

2009 Annual Water Quality Report

Microbiological Contaminants	Unit Measurement	MCL	PHG (MCLG)	Surface Water	Ground Water Range	Ground Water Average
1. Total Coliform Bacteria	% of tests positive	5%	(zero)	0.2%	N/D	N/D
3. Turbidity	NTU	TT	N/S	0.03	.19-.74	0.39

Radioactive Contaminants (2006)

4. Gross Beta Activity DLR=3.00	pCi/L	50	0	N/D	N/D	N/D
5. Strontium 90	pCi/L	8	0.35	N/D	N/D	N/D
6. Tritium	pCi/L	20,000	400	N/D	N/D	N/D
7. Gross Alpha Activity	pCi/L	15	0	N/D	<3.00	N/D
8. Radium 226 & 228 (total)	pCi/L	5	0	N/D	N/D	N/D
9. Uranium	pCi/L	20	0.43	N/D	N/D	N/D

Inorganic Contaminants

10. Aluminum	ppm	1	0.6	N/D	N/D	N/D
11. Antimony	ppb	6	20	N/D	N/D	N/D
12. Arsenic	ppb	10	0.004	N/D	N/D-2.5	0.63
14. Barium	ppm	1	2	N/D	N/D-0.13	0.05
15. Beryllium	ppb	4	1	N/D	N/D	N/D
16. Cadmium	ppb	5	0.04	N/D	N/D	N/D
17. Chromium	ppb	50	(100)	N/D	N/D	N/D
18. Copper	ppm	1.3	0.3	N/D	N/D	N/D
19. Cyanide	ppb	150	150	N/D	N/D	N/D
20. Fluoride	ppm	2	1	N/D	N/D-0.14	0.09
21. Lead	ppb	15	0.2	N/D	N/D	N/D
22. Mercury(inorganic)	ppb	2	1.2	N/D	N/D	N/D
23. Nickel	ppb	100	12	N/D	N/D	N/D
24. Nitrate(as nitrite, NO3)	ppm	45	45	N/D	3.4-9.3	5.35
25. Nitrite(as nitrogen, N)	ppm	1	1	N/D	N/D	N/D
26. Perchlorate	ppb	6	6	N/D	N/D	N/D
27. Selenium	ppb	50	(50)	N/D	N/D	N/D
28. Thallium	ppb	2	0.1	N/D	N/D	N/D

Volatile Organic Contaminants

29. Benzene	ppb	1	0.15	N/D	N/D	N/D
30. Carbon tetrachloride	ppt	500	100	N/D	N/D	N/D
31. 1,2-Dichlorobenzene[o-DCB]	ppb	600	600	N/D	N/D	N/D
32. 1,4-Dichlorobenzene[p-DCB]	ppb	5	6	N/D	N/D	N/D
33. 1,1-Dichloroethane	ppb	5	3	N/D	N/D	N/D
34. 1,2-Dichloroethane	ppt	500	400	N/D	N/D	N/D
35. 1,1-Dichloroethylene	ppb	6	10	N/D	N/D	N/D
36. cis-1,2-Dichloroethylene	ppb	6	100	N/D	N/D	N/D
37. trans-1,2-Dichloroethylene	ppb	10	60	N/D	N/D	N/D
38. Dichloromethane	ppb	5	4	N/D	N/D	N/D
39. 1,2-Dichloropropane	ppb	5	0.5	N/D	N/D	N/D
40. 1,3-Dichloropropane	ppt	500	200	N/D	N/D	N/D
41. Ethylbenzene	ppb	300	300	N/D	N/D	N/D
42. Methyl-tert-butyl ether	ppb	13	13	N/D	N/D	N/D
43. Monochlorobenzene	ppb	70	200	N/D	N/D	N/D
44. Styrene	ppb	100	(100)	N/D	N/D	N/D
45. 1,1,2,2-Tetrachlorethane	ppb	1	0.1	N/D	N/D	N/D
46. Tetrachloroethylene[PCE]	ppb	5	0.06	N/D	N/D-3.2	1.2
47. 1,2,4-Trichlorobenzene	ppb	5	5	N/D	N/D	N/D
48. 1,1,1-Trichloroethane	ppb	200	1000	N/D	N/D	N/D
49. 1,1,2-Trichloroethane	ppb	5	0.3	N/D	N/D	N/D
50. Trichloroethylene[TCE]	ppb	5	1.7	N/D	N/D	N/D
51. Toluene	ppb	150	150	N/D	N/D	N/D
52. Trichlorofluoromethane	ppb	150	700	N/D	N/D	N/D
53. 1,1,2-Trichloro-1,2,2-trifluoroethane	ppb	1.2	4	N/D	N/D	N/D
54. Vinyl Chloride	ppt	500	50	N/D	N/D	N/D
55. Xylenes	ppm	1.75	1.8	N/D	N/D	N/D

Disinfection Byproducts (Distribution System)

56. TTHM [Total Trihalomethanes]	ppb	80	N/S	13.9	N/D	N/D
57. Haloacetic Acids	ppb	60	N/S	9.1	N/D	N/D

Secondary Drinking Water Standards

58. Aluminum	ppb	200	N/S	N/D	N/D	N/D
59. Color	units	15 units	N/S	N/D	N/D	N/D
60. Copper	ppm	1	N/S	N/D	N/D	N/D
61. Corrosivity	---	Non-corrosive	N/S	N/D	N/D	N/D
62. Foaming Agents [MBAS]	ppb	500	N/S	N/D	N/D	N/D
63. Iron	ppb	300	N/S	N/D	N/D-120	30
64. Manganese	ppb	50	N/S	N/D	N/D-20	8.3
65. Methyl-tert-butyl ether [MTBE]	ppb	5	N/S	N/D	N/D	N/D
66. Odor-Threshold	TON (units)	3	N/S	1	N/D	N/D
67. Silver	ppb	100	N/S	N/D	N/D	N/D
68. Thiobencarb	ppb	1	N/S	N/D	N/D	N/D
69. Turbidity	units	5 units	N/S	0.03	.19-.74	0.39
70. Zinc	ppm	5	N/S	N/D	N/D	N/D
71. Total Dissolved Solids	ppm	1000	N/S	49	120-240	183
72. Specific Conductance	micromhos	1600	N/S	89	140-350	240
73. Chloride	ppm	500	N/S	3.9	4.0-20	9.0
74. Sulfate	ppm	500	N/S	3.8	5.5-12	9.0

Unregulated Contaminants and Constituents of Interest

75. 1, 4 Dioxane	ppb	N/S	N/S	N/D	N/D	N/D
76. N-Nitrosodimethylamine (NDMA)	ppb	N/S	N/S	N/D	N/D	N/D
77. Dimethoate	ppb	N/S	N/S	N/D	N/D	N/D
78. Terbufos sulfone	ppb	N/S	N/S	N/D	N/D	N/D
79. 2,2',4,4'-tetrabromodiphenyl ether	ppb	N/S	N/S	N/D	N/D	N/D
80. 2,2',4,4',5-pentabromodiphenyl ether	ppb	N/S	N/S	N/D	N/D	N/D
81. 2,2',4,4',5,5'-hexabromodiphenyl ether	ppb	N/S	N/S	N/D	N/D	N/D
82. 2,2',4,4',5,5'-hexabromodiphenyl ether	ppb	N/S	N/S	N/D	N/D	N/D
83. 2,2',4,4',6-pentabromodiphenyl ether	ppb	N/S	N/S	N/D	N/D	N/D
84. 1,3-dinitrobenzene	ppb	N/S	N/S	N/D	N/D	N/D
85. 2,4,6-trinitrotoluene (TNT)	ppb	N/S	N/S	N/D	N/D	N/D
86. hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	ppb	N/S	N/S	N/D	N/D	N/D
87. Sodium	ppm	N/S	N/S	7.3	7.2-15	10.7
88. Calcium	ppm	N/S	N/S	7.8	11.0-32	21
89. Hardness	ppm	N/S	N/S	30	55-150	105
90. Magnesium	ppm	N/S	N/S	2.7	6.8-17	12.5

Lead and Copper (Sampled 2008)

		AL	PHG	90th Percentile	Number of sites exceeding AL
80. Lead	ppb	15	0.2	N/D	Zero
81. Copper	ppm	1.3	0.17	0.14	Zero

LEGEND:

N/D = Analyzed; Non Detected

NTU = Nephelometric Turbidity Unit

PPM = Parts Per Million

MCL= Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

PCI/l = Picocuries per Liter

PHG = Public Health Goal

N/A = Not Applicable

N/S = No Standard

TT = Treatment Technique

AL = Alert Level

*Total Trihalomethanes =

Sum of results for Chloroform, Bromoform, Dibromochloromethane and Bromochloromethane

Surface water samples collected in 2009.

Groundwater samples collected in 2008 except for

NDMA, Pechlorate, VOC's & Nitrates which are sampled quarterly.

For additional water quality data, contact:

Carmichael Water District at 483-2452