This annual report of water quality covers the calendar year of 2004. It is designed to inform you about the quality of drinking water and services we provide you every day.

You will find Nome Joint Utility System supplies high quality well water that meets or exceeds all water quality standards set by both State and Federal regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We take very seriously our responsibility to provide and protect the water resource, as well as the water distribution and treatment and wastewater collection systems. We are proud of the water and service we provide.

About this report

Our water source

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

Water Distribution System

Nome has one source of water known as Moonlight Springs. Three artesian wells located north of the Nome-Beltz High School at the base of the southwest face of Anvil Mountain provide water to the community.

Our water source is classified as a ground water source. The wells are capable of adequately supplying Nome’s year-round water needs.

The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.
**Water Treatment**

Nome’s potable water is chlorinated to kill disease-causing organisms and fluoridated to promote dental health. Inadequately treated water may contain disease causing organisms such as bacteria, viruses, and parasites, that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Our water treatment facility is located to the west of the Nome-Beltz High School Apartment complex. At this location we monitor, disinfect and fluoridate the water before it is distributed to the high school system and the community of Nome.

**Vulnerability**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people 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 from infections. These individuals should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate methods to lessen the risk of infection by Cryptosporidium are available from the EPA Safe Drinking Water Hotline (800-426-4791).

**Water Testing Results**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Date Tested</th>
<th>Unit</th>
<th>MCL</th>
<th>MCLG</th>
<th>Detected Level</th>
<th>Major Sources</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inorganics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barium</td>
<td>3/7/02</td>
<td>ppm</td>
<td>2.0</td>
<td>0</td>
<td>0.013</td>
<td>Erosion of natural deposits</td>
<td>NO</td>
</tr>
<tr>
<td>Lead – 2</td>
<td>10/25/02</td>
<td>ppb</td>
<td>AL=15</td>
<td>0</td>
<td>15.0</td>
<td>Corrosion of household plumbing systems and lead solder joints</td>
<td>NO</td>
</tr>
<tr>
<td>Nitrate–N</td>
<td>8/31/04</td>
<td>ppm</td>
<td>10</td>
<td>10</td>
<td>0.00</td>
<td>Erosion of natural deposits and decaying vegetation or Tundra</td>
<td>NO</td>
</tr>
<tr>
<td>Copper – 3</td>
<td>10/25/02</td>
<td>ppm</td>
<td>AL=1.3</td>
<td>1.3</td>
<td>0.001</td>
<td>Corrosion of household plumbing and copper tubing</td>
<td>NO</td>
</tr>
<tr>
<td>Fluoride</td>
<td>12/31/02</td>
<td>ppm</td>
<td>4.0</td>
<td>4.0</td>
<td>1.40</td>
<td>Water additive which promotes strong teeth</td>
<td>NO</td>
</tr>
</tbody>
</table>

**How to read the table**

This report is based on tests conducted by NJUS between 1996 and 2004. Terms used in the Water Quality Table and in other parts of this report are defined here.

**Maximum Contaminant Level (MCL):** 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 (MCLG):** 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; **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow; NTU=Nephelometric Turbidity Units; ppm=parts per million, or milligrams per liter (mg/L); ppb=parts per billion, or micrograms per liter (µg/L); TT=Treatment technique: a required process intended to reduce the level of a contaminant in drinking water.

**Explanation of violations**

NJUS chlorinates water in accordance with state regulations and local ordinance. Chlorine disinfection levels dropped below the state standard on three occasions in 2004 when equipment malfunctioned; these incidents are considered violations as chlorine levels dropped below specified standards.

If the chlorine level drops below specifications (0.2mg/L), operators immediately respond and collect water samples to check for Total Coliform Bacteria. On each occurrence a sample was collected. All samples results confirmed the water was free of bacteria and chlorine was restored to its optimum level in accordance with regulations.

NJUS’ Annual Drinking Water Quality Report for 2003 (also called the “Consumer Confidence Report” (CCR)) was not distributed prior to June 30, 2004, which is considered a violation. Additional copies of the 2003 report, as well as previously published CCRs, may be obtained from NJUS or found at www.njus.org.

Nome Youth Hockey Association member Charlie Painter paints fire hydrants “fire engine red” for greater visibility in winter.
Inorganic Chemicals include heavy metals, fluoride and nitrate. Our water is no longer tested for asbestos since there is no asbestos water pipe in the distribution system. NJUS has current ADEC testing waivers for Arsenic, Barium, Cadmium, Chromium, Mercury, Selenium, Antimony, Beryllium, Cyanide, Nickel, and Thallium.

Fluoride occurs naturally in Nome’s water at about 0.2 mg/l. Fluoride is added to promote dental health. Less than 1 mg/l of Nitrate (as nitrogen) occurs naturally in Nome’s water and is not a concern at this low level.

Lead and copper are from the corrosion of copper pipes, fittings, and old lead/tin solder inside houses and service lines. The Lead and Copper rule is based on 90% of the results being less than or equal to the action level which if exceeded would require additional water treatment or addition of corrosion inhibiting chemicals to our water. Nome is currently under reduced lead and copper monitoring requirements because historically our test result sites have been 90% less than the maximum contaminant level (MCL). Compliance testing scheduled once every three years was last completed in 2002 with 90% of the samples under the MCL for both lead and copper.

Volatile Organic Chemicals (VOC) are either disinfections residual byproducts such as total Trihalomethane (TTHM) that are formed when naturally occurring organics in the water are chlorinated or from contamination by petroleum and other products. Of the over 80 VOC’s tested, TTHMs were the only VOC detected and were at levels much lower than the maximum contaminant level (MCL). They are not considered a health risk at these very low levels.

Synthetic/Other Organic Chemicals include pesticides and herbicides. Nome is a non-agricultural area and these chemicals are not used; as a result ADEC has granted Nome a testing waiver.

Radioactive Contaminates have never been detected in Nome’s water.

Questions

If you have any questions about this report or are interested in learning more about the drinking water system in Nome, you may contact the Water & Sewer Superintendent – 443-6330 or the Utility Manager’s Office – 443-NJUS.

The Utility Board holds regularly scheduled meetings the third Tuesday of each month. The public is invited to direct any concerns not addressed by management to the Board.

You may also call the Alaska Department of Environmental Conservation – Drinking Water Division in Fairbanks, AK (907-451-2179).
Some Tips for Saving Water

Nome is fortunate to have an abundant source of water flowing from Moonlight Springs. Each gallon, however, must be pumped, treated, heated, circulated and distributed, and the majority is then collected, pumped, treated and discharged through the wastewater system. This is why we encourage voluntary conservation. NJUS has been doing its part to reduce water waste by maintaining and operating our system as efficiently as possible. By implementing tighter monitoring procedures, making timely repairs and installing new energy saving equipment, water use and electricity for pumping has been reduced.

Some ways to save water:

- Run the dishwasher and clothes washer only when they are fully loaded.
- Repair dripping faucets and leaky toilets. Dripping faucets can waste about 2,000 gallons of water each year. Leaky toilets can waste as much as 200 gallons each day.
- Don’t leave the water running when you shave or brush your teeth – turn it on only when you are actually using it. A running tap shave used about 20 gallons.
- Keep a pitcher of drinking water in the refrigerator – running the faucet until cold can waste a gallon.
- Keep your water heater at an even setting – running water until hot is wasteful.

Studies show that water drips account for as much as 14% of all indoor water use, equivalent to 10 gallons per person of water lost per day. Toilets are the most common source. Check toilets for leaks by placing a few drops of food coloring in the tank. If after 15 minutes the dye shows up in the bowl, the toilet has a leak. Leaky toilets can usually be repaired inexpensively by replacing the flapper.

Nome, AK 99762
Boxholder

Water Quality Report
2004 Annual
Public Water System ID #AK2340010

Nome Joint Utility System
443-6587
John K. Handeland
General Manager/Chief Operating Officer
Toby M. Schield
Water & Sewer Superintendent
State-Certified Water Treatment Operator:
Jay H. Wieler
Water Treatment Operators enrolled in State Operator in Training Program:
Carl O. Merchant
Wesley S. Perkins
Toby M. Schield
Testing Laboratories:
Norton Sound Regional Hospital
Analytica, Inc.

Nome Joint Utility Board:
Berda J. Willson, Chair
Fred H. Moody, Vice Chair
Jim West, Jr., Secretary
Carl Emmons, Member
Ronald Parker, Member