



STATUS AND TREND NETWORKS PRESERVATION, CUSTODY AND SHIPMENT

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Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Tallahassee, FL | Nov. 6, 2024



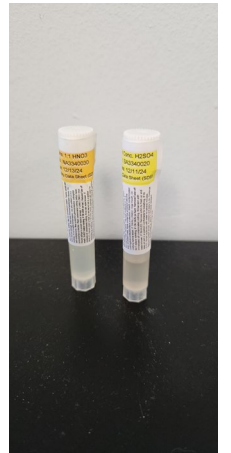
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Weeki Wachee Springs State Park – Source: Cheyenne Alderson

Topics

- Sample Preservation.
- Documentation.
- Sample Shipment.





CUSTODY SHEET PACKETS

Lab Page 1 of ____

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Status & Trend Networks - Chain of Custody Form - October 2020 version

Date Shipped: _____ Collected By (Agency Code): _____
 Customer: AMBIENT Sampler Names: _____
 Lab Project ID (optional): STATUS / SW-TREND /
 (Place RQ Label Here) GW-TREND / BMAP
 # Coolers Shipped: _____
 RQ - _____ Shipping Method (circle one): FedEx / UPS /
 Project Name: _____ Greyhound / Hand Delivered

Instructions:

- Print this form, affix labels to form and place documentation in zipper bag taped to inside lid of cooler.
- Please return the original of this form to the lab along with sample inventory portion of field sheet for each station & blank sampled.
- Affix labels below for all samples & blanks submitted under this RQ for this collection date.

Relinquished by (signature): _____ Date: _____ Time: _____ ETZ CTZ

THIS SECTION IS TO BE COMPLETED BY THE LABORATORY

Received/ Inspected By (signature): _____ Date: _____ Time: _____ ETZ

Cover Page

Lab Page ____ of ____

RQ 2020 _____ Collected By (Agency Code): _____
 Project Name: _____ Sampler Names: _____
 Customer: AMBIENT Lab Project ID: SW-TREND / STATUS / BMAP

Place Station ID Label Here _____
 Comments: _____
 Sulfuric Acid Lot #: _____
 Nitric Acid Lot #: _____

Matrix: W-SURF-FRESH / W-SURF-SALT Grab

Date Collected	Time Collected	D.O. (%SAT)	Temp (°C)	pH (SU)	Sample Depth (m)	Sp. Cond. (umhos/cm)
		<input type="checkbox"/> ETZ <input type="checkbox"/> CTZ				

Parameter Suite	Check Boxes for Each Container Submitted to Lab			Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects			
Chlorophyll (P-11)	<input type="checkbox"/> CHL01TE-W	<input type="checkbox"/> CHL01TE-W		<input type="checkbox"/> Ice		
Nutrients (P-500ML)	<input type="checkbox"/> W-NH3 / W-NH3N / W-S-TP / W-TNH / W-TOC	<input type="checkbox"/> W-NH3 / W-NH3N / W-S-TP / W-TNH / W-TOC		<input type="checkbox"/> 2ML H ₂ SO ₄ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Metals (P-500ML)	<input type="checkbox"/> W-HARD / W-ZP / W-CPMS	<input type="checkbox"/> W-HARD / W-ZP / W-CPMS		<input type="checkbox"/> 2ML HNO ₃ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Anion / Phys Aggregate (P-1L)	<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TDS	<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TDS		<input type="checkbox"/> Ice		
Microbiology (P-200ML or P-1200ML)	<input type="checkbox"/> EC0111-0T	<input type="checkbox"/> EC0111-0T		<input type="checkbox"/> Ice		
Toxins (P-100ML or P-200ML)	<input type="checkbox"/> W-MCST-AA / W-SACTA-MS	<input type="checkbox"/> W-MCST-AA / W-SACTA-MS		<input type="checkbox"/> Ice		
Molecular (PCR-P-500ML)	<input type="checkbox"/> PCR-BACR / PCR-DG / PCR-OPD / PCR-SH44 (P-100-11)	<input type="checkbox"/> PCR-BACR / PCR-DG / PCR-OPD / PCR-SH44 (P-100-11)		<input type="checkbox"/> Ice		
Tracers (P-500ML)	<input type="checkbox"/> W-E321-DI / W-E321-MS	<input type="checkbox"/> W-E321-DI / W-E321-MS		<input type="checkbox"/> Ice		
BOD (P-1L)	<input type="checkbox"/> W-800-UN	<input type="checkbox"/> W-800-UN		<input type="checkbox"/> Ice		
Pesticides (P-500ML)	<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> W-PSNP-TQ		<input type="checkbox"/> Ice		
Filtered Nutrient (P-1200ML)	<input type="checkbox"/> W-PH-F	<input type="checkbox"/> W-PH-F		<input type="checkbox"/> Field Filtered w/ springs & 0.45 um PES filter		

Matrix: **SEDIMENT** Date Collected: _____ Time Collected: _____ ETZ / CTZ

Parameter Suite	Check Boxes for Each Container Submitted to Lab			Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects			
Metals & Nutrients (P-500ML)	<input type="checkbox"/> S-HO-TDA / S-ICR-TD / S-ICRME-TD / S-TDM / S-TOC / S-TP	<input type="checkbox"/> S-HO-TDA / S-ICR-TD / S-ICRME-TD / S-TDM / S-TOC / S-TP		<input type="checkbox"/> Ice		

Matrix: **BIOLOGICAL** Date Collected: _____ Time Collected: _____ ETZ / CTZ

Parameter Suite	Check Boxes for Each Container Submitted to Lab			Preservation	# Bottles sent to Lab	Bottle Group
	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects			
Macromon-SCT (P-1L)	<input type="checkbox"/> M-FW-QLDC	<input type="checkbox"/> M-FW-QLDC		<input type="checkbox"/> Buffered Formalin (10%)		
Algal ID (P-500ML)	<input type="checkbox"/> ALGAL_ID	<input type="checkbox"/> ALGAL_ID		<input type="checkbox"/> Ice		

Surface Water Details

Lab Page ____ of ____

RQ 2020 _____ Collected By (Agency Code): _____
 Project Name: _____ Sampler Names: _____
 Customer: AMBIENT Lab Project ID: GW-TREND / STATUS / BMAP

Place Station ID Label Here _____
 Comments: _____
 Sulfuric Acid Lot #: _____
 Nitric Acid Lot #: _____

Matrix: W-GROUND Grab

Date Collected	Time Collected	D.O. (%SAT)	Temp (°C)	pH (SU)	Sp. Cond. (umhos/cm)
		<input type="checkbox"/> ETZ <input type="checkbox"/> CTZ			

Parameter Suite	Check Boxes for Each Container Submitted to Lab			Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects			
Tracers (BG-500ML)	<input type="checkbox"/> W-E321-DI / W-E321-MS	<input type="checkbox"/> W-E321-DI / W-E321-MS		<input type="checkbox"/> Ice		
Pesticides - Carbamates (BG-500ML)	<input type="checkbox"/> W-CARB-AA	<input type="checkbox"/> W-CARB-AA		<input type="checkbox"/> 1 vial MCAA Buffer <input type="checkbox"/> Ice		
Pesticides - Organochlorine (BG-500ML)	<input type="checkbox"/> W-PCL-TQ-R	<input type="checkbox"/> W-PCL-TQ-R		<input type="checkbox"/> Ice		
Pesticides - Organo-NP (BG-500ML)	<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> W-PSNP-TQ		<input type="checkbox"/> Ice		
Nutrients (P-500ML)	<input type="checkbox"/> W-NH3 / W-NH3N / W-S-TP / W-TNH / W-TOC	<input type="checkbox"/> W-NH3 / W-NH3N / W-S-TP / W-TNH / W-TOC		<input type="checkbox"/> 2ML H ₂ SO ₄ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Metals (P-500ML)	<input type="checkbox"/> W-HARD / W-ZP / W-CPMS	<input type="checkbox"/> W-HARD / W-ZP / W-CPMS		<input type="checkbox"/> 2ML HNO ₃ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Anion / Phys Aggregate (P-1L)	<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TDS	<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TDS		<input type="checkbox"/> Ice		
Microbiology (P-200ML or P-1200ML)	<input type="checkbox"/> EC0111-RQT / TC0111-RQT	<input type="checkbox"/> EC0111-RQT / TC0111-RQT		<input type="checkbox"/> Ice		
Filtered Nutrient (P-1200ML)	<input type="checkbox"/> W-PH-F	<input type="checkbox"/> W-PH-F		<input type="checkbox"/> Field Filtered w/ in-line 0.45 um PES filter		

Groundwater Details

Download current versions from Watershed Monitoring Information Center:
<http://publicfiles.dep.state.fl.us/dear/watershed%20monitoring/Info%20Center/>



PRESERVATION

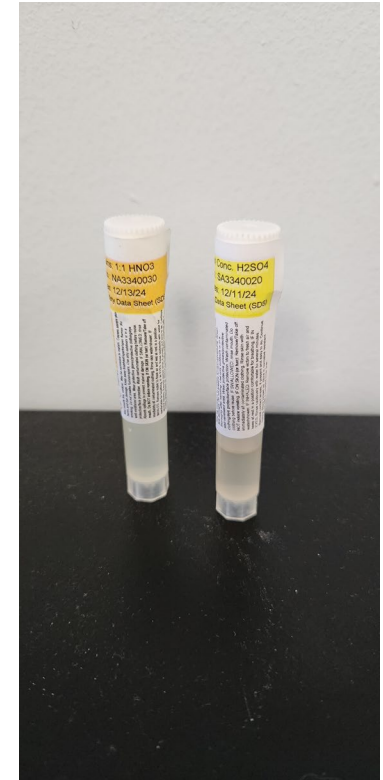
SAMPLING MANUAL SECTION 11



Source: pexels.com



Source: pexels.com





SURFACE WATER PRESERVATION DETAILS

Lab Page ___ of ___

RQ-2020-_____ Collected By (Agency Code): _____
 Project Name: _____ Sampler Names: _____
 Customer: AMBIENT Lab Project ID: SW-TREND / STATUS / BMAP

Place Station ID Label Here	Comments:						
	Sulfuric Acid Lot #:						
	Nitric Acid Lot #:						
Matrix: <input type="radio"/> W-SURF-FRESH / <input type="radio"/> W-SURF-SALT <input checked="" type="checkbox"/> Grab							
Date Collected	Time Collected	D.O. (% SAT)	Temp (°C)	pH (SU)	Sample Depth (m)	Sp. Cond. (umhos/cm)	
	<input type="checkbox"/> ETZ <input type="checkbox"/> CTZ						
Check Boxes for Each Container Submitted to Lab				Preservation (Must be completed within 15 min of sample collection)		# Bottles sent to Lab	Bottle Group
Parameter Suite	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects				
Chlorophyll (BP-1L)	<input type="checkbox"/> CHLSUITE-W	<input type="checkbox"/> CHLSUITE-W		<input type="checkbox"/> Ice			
Nutrients (P-500ML)	<input type="checkbox"/> W-NH3 / W-NO2NO3 / W-S-T-P / W-TKN / W-TOC	<input type="checkbox"/> W-NH3 / W-NO2NO3 / W-S-T-P / W-TKN / W-TOC		<input type="checkbox"/> 2ML H ₂ SO ₄ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice			
Metals (P-500ML)	<input type="checkbox"/> W-HARD / W-ICP / W-ICPMS	<input type="checkbox"/> W-HARD / W-ICP / W-ICPMS		<input type="checkbox"/> 2ML HNO ₃ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice			
Anion / Phys. Aggregate (P-1L)	<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TSS	<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TSS		<input type="checkbox"/> Ice			
Microbiology (P-250ML or P-120ML)	<input type="checkbox"/> ECOLL-18-QT	<input type="checkbox"/> ECOLL-18-QT		<input type="checkbox"/> Ice			
Toxins (P-125ML/BG-250ML)		<input type="checkbox"/> W-MCYST-AA / W-SAXTN-MS	<input type="checkbox"/> W-MCYST-AA / W-SAXTN-MS	<input type="checkbox"/> Ice			
Molecular (QPCR-P-500ML)			<input type="checkbox"/> PCR-BACR / PCR-DG3 / PCR-GFD / PCR-GULL2 / PCR-HF183	<input type="checkbox"/> Ice			
Tracers (BG-500ML)			<input type="checkbox"/> W-E8321-D1 / W-E8321-MS	<input type="checkbox"/> Ice			
BOD (P-1L)			<input type="checkbox"/> OV-BOD-UN	<input type="checkbox"/> Ice			
Pesticides (BG-500ML)			<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> Ice			
Filtered Nutrient (P-125ML)			<input type="checkbox"/> W-PC4-F	<input type="checkbox"/> Field Filtered w/ syringe & 0.45 um PES filter <input type="checkbox"/> Ice			



GROUNDWATER PRESERVATION DETAILS

Station ID Label Here			Sulfuric Acid Lot #:			
			Nitric Acid Lot #:			
Matrix: W-GROUND			<input checked="" type="checkbox"/> Grab			
Date Collected	Time Collected	D.O. (% SAT)	Temp (°C)	pH (SU)	Sp. Cond. (umhos/cm)	
	<input type="checkbox"/> ETZ <input type="checkbox"/> CTZ					
Check Boxes for Each Container Submitted to Lab				Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
Parameter Suite	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects			
Tracers (BG-500ML)			<input type="checkbox"/> W-E8321-DI / <input type="checkbox"/> W-E8321-MS	<input type="checkbox"/> Ice		
Pesticides – Carbamates (BG-500ML)			<input type="checkbox"/> W-CARB-AA	<input type="checkbox"/> 1 vial MCAA Buffer MCAA Lot #:	<input type="checkbox"/> Ice	
Pesticides - Organochlorine (BG-500ML)			<input type="checkbox"/> W-PCL-TQ-R	<input type="checkbox"/> Ice		
Pesticides – Organo-N/P (BG-500ML)			<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> Ice		
Nutrients (P-500ML)	<input type="checkbox"/> W-NH3 / <input type="checkbox"/> W-NO2NO3 / <input type="checkbox"/> W-S-T-P / W-TN / <input type="checkbox"/> W-TOC	<input type="checkbox"/> W-NH3 / <input type="checkbox"/> W-NO2NO3 / <input type="checkbox"/> W-S-T-P / W-TN / <input type="checkbox"/> W-TOC		<input type="checkbox"/> 2ML H ₂ SO ₄ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Metals (P-500ML)	<input type="checkbox"/> W-HARD / <input type="checkbox"/> W-ICP / W-ICPMS	<input type="checkbox"/> W-HARD / <input type="checkbox"/> W-ICP / W-ICPMS		<input type="checkbox"/> 2ML HNO ₃ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Anion / Phys. Aggregate (P-1L)	<input type="checkbox"/> ALKALINITY / <input type="checkbox"/> TURBIDITY / <input type="checkbox"/> W-CL-IC / <input type="checkbox"/> W-COLOR / <input type="checkbox"/> W-COND / W-F / <input type="checkbox"/> W-SO4-IC / W-TDS	<input type="checkbox"/> ALKALINITY / <input type="checkbox"/> TURBIDITY / <input type="checkbox"/> W-CL-IC / <input type="checkbox"/> W-COLOR / <input type="checkbox"/> W-COND / W-F / <input type="checkbox"/> W-SO4-IC / W-TDS		<input type="checkbox"/> Ice		
Microbiology (P-250ML or P-120ML)	<input type="checkbox"/> ECOLI-18QT / <input type="checkbox"/> TCOLI-18QT	<input type="checkbox"/> ECOLI-18QT / <input type="checkbox"/> TCOLI-18QT		<input type="checkbox"/> Ice		
Filtered Nutrient (P-125ML)	<input type="checkbox"/> W-PO4-F			<input type="checkbox"/> Field Filtered w/ in-line 0.45 um PES filter <input type="checkbox"/> Ice		



PRESERVATION BASICS

Boxes indicate required preservation for each bottle.

- Check box for each procedure performed.
- Add comment for any procedures not performed.

H / <input type="radio"/> W-SURF-SALT		<input checked="" type="checkbox"/> Grab	
Collected	D.O. (% SAT)	Temp (°C)	pH (SU)
<input type="checkbox"/> ETZ <input type="checkbox"/> CTZ			Sample Depth (m)
Container Submitted to Lab		Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab
Lab Test Codes Status Core	Lab Test Codes Special Projects		Bottle Group
<input type="checkbox"/> CHLSUITE-W		<input type="checkbox"/> Ice	
<input type="checkbox"/> W-NH3 / W-NO2NO3 / W-S-T-P / W-TKN / W-TOC		<input type="checkbox"/> 2ML H ₂ SO ₄ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice	
<input type="checkbox"/> W-HARD / W-ICP / W-ICPMS		<input type="checkbox"/> 2ML HNO ₃ <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice	
<input type="checkbox"/> ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TSS		<input type="checkbox"/> Ice	
<input type="checkbox"/> ECOLI-18-QT		<input type="checkbox"/> Ice	
<input type="checkbox"/> W-MCYST-AA / W-SAXTN-MS	<input type="checkbox"/> W-MCYST-AA / W-SAXTN-MS	<input type="checkbox"/> Ice	
	<input type="checkbox"/> PCR-BACR / PCR-DG3 / PCR-GFD / PCR-GULL2 / PCR-HF183	<input type="checkbox"/> Ice	
	<input type="checkbox"/> W-E8321-D1 / W-E8321-MS	<input type="checkbox"/> Ice	
	<input type="checkbox"/> OV-BOD-UN	<input type="checkbox"/> Ice	
	<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> Ice	
	<input type="checkbox"/> W-PO4-F	<input type="checkbox"/> Field Filtered w/ syringe & 0.45 um PES filter <input type="checkbox"/> Ice	
Collected:	Time Collected:	<input type="checkbox"/> ETZ / <input type="checkbox"/> CTZ	
Container Submitted to Lab		Preservation	# Bottles

Lab Page ____ of ____

Collected By (Agency Code): _____

Sampler Names: _____

Lab Project ID: GW-TREND / STATUS / BMAP

Comments:

Sulfuric Acid Lot #:

Nitric Acid Lot #:

Grab


D.O. (% SAT)	Temp (°C)	pH (SU)	Sp. Cond. (umhos/cm)
-----------------	--------------	------------	-------------------------

Document lot numbers from the acid vials used to preserve samples.



PRESERVATION BASICS

Lab Page ____ of ____

 RQ-2020-_____ Collected By (Agency Code): _____
Project Name: _____ Sampler Names: _____
Customer: AMBIENT Lab Project ID: GW-TREND / STATUS / BMAP

Place Station ID Label Here	Comments:				
	Sulfuric Acid Lot #: Nitric Acid Lot #:				
Matrix: W-GROUND <input checked="" type="checkbox"/> Grab					
Date Collected	Time Collected	D.O. (% SAT)	Temp (°C)	pH (SU)	Sp. Cond. (umhos/cm)
	<input type="radio"/> ETZ <input type="radio"/> CTZ				

Describe differences in comments if preservation performed differs from required steps listed on details page.



PRESERVATION BASICS

- Complete all preservation within 15 minutes of sample collection.
- Check bottle labels and sample details page for preservation instructions.
- Wear clean, powder-free, disposable gloves.
- Wear protective eyewear and work in a well-ventilated area when working with acid or formalin.



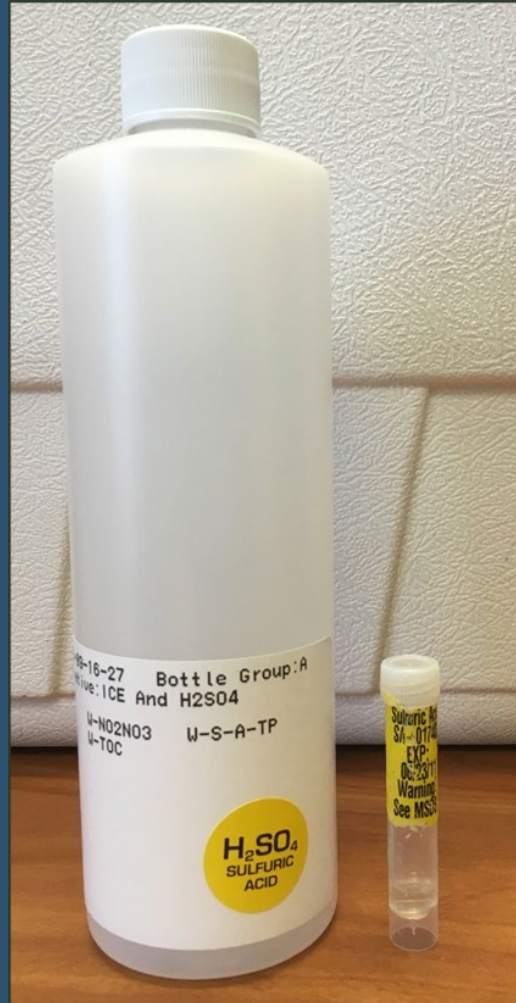
SJRWMD employee preserving samples.



PRESERVATION BASICS

PRESERVATION WITH ACID

- Use “tag-team” approach to ensure correct preservation.
- Check label of acid vial against sample bottle before preserving sample.
- Use **sulfuric acid** with nutrients and test pH – first.
- Then use **nitric acid** with metals and test pH.



Wakulla Springs State Park



Rock Springs/Kelly Park



PRESERVATION BASICS

PRESERVING WITH ACID

- Use narrow range pH paper (0-3).
- Pour acidified sample onto pH strip over a small disposable cup or watch glass.
- Check $\text{pH} < 2$.
- If $\text{pH} \geq 2$, use another $\frac{1}{2}$ vial of acid; check again; document.
- Dispose of acids properly.



Small acid waste containers - empty frequently and follow chemical safety plan for your building when disposing.



PRESERVATION BASICS

PRESERVING WITH ACID

If pre-measured vials are unavailable:

- Lab will provide plastic containers of pre-mixed 1:1 acid solutions and disposable pipettes.
- Always use a clean, disposable pipette to add acid to sample or blank.
- Use a new pipette for each sample or blank.
- 2 mL sulfuric per 500 mL bottle for nutrients.
- 2 mL nitric per 500 mL bottle for metals.
- Do not allow pipette to come into contact with bottle lip or sample.
- Cap, mix and check preservation as previously described. If more acid needed to reach $\text{pH} < 2$ then document.
- Dispose of used pipettes in acid disposal container.



PRESERVATION BASICS

FIELD FILTRATION PRESERVATION

If filtration is required (e.g., orthophosphate), it must be done:

- In the field.
- Before thermal preservation.





PRESERVATION BASICS

THERMAL PRESERVATION

- Place samples together in large zip-top bag.
- Place bag in wet ice $\leq 6^{\circ}\text{C}$.
 - Ice must be loose and surround the bag of samples for proper cooling.
- Include temperature verification bottle.
- Samples $> 6^{\circ}\text{C}$ will be qualified or discarded.





PRESERVATION BASICS

GLASS BOTTLES

Bottles for Tracers, Pesticides and Algal Toxins:

(250 mL and 500 mL amber glass bottles)

- Place in bubble-wrap bag
CAUTION - Always support container from bottom; bags are not strong.
- Place in cooler **in ice** within 15 minutes.





PRESERVATION BASICS

SEDIMENTS

- Seal lid/container with tape (electrical tape recommended).
- Place in bubble-wrap bag (**CAUTION** — Always support container from bottom; bags are not strong).
- Place in cooler **in ice** within 15 minutes.

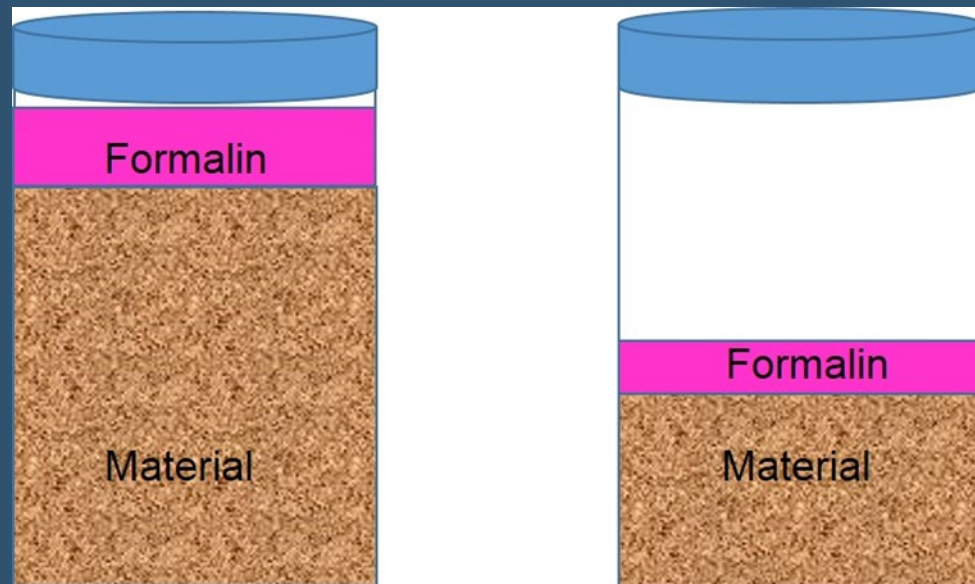




PRESERVATION BASICS

STREAM CONDITION INDEX (SCI)

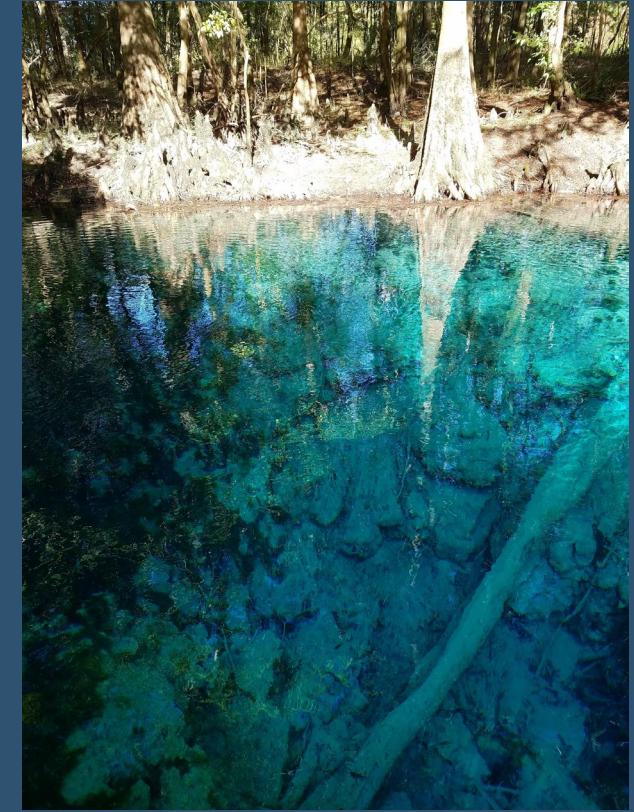
- Drain excess water from jug before preserving.
- Add recycled 10% buffered Formalin to sufficiently cover material.
- Seal lid/container with tape (optional).
- Place back in the large zip-top bag in which they arrived.
- Always transport buffered formalin and preserved samples in upright position.





DOCUMENTATION PRESERVATION AND INVENTORY

- Survey123 guides user through completing sample details page for each sample and/or blank.
- When a particular analyte is marked as collected, the application requires preservation information to be selected or a comment to be entered before allowing you to proceed.





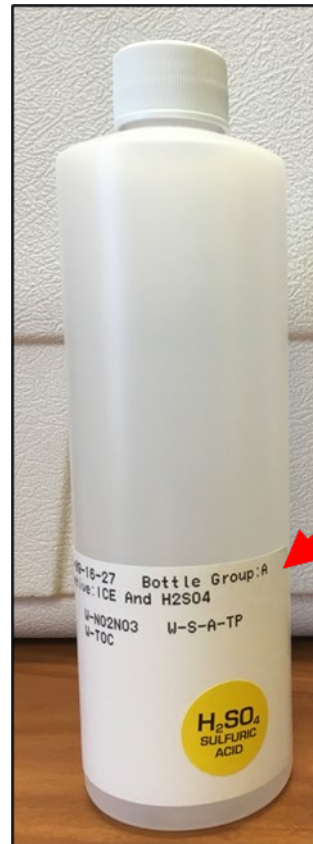
DOCUMENTATION PRESERVATION AND INVENTORY

Bottle Group

- Summary In RQ paperwork from kit.
- On sample bottles.

Parameters Collected

- Core lists for Status or Trend.



FL DEP Status and Trend Networks - Surface Water

Water Sample Inventory & Preservation Details

Bottle group for water samples? *

A B C D
 E F G H

▼ Trend Network - Core Parameters

Chlorophyll container filled? (BP-1L) *

Lab test: CHLSUITE-W

YES NO

Nutrients container filled and preserved? (P-500ML) *

Lab tests: W-NH3 / W-NO2NO3 / W-S-T-P / W-TKN / W-TOC

Yes - container filled, preserved w/ 2 mL (or one vial) sulfuric acid, pH < 2.
 Yes - container filled, different preservation (described below)
 No

Metals container filled and preserved? (P-500ML) *

Lab tests: W-HARD / W-ICP / W-ICPMS

Yes - container filled, preserved w/ 2 mL (or one vial) nitric acid, pH < 2.
 Yes - container filled, different preservation (described below)
 No

Anion / Phys. Aggregate container filled? (P-1L) *

Lab tests: ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TSS

YES NO

Microbiology container(s) filled? (P-250mL or P-125ML) *

Lab test: ECOLI-18-QT

YES NO

✓



DOCUMENTATION PRESERVATION AND INVENTORY

- Preservation must be recorded for each analyte collected
- 'No' answers require a comment.

FL DEP Status and Trend Networks - Surface Water

▼ **Preservation and Container Inventory**

Nutrients Preservation

Nutrients Bottle - 2ML (or one vial) sulfuric acid added? *

YES NO

Sulfuric acid lot number: *

Nutrients Bottle - pH < 2? *

YES NO

Metals Preservation

Metals Bottle - 2ML (or one vial) nitric acid added? *

YES NO

Nitric acid lot number: *

Metals Bottle - pH < 2? *

YES NO



DOCUMENTATION PRESERVATION AND INVENTORY

- Number of bottles submitted to lab for each parameter group.
- Populates sample details page (used by laboratory receiving during sample login).

FL DEP Status and Trend Networks - Surface Water

Container Inventory

Chlorophyll - Number of containers sent to lab? *
(BP-1L)

Nutrients - Number of containers sent to lab? *
(P-500ML)

Metals - Number of containers sent to lab? *
(P-500ML)

Anion / Phys. Aggregate - Number of containers sent to lab? *
(P-1L)

Microbiology - Number of containers sent to lab? *
(P-250mL or P-125ML)

All water sample containers submerged in wet ice (≤ 6 °C) within 15 min of sample collection? *

YES NO

Water Samples - Comments for Lab
Include comments for scenarios such as damaged containers and deviations from required preservation procedures. **If "NO" was selected for any preservation questions above, a comment is required.**

✓



CUSTODY AND SHIPMENT SAMPLING MANUAL SECTION 13





CUSTODY SHEET PACKETS

- Submit a separate custody sheet packet for each RQ.
- One cover page per packet.
 - List all samples and blanks (digital barcodes or barcode labels).
 - Signature required in “relinquished by” section.
- One details page for each sample submitted.
- One details page for each blank submitted.





CUSTODY SHEET PACKETS

- Document every sample submitted.
- Details page differs for groundwater and surface water.
- Make sure all containers from a site are submitted with matching RQs.
- Fill out completely and use digital barcodes or Station ID and RQ Labels.





CUSTODY SHEET PACKETS

If you have no choice but to hand-write the information
Please write as clearly as possible!

STATUS – Site Location and Field ID =
Random Sample Location
(e.g. Z4-UA-14025).

	RQ-2020-_____	Collected By (A
	Project Name: _____	Sampler Names
	Customer: <u>AMBIENT</u>	Lab Project ID:
Place Station ID Label Here	SITE = Z4-UA-14025 FIELD ID = Z4-UA-14025	Comm Sulfuric Nitric A
Matrix:	W-GROUND	

TREND – Site Location = WIN
Monitoring Location ID (If you don't
know it, write the station name or
description).

	RQ- _____	Collected B
	Project Name: _____	Sampler Na
	Customer: <u>AMBIENT</u>	Lab Project
Place Station ID Label Here	SITE = 21200 FIELD ID = LSJ918	Co Su Ni
Matrix:	<input type="radio"/> W-SURF-FRESH / <input type="radio"/> W-SURF-SALT	



CUSTODY SHEET PACKETS

- Analytes listed on details page tell the lab what you are submitting.
- Different analyte lists on surface water and groundwater details pages.
- Provide a comment if anything is different or missing.



CUSTODY SHEET PACKETS

- Copies of custody sheet packets needed for:
 - Laboratory.
 - Tallahassee Watershed Management Section
 - Sampling Agency.
- Digital custody sheet packets.
 - Email to lab.receiving@floridadep.gov.
 - Or print and place in in zip-top bag, taped to inside lid of cooler.
- Paper custody sheet packets w/ physical labels.
 - Place in in zip-top bag, taped to inside lid of cooler.
 - DO NOT scan and email to lab.
- Lab preference: If shipping multiple coolers at once, label outside of coolers: “Cooler 1 of 2” etc.



Custody Sheet Cover Page

Custody Sheet
Page 1

Custody Sheet
Page 2

Custody Sheet
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Custody Sheet
Page 5

Field Sheet - Station 1

Page 1

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Page 3

Page 4

Field Sheet - Station 2

Page 1

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SHIPMENT SAMPLING MANUAL SECTION 13



- Ensure spigot is plugged and cooler is not cracked.
- Pack samples properly:
 - Line cooler w/ large plastic bag.
 - Surround sample bags with wet ice.
 - Tie/tape outer bag closed.
 - Bag custody sheet and tape to
 - Inside of lid (If applicable).
 - Tape cooler closed.
 - Remove the existing shipping tag and attach the return tag.
- Observe lab holidays and weekends!
- Make every attempt to use FedEx Priority Overnight Shipping.



SHIPMENT

Locating **staffed** FedEx Shipping Centers for Cooler Drop-Off.

Other options:

- Call 1.800.GOFEDEx (1.800.463.3339).
- Visit www.FedEx.com and select “schedule pickup.”





WHAT IF THINGS DON'T GO AS PLANNED?

- Shipping delay or lost in shipment.
 - Document and report all shipping problems to Quality Assurance (QA) Officer ASAP.
 - Please include waybill and tracking numbers.
- Cracked or leaking containers.
- Sample lost during analysis.



RESAMPLING PROTOCOL

- Resampling requirements will be decided by QA Officer and Managers.
- Time and logistics will determine if resampling will be attempted.
- If many analytes are lost resampling is advisable.
- SCI will not be resampled (as long as the original samples were properly collected and preserved).



RESAMPLING PROTOCOL

- Retain original field sheets.
- Status – Rename site location from original sampling event with a “B” designation (e.g., “Z1-SL-17001B”) as a comment on the field sheet.
- Trend – No need to rename the site location since the sample is collected from the same location.
- Complete new Survey123 response for Status or Trend re-sampling.
- Collect all water quality data again, including location data & field parameter measurements.
- Send documentation for **both events** (original & resample) to your WMS Project Manager.



QUESTIONS?



THANK YOU

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Division of Environmental Assessment and
Restoration/Water Quality Monitoring Program
Florida Department of Environmental Protection

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