and tested the water for manganese and iron. At elevated levels, these minerals can cause yellow, orange, or brown colored water. Monthly water samples are typically collected from wells that exceed 0.15 ppm iron or 25 ppb manganese. The table below shows the October test results, and the September results which were not previously reported.

September	Mn (ppb)	Iron (ppm)
UW 6	0.9	0.007
UW 19	41	0.208
UW 26	23	0.009
UW 27	27	0.152
UW 28	21	0.186
UW 30	16	0.253

October	Mn (ppb)	Iron (ppm)
UW 7	27	0.386
UW 19	47	0.214
UW 23	25	0.063
UW 24	30	0.174
UW 26	11	< 0.001
UW 30	14	0.201

RESIDENTIAL IRON & MANGANESE – A total of sixty-eight samples were collected from homes in the Well 29 service area during September and October. These homes were sampled to confirm that satisfactory iron and manganese levels were being observed at the residential tap for homes served by Well 29. Manganese levels ranged from 0.9 to 76 ppb with a median of 2.9 ppb. Iron levels ranged from <0.01 to 0.53 ppm with a median concentration of 0.02 ppm. A single sample exceeded the secondary maximum contaminant level (SMCL) for manganese (50 ppb) and iron (0.3 ppm).

Fifty-two tap samples were collected from nineteen homes in the Well 8 service area during September and October. Homes were sampled during periods in which Well 8 operated and other times when the well was off. Manganese ranged from 0.5 to 77 ppb with a median of 6 ppb while iron ranged from <0.01 to 1.2 ppm with a median concentration of 0.03 ppm. Three samples exceed the SMCL for manganese while nine were greater than the SMCL for iron.

Finally, multiple samples were collected at two homes while the water mains in front of the homes were being flushed as part of the unidirectional flushing program. The results showed brief periods of elevated turbidity (water discoloration) and iron and manganese levels. The sampling was conducted as part of an on-going project to identify potential triggers for water main flushing that could minimize customer impacts during flushing.

VOLATILE ORGANICS MONITORING – Five wells and two reservoirs were sampled in October for volatile organic compounds (VOC) testing. Each sample was analyzed for 50+ potential contaminants. The five wells evaluated are tested quarterly due to previous VOC detections. The table below shows only the compounds that were detected.

VOLATILE ORGANIC COMPOUNDS	MCL	UNITS	9	11	14	15	18	106	315
Bromodichloromethane*	--	ppb	[0.51]	<0.21	<0.21	[0.25]	<0.21	1.6	2.0
Bromoform*	--	ppb	0.49	[0.23]	[0.20]	[0.45]	<0.14	2.1	[0.44]
Chloroform*	--	ppb	[0.19]	<0.12	<0.12	[0.16]	<0.12	0.89	1.7
Dibromochloromethane*	--	ppb	0.80	[0.22]	[0.16]	0.57	<0.16	2.6	1.5
Total Trihalomethanes (TTHM)	80	ppb	2.0	0.45	0.36	1.4	0.0	7.2	5.6
Dichlorodifluoromethane	--	ppb	<0.16	<0.16	[0.19]	<0.16	<0.16	<0.16	<0.16
1,2-Dichloroethylene (cis)	70	ppb	[0.13]	0.38	<0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	5	ppb	2.2	[0.64]	[0.68]	3.4	0.93	[0.47]	<0.20
1,1,1-Trichloroethane	200	ppb	[0.15]	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Trichloroethylene	5	ppb	<0.25	[0.30]	[0.31]	[0.35]	<0.25	<0.25	<0.25
Trichlorofluoromethane	--	ppb	<0.16	1.3	<0.16	<0.16	<0.16	<0.16	<0.16

* Disinfection By-Product

¹ Bracketed numbers indicate that the contaminant was detected but measured below the Level of Quantification (LOQ)

System Changes on the Far East Side

Phase 1 of the conversion of a portion of Pressure Zone 6 into Pressure Zone 3 was completed in early November. The conversion increased pressure by 15-25 psi in the N. Thompson Drive area between Commercial Avenue and Cottage Grove Road. The second phase of the conversion, planned for next spring, will impact homes between Cottage Grove Road and Buckeye Road. Additional information can be found on our [website](#) or by contacting Water Utility Principal Engineer Al Larson. A public meeting will be scheduled before phase 2 of the conversion is implemented.

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Please contact me if you need assistance.

Sincerely,
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