

INSTRUCTIONS FOR COLLECTING DRINKING WATER SAMPLES

- 1) WASH HANDS 2) WEAR GLOVES & EYE PROTECTION 3) FOLLOW STEP-BY-STEP INSTRUCTIONS 4) FILL OUT LAB FORMS, SHIP WITH SAMPLES
5) CALL LAB, NOTIFY. Most labs charge extra if samples are not received 8am-5pm Mon-Wed, and by 3pm on Thursdays. Never let a sample freeze.
***More details in Sampling Guidebook.**

HOLD TIME	HOLD TEMP	PRESERVATIVE	SAMPLING RAW WATER: Tap supplied by raw water before any water treatment or disinfection.	USUAL CONTAINER*
30 hours	50°F max	Sodium thiosulfate (Na ₂ S ₂ O ₃)	Long Term 2 (LT2) Refrigerate Temperature Blank until sampling. Check your DEC-approved plan for sampling site and frequency. Do not rinse sample bottle containing preservative. Fill bottle between 100-150 mL or as instructed by lab. Complete LT2 reporting form and lab paperwork. Pack Temperature Blank with sample. Ship ASAP! Call lab to report sample tracking information.	120mL clear plastic 
28 days	39°F max	Hydrochloric (HCl) / Sulfuric acid (H ₂ SO ₄) with pH <2	Total Organic Carbon (TOC) in raw water Put ice packs in freezer until completely frozen or until sample collection, whichever is longer. Check your DEC-approved plan for sampling site and frequency. Do not rinse sample bottle containing preservative. Remove faucet aerators/screen. Run cold water for about 5 minutes, reduce flow to width of a pencil. Remove cap, hold cap with opening facing down and do not touch inside bottle cap/top. Slowly fill bottle to the shoulder, cap tightly. Invert bottle 5 times to mix in preservative. Place sample in ice packs immediately or within no more than 15 minutes.	40 ml vial or 125 ml glass bottle 
HOLD TIME	HOLD TEMP	PRESERVATIVE	SAMPLING AT ENTRY POINT TO DISTRIBUTION: First tap after treatment but before distribution.	USUAL CONTAINER*
48 hours	42°F max	Sulfuric acid (H ₂ SO ₄) with pH <2	Nitrate (NO₃-) Check your monitoring summary for sampling site and frequency. Remove faucet aerators/screens. Run cold water for about 5 minutes, reduce flow to width of a pencil. Slowly fill bottle to shoulder, don't overfill, cap tightly to avoid leaks. Ship ASAP! Call lab to report sample tracking information.	125mL 60mL or 40mL clear plastic 
See =>	Do not freeze	Preservative depends on lab's method	Regulated Inorganics (Old and New) Required for systems subject to monitoring Arsenic, Barium, Cadmium, Chromium, Cyanide, Fluoride, Mercury, Nickel, Selenium, Total Antimony, Total Beryllium, or Total Thallium. Check your system's DEC-approved plan for each specific contaminant and its required sampling frequency. Do not rinse sample bottle containing preservative. Remove faucet aerators/screen. Run cold water for about 5 minutes, reduce flow to thickness of a pencil. Remove cap, hold cap with opening facing down and do not touch inside bottle cap/top. Slowly fill bottle to the shoulder, cap tightly. Invert bottle 5 times to mix in preservative. Place sample with ice for shipment. Call lab to report tracking information for shipped sample. Holding time for Mercury is 28 days ; all others is 6 months .	Material and size depends on lab 
14 days	39°F max	Ascorbic acid & Hydrochloric acid (HCl) with pH <2	Volatile Organic Compounds (VOC) — Take all samples from the same location. Trip Blanks (TB) must return unopened to the lab. Check your monitoring summary for sampling frequency. While sampling, have clothes, hands, and body free of oil, grease, gasoline, diesel fuel or fumes and do not use Sharpie or markers with smells; these could affect sample lab results. Do not rinse bottles containing ascorbic acid. Do not touch inside bottle cap/top. Run cold water for about 5 minutes, reduce flow to width of a pencil. Slowly fill until 1/2 full, then add HCl, swirl sample vial to mix in preservative. Then slowly fill rest of the vial forming a mound of water at the rim, careful not to overfill. If you see air bubbles, add water avoiding spills, cap and check; repeat as needed until no bubbles.	Trip Blanks (TB), vials w/septum cap 
7 days	39°F max	Preservative depends on lab's method	Synthetic Organic Compounds (SOC) Most systems in Alaska are not susceptible to SOC contamination and are eligible for an SOC waiver. If your system has a waiver, then you do not need to sample SOC during the waived 3-year compliance period. Check your system's Monitoring Summary to see if you are required to sample, or contact your drinking water environmental specialist for SOC monitoring waiver application assistance.	Vials or bottles 
6 months	See =>	Nitric acid (HNO ₃) with pH <2	Total Gross Alpha, Radium 226 & 228 Sampling containers, volume, and frequency varies. Check your monitoring summary for frequency. Do not rinse sample bottle containing preservative. Remove faucet aerators/screens. Run cold water for about 5 minutes, reduce flow to thickness of a pencil. Do not touch inside bottle cap/top. Fill bottle without overfilling and removing preservative. Cap tightly and gently swirl to mix. Holding temperature: Gross Alpha, 50°F max; Radium 226/228, 39°F max.	2L cubitainer or jug 
Analyze On-Site Immediately			Free Chlorine Residual (Entry to Distribution) — Enter readings on Monthly Operator Report and submit to DEC per requirements. Follow your specific kit's user manual. If test kit calls for reagents, always use Free (not Total) DPD chlorine reagents that are not expired. These are instructions specific to <i>HACH Chlorine Test Kit</i> (pictured): Run cold water for 5 minutes. Collect a "blank" sample by filling 10 mL vial. Turn instrument on. Wipe vial/blank with lint-free cloth or chem wipes. Insert into instrument and cover. Press the "0" button to zero out the instrument. Take out vial, add the DPD reagent (Free powder pillow, not Total), screw cap on and swirl to mix. Wipe again with lint-free cloth or chem wipes ensuring vial is free of lint or fingerprints. If measuring Free Chlorine Residual, within 1 (one) minute of adding the reagent, insert the mixed sample into instrument. Arrange sample/vial so the white diamond is facing you. Cover by placing instrument cap over mixed sample, cap should fit snugly. Press start button. Results will appear in mg/L.	<i>HACH Test Kit</i> 
28 days	39°F max	Hydrochloric (HCl) or Sulfuric (H ₂ SO ₄) with pH <2	Total Organic Carbon (TOC) in treated water Check your monitoring summary if required to sample for sampling frequency. Do not rinse sample bottle containing preservative. Remove faucet aerators/screen. Run cold water for about 5 minutes, reduce flow to width of a pencil. Remove cap, hold cap with opening facing down and do not touch inside bottle cap/top. Slowly fill bottle to the shoulder, cap tightly. Swirl bottle to mix in the preservative. If provided, place sample in ice packs immediately or within 15 minutes after sampling.	40 ml vial or 125 ml glass bottle 
HOLD TIME	HOLD TEMP	PRESERVATIVE	SAMPLING AT DISTRIBUTION SYSTEM: Tap after all treatment. Collection site is system-specific as explained below.	USUAL CONTAINER*
30 hours	50°F max	Sodium thiosulfate (Na ₂ S ₂ O ₃)	Total Coliform (TC) — Check your system's RTCR Sample Siting Plan approved by DEC for exact collection site and required frequency. Do not rinse sample bottle containing preservative. Remove faucet aerators/screens, sterilize end. Run cold water for about 5 minutes, reduce flow to width of a pencil. Remove cap, hold cap with opening facing down and do not touch inside bottle cap/top. Fill bottle to the shoulder, cap tightly. Invert bottle 5 times to mix in preservative. Fill out lab forms for each sample bottle. Place sample with ice pack for shipment ASAP! Call lab to report sample tracking info. For most labs, samples should arrive to lab Monday - Thursday. Call ahead if needing weekend analysis. If result is positive, see guidebook for next steps.	120mL clear plastic 
Analyze On-site Immediately			Free Chlorine Residual — Ship with TC sample after collecting at same time and site as TC. Enter readings on Monthly Operator Report for DEC. Instructions for <i>HACH Chlorine Test Kit</i> (pictured): Start the water tap until water temperature is stabilized. Collect a "blank" sample by filling the vial with 10 mL of water. Turn on the instrument. Wipe the vial/blank sample with lint-free cloth or chem wipes, insert into the instrument and cover. Press the "0" button to zero out the instrument. Take out the sample vial, add the DPD reagent (Free powder pillow, not Total) to the vial, screw on cap and swirl to mix. Wipe again with lint-free cloth or chem wipes making sure the outside of the sample bottle is free of lint or fingerprint. To measure Free chlorine residual, within one minute after adding the reagent, insert again the mixed sample into the instrument. Arrange the mixed sample vial so that the white diamond is facing you. Cover the mixed sample by placing the instrument cap over the mixed sample, the cap should fit snugly. Press the start button. Results appear in mg/L.	<i>HACH Test Kit</i> 
See =>	Avoid Freezing	Nitric acid (HNO ₃) with pH <2	Lead and Copper Check your DEC-approved plan for collection sites. Review instructions with home/building sampler for how and where to sample. Do not remove faucet aerators/screens. Do not rinse bottles containing preservatives. Take "first-draw" sample from indoor cold-water faucet not connected to water softener/filter that has not been in use for at least six (6) hours (minimum water stagnation). Sampler must wear gloves and eye protection. Do not overfill sample bottle. Do not touch inside bottle cap/top. After filling to the mark, cap and swirl sample bottle to mix in the preservatives. Complete lab form for each sample with time faucet was shut off, time sample was collected, and site. Holding time is 6 months if preservative is in the bottle, or 14 days if the preservative is not included.	1Liter wide-mouth 
14 days	39°F max	Ascorbic (C ₆ H ₈ O ₆) / Hydrochloric acid (HCl)	Total Trihalomethanes (TTHM) — Take all samples from the same approved location. Trip Blanks (TB) must return unopened to the lab. Check your DEC-approved plan for sampling site and frequency. Do not rinse bottles containing ascorbic acid. Do not touch inside bottle cap/top. Run cold water for about 5 minutes, reduce flow to width of a pencil. Slowly fill until 1/2 full, then add HCl, then slowly fill rest of the vial forming a mound of water at the rim, careful not to overfill. Swirl sample bottle to mix in the preservatives. If you see air bubbles, add water avoiding spills, cap and check; repeat as needed until no bubbles. Ship sample bottle with the lab form in a cooler with ice to keep them cold.	Trip Blanks (TB), vials w/septum cap 
14 days	39°F max	Ammonium chloride (NH ₄ Cl)	Haloacetic Acids (HAA5) — Take all samples from the same approved location. Check your DEC-approved plan for sampling site and frequency. Do not rinse vials or touch inside bottle cap/top. Run water until temperature stabilizes. Decrease flow. If using the 250 mL bottle, fill to the bottle shoulder only. Cap the bottle and swirl sample bottle to mix in the preservatives. Within 15 minutes of sampling, ship sample bottle with the lab form in a cooler with ice to keep them cold. Keep samples in the dark.	250mL brown glass 



Division of Water
Capacity Development Program
Alaska Department of Environmental Conservation

Drinking Water Watch for Current Monitoring Summary



Remote Maintenance Worker Program



Capacity Development Program



Certified labs for chemical analyses



Certified labs for microbiological analyses





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