

Volatile Organic Scan (57 parameters)

Benzene	1,2,4-Trichlorobenzene	p-Chlorotoluene
Carbon Tetrachloride	1,1,2-Trichloroethane	Bromobenzene
1,1-Dichloroethylene	Chloroform	1,3-Dichloropropane
1,2-Dichloroethane	Bromodichloromethane	1,2,3-Trimethylbenzene
p-TichloroBenzene	Chlorodibromomethane	1,2,4-Trimethylbenzene
Trichloroethene	Bromoform	1,3,5-Trimethylbenzene
1,1,1-Trichloroethane	m-Dichlorobenzene	n-Propylbenzene
Vinyl Chloride	Dibromomethane	n-Butylbenzene
Monochlorobenzene	1,1-Dichloropropene	Naphthalene
ortho-Dichlorobenzene	1,1-Dichloroethane	Hexachlorobutadiene
trans-1,2-Dichloroethylene	1,1,2,2-Tetrachloroethane	1,2,3-Trichlorobenzene
ci-1,2-Dichlorethylene	1,3-Dichloropropane	p-Isopropyltoluene
1,2-Dichloropropane	Chloromethane	Isopropylbenzene
Ethylbenzene	Bromomethane	sec-Butylbenzene
Styrene	1,2,3-Tichloropropane	FluoroTrichloromethane
Tetrachloroethylene	1,1,1,2-Tatrachloroethane	Bromochloromethane
Toluene	Chloroethane	MethylTertiaryButylEther (MTBE)
Xylenes (Total)	2,2-Dichloropropane	Acetone
Dichloromethane	o-Chlorotoluene	2-Butanone (MEK)

Sample Bottle Key

R = Radon Vial (no preservative)
VOC = VOC Vials (with or without Hydrochloric Acid (HCl) preservative)
S = 100 mL Sterilized Bottle (with Sodium Thiosulfate (10 mg) preservative)
P1= 100mL Poly Bottle
P5 = 500mL Poly Bottle
PL = 1 Liter Poly Bottle
G = 500mL Amber Glass Bottle

Notes

- 1: Arsenic Speciation: Nashoba Analytical requires their brown plastic 500 mL sample bottle with EDTA preservative, Analytical Balance will accept either a 500mL (P5) or Amber Glass (G) sample bottle.
- 2: Perchlorate Sampling: Use Sterile 100 mL bacteria bottle - NO SODIUM BIOSULFATE - NO PRESERVATIVE (Field filter kit available through Analytical Balance)
- 3: Pesticide Sampling: Use 2 VOC bottles with Sodium biosulfate preservative.
- 4: pH sampling: always take on-site, in addition to pulling sample for laboratory
- 5: Radon Sampling: Use Accustar kit and include disposable hand warmer during winter months.
- 6: Trihalomethanes (TTHMs) Sampling: 2 VOC bottles with HCl preservative. If water supply is chlorinated Ascorbic Acid or Sodium BioThiosulfate preservative is required

Chain-of-Custody (COC) Instructions

- 1 - FILL OUT THE COC AND LABEL BOTTLES ON-SITE AT THE CUSTOMER'S LOCATION.
- 2 - Write clear and detailed information and double check your spelling - all information provided on COC is reported on the Laboratory Report.
- 3 - The customer address must be clearly written on each COC and on the bottle label.
- 4 - The date and time of each sample must be on the COC and bottle label. The date and time must be recorded accurately as it affects the analytical result reported on the laboratory report.
- 5 - The sampling location must be clearly described for each bottle on the COC and on the bottle label. (Please use standard location names when applicable: "Raw-Untreated" - Further describe location, Examples: "Well tank", "kitchen faucet", "outside spigot", etc. or "Treated" - Further describe location, Examples: "Post Softener", "Post Iron Filter", "bathroom faucet", "kitchen faucet", etc.)
- 6 - Make sure to indicate it is drinking water with a "DW" next to sample ID so that the correct analytical method is performed
- 7 - Record on COC if there is a preservative in the sample and the name of the preservative.
- 8 - Retain a copy of COC to turn in with customer paperwork.

Arsenic Sampling Procedure

- 1 - Before pulling samples for an arsenic system, if pre-treatment is on-site (i.e. chlorine injection, softener, iron filter, etc.) verify that the pre-treatment is functioning properly through onsite testing and visual inspection.
- 2 - If the pre-treatment equipment is functioning properly continue with arsenic sampling.
- 3 - If the pre-treatment is not functioning, fix the equipment, flush all equipment and then pull samples.
- 4 - If regeneration is required then reschedule arsenic sampling.
- 5 - Run water through the system and house for 10 minutes prior to sampling.
- 6 - When pulling arsenic samples, confirm water is flowing through the system (recommend minimum 2 fixtures running).
- 7 - Pull Untreated "raw" sample from Well Tank.
- 8 - Flush each sample port and pull a "Treated-Post Lead Arsenic Tank" and a "Treated - Post Lag Arsenic Tank" sample.
- 9 - Offer the discounted package price for the 3 arsenic tests to the customer.

Radon Sampling Procedure

1 - Remove any aeration devices or faucet filters from the tap. 2 - Run the cold water until fresh water is being drawn from the well. Water that has been sitting in a holding tank or pipes does not contain as much radon as fresh well water. 3 - Slowly fill a bowl or deep pan with the spigot underwater. Minimize aeration and splashing. 4 - Submerge the vial and the cap open side up until they fill with water. 5 - While the vial and cap are underwater, screw the cap back on tightly. 6 - Lift the vial out of the water and turn it upside down to check for air bubbles. If there is a bubble or an air space, empty the vial and repeat the process. (Note: Air bubbles in the vial can contribute to an inaccurate radon level reading.) 7 - **Fill out the COC completely with property address, device number, sample location, time and date.** Missing or inaccurate information will delay the report and / or contribute to an incorrect radon level reading. 8 - Retain copy of all COC information for customer paperwork.

Bacteria Sampling Procedure

Sample Selection Site: If possible, take sample from clean indoor faucet. Outside faucets and frost free spigots should be avoided. Avoid threaded taps, swivel faucets and leaking faucets. If possible do not use a mixing faucet.

Container Type: Use only a sterilized container that has not been tampered or opened. Use a container containing the preservative sodium thiosulfate (white tablet) to prevent any chlorine from interfering with the water test. If there is any doubt that the bottle is not sterile or clean throw it away and use another one.

Sampling Technique: 1 - Remove any hoses, screens, aerators or purification devices from the faucet. 2 - Turn the cold water on and allow it to run in a steady stream for at least 10 minutes. 3 - Wash your hands thoroughly with soap prior to handling the sample container. 4 - Fill out the label on the sample bottle with customer name and address, sample location, date and time. 5 - Disinfect the faucet with chlorine bleach or peroxide. 6 - Adjust the water flow to about the width of a pencil. 7 - Carefully open the container and fill the bottle to within a 1/4" of the top, making sure to leave a little bit of head space without overflowing. (Fill to 100 mL indicator line if shown on bottle.) Do not touch any part of the inside of the bottle or inside of the lid. Do not set the lid down. Do not allow water to splash off the sink or your hand while sampling. Do not allow the bottle to touch the faucet. 8 - After the bottle is filled to the appropriate volume, replace the lid. 9 - Turn the water off and replace any aerators or screens. 10 - Complete the COC and confirm the information is accurate. 11 - Keep the sample cold and bring to the laboratory within 24 hours.