2025 Annual Water Quality Report

City of Moro, Oregon

We are pleased to present to you this year's Annual Water Quality Report for the City of Moro. This report is designed to inform you about the quality of the 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. We want you to understand the efforts we make to continually improve the water system and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are :

- City Hall Well; City Hall Well Draws from the 3rd aquifer at 500' and pumps 100 GPM
- Hart Well; Hart Well draws from the 2nd aquifer at 280' and pumps 40 GPM
- Cemetery Well; Cemetery Well draws from the deep basalt (3rd) aquifer at 400 GPM

None of the Wells are treated with chlorine.

We are pleased to report that our drinking water is safe and meets federal and state requirements. This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact **the City of Moro 541-565-3535 or John English with Department of Public Works**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any or our regularly scheduled meetings. They are held on the **first Tuesday of every month at 7:00P.M. at the Moro City Hall – 104 1st Street.** The City of Moro routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st, 2025 to December 31st, 2025. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amount of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Paper copies of the 2025 Consumer Confidence Report are available at City Hall 104 1st Street, Moro, Oregon 97039.

Definitions: In the table below you will find many terms and abbreviation 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.
- Action Level – The concentration of a contaminant, which, if exceeded, triggers treatment of other requirements, which a water system must follow.
- Treatment Technique (TT) – a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (see definition below) as feasible using the best available treatment technology.
- Maximum Contaminant Level Goals (MCLG) – The level of a contaminant in drinking water which there is no known or expected risk to health. MCLGs allow for a margin of safety.

TEST RESULTS						
Contaminant	Violation YIN	Level Detect	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria 12 routine samples 0 repeat samples	N	Total ND		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment *Cemetery Well Construction *Disturbance of the ground *Re-samples all OK
2. Fecal coliform and *E.coli* 12 routine samples 0 repeat samples	N	E.coli ND		0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	Human and animal fecal waste
3. Turbidity				n/a	TT	Soil runoff
Radioactive Contaminants						
4. Beta/photon emitters	N	ND	mrem/yr	0	4	Decay of natural and man-made deposits
5. Alpha emitters	N	ND	pCi/1	0	15	Erosion of natural deposits
6. Combined radium	N	ND	pCi/1	0	5	Erosion of natural deposits
Inorganic Contaminants						
7. Antimony	N	<LOQ	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder

8. Arsenic	N	.0017 .0012 .0015	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
9. Asbestos	N	ND	M FL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
10. Barium	N	.0220 .0055 .0062	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
1 1. Beryllium	N	<LOQ	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	N	<LOQ	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
13. Chromium	N	.0018 .0021 .0017	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper Sampled 8/22/2023	N	.0033 .0079 .0197 .0056 .0050	ppm	1.3	AL=l .3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	.027 <LOQ <LOQ	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	.45 .40 .51	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead Sampled 8/22/2023	N	.0003 .0005 .0005 <LOQ .004	ppb	0.015	AL=l 5	Corrosion of household plumbing systems, erosion of natural deposits
18. Mercury (inorganic)	N	.002 <LOQ <LOQ	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
19. Nitrate (as Nitrogen)	Y Late Report	4.06 5.19 1.53	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
20. Nitrite (as Nitrogen)	N	<LOQ <LOQ	ppm	I	1 0	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium	N	<LOQ <LOQ <LOQ	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
22. Thallium	N	<LOQ	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides						
23. 2,4-D	N	ND	ppb	70	70	Runoff from herbicide used on row crops

24. 2,4,5-TP (Silvex)	N	ND	ppb	50	50	Residue of banned herbicide
25. Acrylamide	N	ND		0	1T	Added to water during sewage/wastewater treatment
26. Alachlor	N	ND	ppb	0	2	Runoff from herbicide used on row crops
27. Atrazine	N	ND	ppb	3	3	Runoff from herbicide used on row crops
28. Benzo(a)pyrene (PAH)	N	ND	nanograms/1	0	200	Leaching from linings of water storage tanks and distribution lines
29. Carbofuran	N	ND	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
30. Chlordane	N	ND	ppb	0	2	Residue of banned termiticide
31. Dalapon	N	ND	ppb	200	200	Runoff from herbicide used on rights of way
32. Di(2-ethylhexyl) adipate	N	ND	ppb	400	400	Discharge from chemical factories
33. Di(2-ethylhexyl) phthalate	N	ND	ppb	0	6	Discharge from rubber and chemical factories
34. Dibromochloropropane	N	ND	nanograms/1	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
35. Dinoseb	N	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
36. Diquat	N	ND	ppb	20	20	Runoff from herbicide use
37. Dioxin (2,3,7,8-TCDD]	N	ND	picograms/I	0	30	Emissions from waste incineration and other combustion; discharge from chemical
38. Endothall	N	ND	ppb	100	J OO	Runoff from herbicide use
39. Endrin	N	ND	ppb	2	2	Residue of banned insecticide
40. Epichlorohydrin	N	ND		0	TT	Discharge from industrial chemical factories; an impurity of some water
41. Ethylene dibromide	N	ND	nanograms/1	0	50	Discharge from petroleum refineries
42. Glyphosate	N	ND	ppb	700	700	Runoff from herbicide use
43. Heptachlor	N	ND	nanograms/1	0	400	Residue of banned tenniticide
44. Heptachlor epoxide	N	ND	nanograms/1	0	200	Breakdown of heptachlor
45. Hexachlorobenz	N	ND	ppb	0	I	Discharge from meta I refineries and agricultural chemical factories
46. Hexachlorocyclo	N	ND	ppb	50	50	Discharge from chemical factories
47. Lindane	N	ND	nanograms/1	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
48. Methoxychlor	N	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
49. Oxamyl [Vydate]	N	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
50. PCBs [Polychlorinated	N	ND	nanograms/1	0	500	Runoff from landfills; discharge of waste chemicals
51. Pentachlorophe	N	ND	ppb	0	I	Discharge from wood preserving factories
52. Picloram	N	ND	ppb	500	500	Herbicide runoff
53. Simazine	N	ND	ppb	4	4	Herbicide runoff

54. Toxaphene	N	ND	ppb	0	3	Runoft/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants						
55. Benzene	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
56. Carbon tetrachloride	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
57. Chlorobenzene	N	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
58. o-Dichlorobenzene	N	ND	ppb	600	600	Discharge from industrial chemical factories
59. p-Dichlorobenzene	N	ND	ppb	75	75	Discharge from industrial chemical factories
60. 1,2 - Dichloroethane	N	ND	ppb	0	5	Discharge from industrial chemical factories
61. I ,I - Dichloroethylene	N	ND	ppb	7	7	Discharge from industrial chemical factories
62. cis-1,2-Dichloroethylene	N	ND	ppb	70	70	Discharge from industrial chemical factories
63. trans - 1,2 - Dichloroethylene	N	ND	ppb	100	100	Discharge from industrial chemical factories
64. Dichloromethane	N	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
65. 1,2-Dichloropropane	N	ND	ppb	0	5	Discharge from industrial chemical factories
66. Ethylbenzene	N	ND	ppb	700	700	Discharge from petroleum refineries
67. Styrene	N	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
68. Tetrachloroethylene	N	ND	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
69. 1,2,4 -Trichlorobenzene	N	ND	ppb	70	70	Discharge from textile-finishing factories
70. I , I , I - Trichloroethane	N	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
71. 1,1,2 -Trichloroethane	N	ND	ppb	3	5	Discharge from industrial chemical factories
72. Trichloroethylene	N	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
73. TTH M [Total trihalomethanes]	N	ND	ppb	0	100	By-product of drinking water chlorination
74. Toluene	N	ND	ppm	I	I	Discharge from petroleum factories
75. Vinyl Chloride	N	ND	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
76. Xylenes	N	ND	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

Microbiological Contaminants:

1.) Total Coliform- Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

2.) Fecal coliform/ E.coli- Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

8.) Arsenic- Erosion of natural deposits; runoff from orchards, glass and electronic production wastes.
10.) Barium- Discharge of drilling wastes; discharge from metal refineries erosion of natural deposits
14.) Copper- Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.
16.) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
17.) Lead- Lead can cause serious health effects in people of all ages, especially pregnant women, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Moro is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standard Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to insure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at least five minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact The City of Moro at (541) 565-3535 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead. Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Additional information is available from the Safe Water Drinking Hotline 1-800-426-4719.
19.) Nitrate- Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
20.) Nitrite- Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate and Nitrite in drinking water at levels above 10 ppm present a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate and Nitrite levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

The City of Moro's most recent lead and copper test results from 2023 are as follows:

The five Lead samples (Action Level 15 ppb) ranged from 0 to 0.5 ppb. The number of those samples above the AL was Zero.

The five Copper samples (Action Level 1.3 ppm) ranged from .003 to .02 ppm. The number of those samples above the action level.

Results for the 2024 Lead and Copper Line Inventory can be found at:
yourwater.oregon.gov/leadcopper.php?pwsno=00542&tab=sli

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