## Annual Drinking Water Quality Report for TODD CREEK FARMS METROPOLITAN DISTRICT

Esta es informacion importante. Si no la pueden leyer, necesitan que alguin se la traducean.

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. Our water sources are: Wells #2, #3, #4, #5, #6, #7 and #8 - Laramie Foxhills Aquifer. Well #2 is 1000 feet deep. Wells #3, #4, #5 and #6 are 1080 feet deep. Wells #7 and #8 are 1100 feet deep.

If you have any questions about this report or concerning your water utility, please contact Katie Creighton at 303-910-5690 or Todd Creek Farms Metropolitan District at 303-637-0344.

We want our valued customers to be informed about their water utility. If you want to learn more, please call the above contact about the utility or any scheduled public meetings.

All public water systems are required to have a source water protection plan in place by January, 2001. Many systems have already begun source water protection activities. To find out what your system has been doing, call the above contact.

Todd Creek Farms Metropolitan District routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2001. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. Further information on this subject can be obtained by calling the EPA Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/safewater on the Internet.

The sources of drinking water (both tap water and bottled water) included rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which provides the same protection for public health. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - (mandatory language) The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
61. cis-1,2-ichloroethylene	7/18/01	N	ND	ppb	70	70	Discharge from industrial chemical factories
62. trans - 1,2 -Dichloroethylene	7/18/01	N	ND	ppb	100	100	Discharge from industrial chemical factories
63. Dichloromethane	7/18/01	N	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
64. 1,2-Dichloropropane	7/18/01	N	ND	ppb	0	5	Discharge from industrial chemical factories
65. Ethylbenzene	7/18/01	N	ND	ppb	700	700	Discharge from petroleum refineries
66. Styrene	7/18/01	N	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
67. Tetrachloroethylene	7/18/01	N	ND	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
66. 1,2,4 – Trichlorobenzene	7/18/01	N	ND	ppb	70	70	Discharge from textile-finishing factories
67. 1,1,1 - Trichloroethane	7/18/01	N	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
70. 1,1,2 - Trichloroethane	7/18/01	N	ND	ppb	3	5	Discharge from industrial chemical factories
71. Trichloroethylene	7/18/01	N	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
72. TTHM [Total trihalomethanes]	7/18/01	N	ND	ppb	0	100	By-product of drinking water chlorination
73. Toluene	7/18/01	N	ND	ppm	1	1	Discharge from petroleum factories
74. Vinyl Chloride	7/18/01	N	ND	ppb	0	2	Leaching from PVC piping; discharge from chemical factories
75. Xylenes	7/18/01	N	ND	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

Note: A check sample for Dichloromethane was analyzed on 9/7/01. The result was ND (none detected).

Violations in 2001: NONE

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations. Arsenic levels above 25 ppb warrant public concern.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general public. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants are available from the Safe drinking Water Hotline above.

Please call our office if you have questions.

Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
19. Nitrate/Nitrite (as Nitrogen)	7/18/01	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
20. Selenium	NT			ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
21. Thallium	NT			ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthet	ic Organic	Contamir	ants inc	luding Pest	icides a	nd Hei	rbicides
22. 2,4-D	7/18/01	N	ND	ppb	70	70	Runoff from herbicide used on row crops
23. 2,4,5-TP (Silvex)	7/18/01	N	ND	ppb	50	50	Residue of banned herbicide
24. Acrylamide	7/18/01	N	ND	N. A.	0	TT	Added to water during sewage/wastewater treatment
25. Alachlor	7/18/01	N	ND	ppb	0	2	Runoff from herbicide used on row crops
26. Atrazine	7/18/01	N	ND	ppb	3	3	Runoff from herbicide used on row crops
27. Benzo(a)pyrene (PAH)	7/18/01	N	ND	nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
28. Carbofuran	7/18/01	N	ND	ppb	40	40	Leaching of soil furnigant used on rice and alfalfa
29. Chlordane	7/18/01	N	ND	ppb	0	2	Residue of banned termiticide
30. Dalapon	7/18/01	N	ND	ppb	200	200	Runoff from herbicide used on rights of way
31. Di (2-ethylhexyl) adipate	7/18/01	N	ND	ppb	400	400	Discharge from chemical factories
32. Di (2-ethylhexyl) phthalate	7/18/01	N	ND	ppb	0	6	Discharge from rubber and chemical factories
33. Dibromochloropropane	7/18/01	N	ND	nanograms/1	0	200	Runoff/leaching from soil furnigant used on soybeans, cotton, pineapples, and orchards
34. Dinoseb	7/18/01	N	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
35. Diquat	7/18/01	N	ND	ppb	20	20	Runoff from herbicide use
36. Dioxin [2,3,7,8-TCDD]	Waived			picograms/l	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories

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Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
37. Endothall	7/18/01	N	ND	ppb	100	100	Runoff from herbicide use
38. Endrin	7/18/01	N	ND	ррь	2	2	Residue of banned insecticide
39. Epichlorohydrin	7/18/01	N	ND	N. A.	0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
40. Ethylene dibromide	7/18/01	N	ND	nanograms/l	0	50	Discharge from petroleum refineries
41. Glyphosate	Waived		ND	ppb	700	700	Runoff from herbicide use
42. Heptachlor	7/18/01	N	ND	nanograms/l	0	400	Residue of banned temiticide
43. Heptachlor epoxide	7/18/01	N	ND	nanograms/1	0	200	Breakdown of heptachlor
44. Hexachlorobenzene	7/18/01	N	ND	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
45. Hexachlorocyclo-pentadiene	7/18/01	N	ND	ppb	50	50	Discharge from chemical factories
46. Lindane	7/18/01	N	ND	nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
47. Methoxychlor	7/18/01	N	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
48. Oxamyl [Vydate]	7/18/01	N	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
49. PCB [Polychlorinated biphenyls]	7/18/01	N	ND	nanograms/1	0	500	Runoff from landfills; discharge of waste chemicals
50. Pentachlorophenol	7/18/01	N	ND	ppb	0	1	Discharge from wood preserving factories
51. Picloram	7/18/01	N	ND	ppb	500	500	Herbicide runoff
52. Simazine	7/18/01	N	ND	ppb	4	4	Herbicide runoff
53. Toxaphene	7/18/01	N	ND	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
		Volatile	Organic	Contaminan	ts		
54. Benzene	7/18/01	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
55. Carbon tetrachloride	7/18/01	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
56. Chlorobenzene	7/18/01	N	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
57. o-Dichlorobenzene	7/18/01	N	ND	ppb	600	600	Discharge from industrial chemical factories
58. p-Dichlorobenzene	7/18/01	N	ND	ppb	75	75	Discharge from industrial chemical factories
59. 1,2 - Dichloroethane	7/18/01	N	ND	ppb	0	5	Discharge from industrial chemical factories
60. 1,1 - Dichloroethylene	7/18/01	N	ND	ppb	7	7	Discharge from industrial chemical factories

## TABLE OF VALUES

The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data (e.g., for organic contaminants), though representative, is more than one year old.

## **Microbiological Contaminants**

Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
1. Total Coliform Bacteria	1/4/01 2/14/01 3/12/01 4/5/01 5/8/01 6/14/01 7/11/01 8/16/01 9/11/01 10/08/01 11/08/01	N N N N N N N N N N N N N N N N N N N	absent absent absent absent absent absent absent absent absent absent absent	Presence/ Absence	0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
2. Fecal coliform and <i>E.coli</i>	N/A			Presence/ Absence	0	a routine sample & repeat sample are total coliform positive & one is also fecal coliform or <i>E.coli positive</i>	Human and animal fecal waste
3. Turbidity	NT			N.T.U.	n/a	TT	Soil runoff
		Radioa	active Co	ontaminant	S		
Beta/photon emitters	7/18/01	N	0	pCi/l	0	50	Decay of natural and man-made deposits
5. Alpha emitters	7/18/01	N	0.4	pCi/l	0	15	Erosion of natural deposits
6. Combined radium	NT			pCi/l	0	5	Erosion of natural deposits