



# STATUS AND TREND NETWORKS PRESERVATION, CUSTODY AND SHIPMENT

**Rachael Dragon**

Division of Environmental Assessment and Restoration  
Florida Department of Environmental Protection

Tallahassee, FL | April 22, 2025





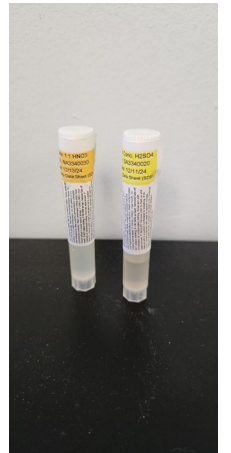
# STATUS AND TREND PRESERVATION, CUSTODY, AND SHIPMENT



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 (circle one): STATUS / SW-TREND /  
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	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects	Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
Chlorophyll (P-11)	<input type="checkbox"/> CHLOR-TE-W	<input type="checkbox"/> CHLOR-TE-W		<input type="checkbox"/> Ice		
Nutrients (P-100ML)	<input type="checkbox"/> W-NH3 / W-NH4N / W-S-T-P / W-TN / W-TOC	<input type="checkbox"/> W-NH3 / W-NH4N / W-S-T-P / W-TN / W-TOC		<input type="checkbox"/> 2ML H2SO4 <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Metals (P-100ML)	<input type="checkbox"/> W-HARD / W-CP / W-CPMS	<input type="checkbox"/> W-HARD / W-CP / W-CPMS		<input type="checkbox"/> 2ML HNO3 <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Anion / Phys. Aggregate (P-11)	<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-100ML or P-100ML)	<input type="checkbox"/> ECOLI-18-QT	<input type="checkbox"/> ECOLI-18-QT		<input type="checkbox"/> Ice		
Toxins (P-100ML or P-100ML)	<input type="checkbox"/> W-MCTST-AA / W-SACTS-MS	<input type="checkbox"/> W-MCTST-AA / W-SACTS-MS		<input type="checkbox"/> Ice		
Molecular (PCR-P-100ML)	<input type="checkbox"/> PCR-BACR / PCR-DG / PCR-DG / PCR-DG / PCR-DG	<input type="checkbox"/> PCR-BACR / PCR-DG / PCR-DG / PCR-DG / PCR-DG		<input type="checkbox"/> Ice		
Tracers (P-100ML)	<input type="checkbox"/> W-E331-DI / W-E331-MS	<input type="checkbox"/> W-E331-DI / W-E331-MS		<input type="checkbox"/> Ice		
BOD (P-11)	<input type="checkbox"/> OV-BOD-UN	<input type="checkbox"/> OV-BOD-UN		<input type="checkbox"/> Ice		
Pesticides (P-100ML)	<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> W-PSNP-TQ		<input type="checkbox"/> Ice		
Filtered Nutrient (P-100ML)	<input type="checkbox"/> W-POL-F	<input type="checkbox"/> Field Filtered w/ 0.45 um PES filter		<input type="checkbox"/> Ice		

Matrix: SEDIMENT Date Collected: \_\_\_\_\_ Time Collected: ☐ ETZ / ☐ CTZ

Parameter Suite	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects	Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
Metals & Nutrients (P-100ML)	<input type="checkbox"/> S-HO-TDA / S-CP-TO / S-CPMS / S-TOC / S-TP	<input type="checkbox"/> S-HO-TDA / S-CP-TO / S-CPMS / S-TOC / S-TP		<input type="checkbox"/> Ice		

Matrix: BIOLOGICAL Date Collected: \_\_\_\_\_ Time Collected: ☐ ETZ / ☐ CTZ

Parameter Suite	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects	Preservation	# Bottles sent to Lab	Bottle Group
Macrobenthos (P-11)	<input type="checkbox"/> MI-FW-QLDC	<input type="checkbox"/> MI-FW-QLDC		<input type="checkbox"/> Buffered Formalin (10%)		
Algal ID (P-100ML)	<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	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects	Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group
Tracers (BG-500ML)			<input type="checkbox"/> W-E331-DI / W-E331-MS	<input type="checkbox"/> Ice		
Pesticides - Carbamates (BG-500ML)			<input type="checkbox"/> W-CARB-AA	<input type="checkbox"/> 1 vial MCAA Buffer <input type="checkbox"/> Ice		
Pesticides - Organochlorines (BG-500ML)			<input type="checkbox"/> W-PCL-TQ-R	<input type="checkbox"/> Ice		
Pesticides - Organophosphates (BG-500ML)			<input type="checkbox"/> W-PSNP-TQ	<input type="checkbox"/> Ice		
Nutrients (P-100ML)	<input type="checkbox"/> W-NH3 / W-NH4N / W-S-T-P / W-TN / W-TOC	<input type="checkbox"/> W-NH3 / W-NH4N / W-S-T-P / W-TN / W-TOC		<input type="checkbox"/> 2ML H2SO4 <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Metals (P-100ML)	<input type="checkbox"/> W-HARD / W-CP / W-CPMS	<input type="checkbox"/> W-HARD / W-CP / W-CPMS		<input type="checkbox"/> 2ML HNO3 <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice		
Anion / Phys. Aggregate (P-11)	<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-100ML or P-100ML)	<input type="checkbox"/> ECOLI-18-QT / TCOLI-18-QT	<input type="checkbox"/> ECOLI-18-QT / TCOLI-18-QT		<input type="checkbox"/> Ice		
Filtered Nutrient (P-100ML)	<input type="checkbox"/> W-POL-F			<input type="checkbox"/> Field Filtered w/ in-line 0.45 um PES filter	<input type="checkbox"/> Ice	

Groundwater Details

Download current versions from Watershed Monitoring Information Center:  
[Watershed Monitoring Information Center | Florida Department of Environmental Protection](#)





# PRESERVATION

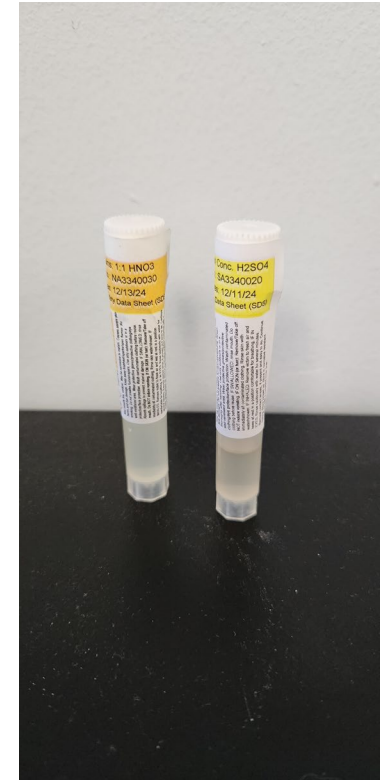
## SAMPLING MANUAL SECTION 11



Source: pexels.com



Source: pexels.com







# SURFACE WATER PRESERVATION

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							
Parameter Suite	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects	Preservation (Must be completed within 15 min of sample collection)	# Bottles sent to Lab	Bottle Group	
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 <sub>2</sub> SO <sub>4</sub> <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 <sub>3</sub> <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"/> ECOLI-18-QT	<input type="checkbox"/> ECOLI-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

Station ID Label Here				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						
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 / W-E8321-MS	<input type="checkbox"/> Ice			
Pesticides – Carbamates (BG-500ML)			<input type="checkbox"/> W-CARB-AA	<input type="checkbox"/> 1 vial MCAA Buffer <input type="checkbox"/> Ice MCAA Lot #: _____			
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 / W-NO2NO3 / W-S-T-P / W-TN / W-TOC	<input type="checkbox"/> W-NH3 / W-NO2NO3 / W-S-T-P / W-TN / W-TOC		<input type="checkbox"/> 2ML H <sub>2</sub> SO <sub>4</sub> <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 <sub>3</sub> <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-250ML or P-120ML)	<input type="checkbox"/> ECOLI-18QT / TCOLI-18QT	<input type="checkbox"/> ECOLI-18QT / 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			
lected	D.O. (% SAT)	Temp (°C)	pH (SU)	Sample Depth (m)	Sp. Cond. (umhos/cm)
<input type="checkbox"/> ETZ <input type="checkbox"/> CTZ					
Container Submitted to Lab		Preservation (Must be completed within 15 min of sample collection)		# Bottles sent to Lab	Bottle Group
Lab Test Codes Status Core	Lab Test Codes Special Projects				
<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 <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> pH < 2 <input type="checkbox"/> Ice			
<input type="checkbox"/> W-HARD / W-ICP / W-ICPMS		<input type="checkbox"/> 2ML HNO <sub>3</sub> <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			
ollected:		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: <input type="radio"/> GW-TREND / <input type="radio"/> STATUS / <input type="radio"/> BMAP			
Comments:			
Sulfuric Acid Lot #:			
Nitric Acid Lot #:			
<input checked="" type="checkbox"/> 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	<b>Comments:</b>				
	Sulfuric Acid Lot #:				
	Nitric Acid Lot #:				
Matrix: <b>W-GROUND</b>			✓ 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.

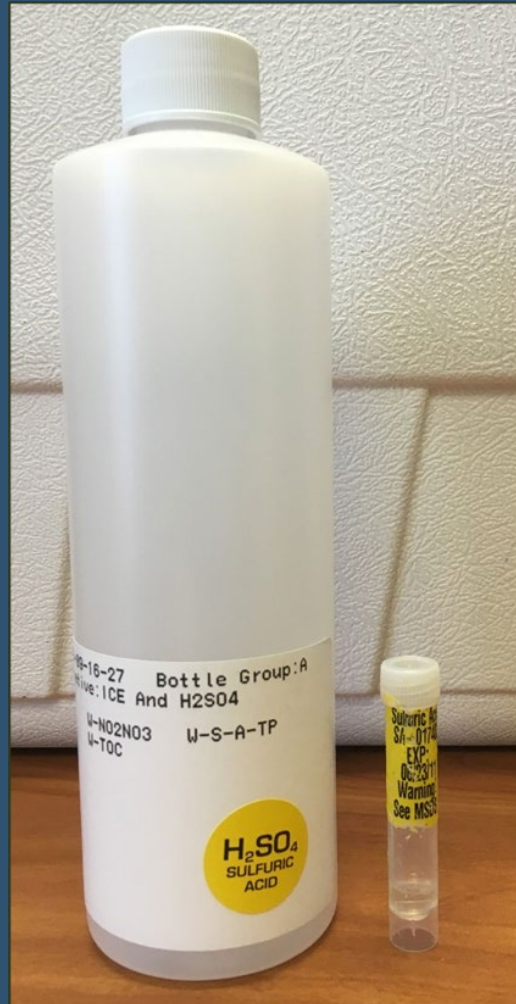




# PRESERVATION BASICS

## 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 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.



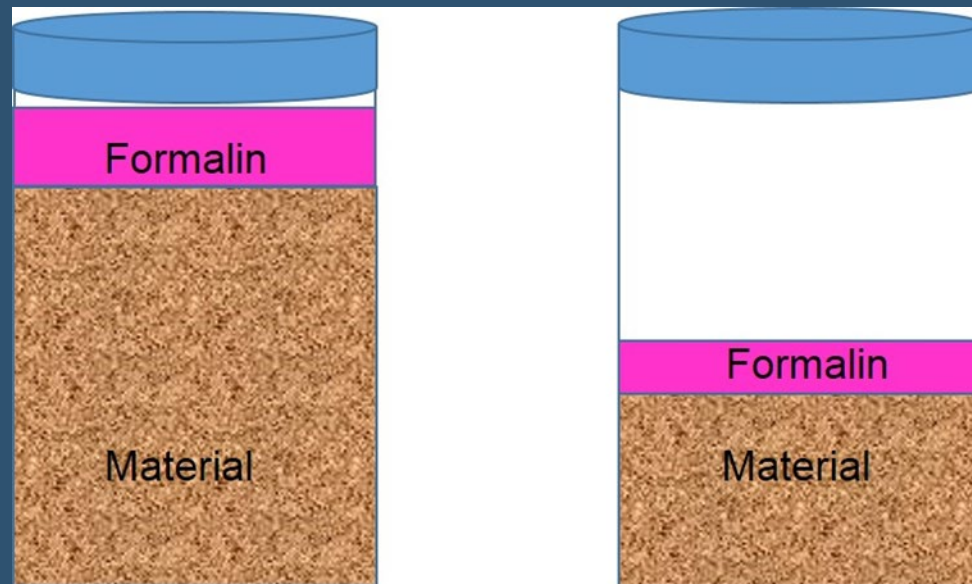




# PRESERVATION BASICS

## 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.

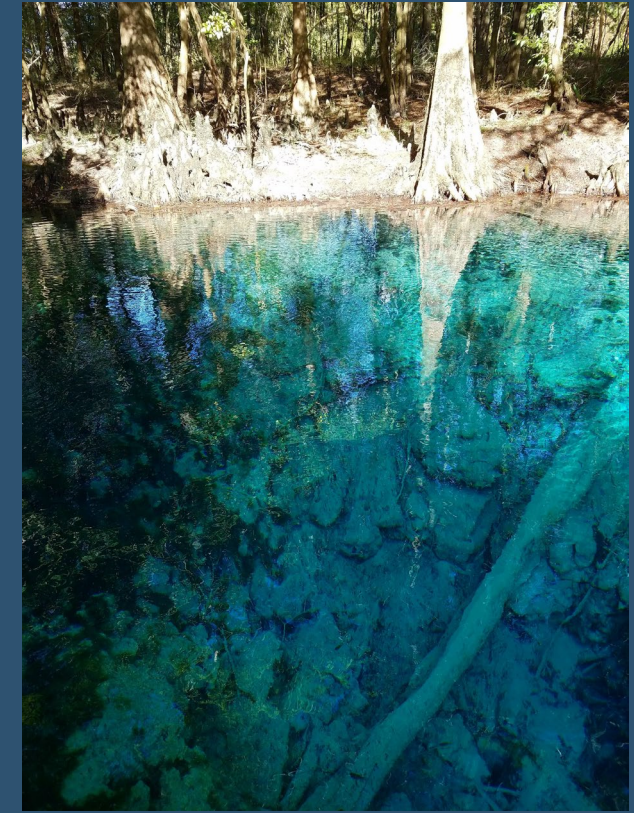






# DOCUMENTATION PRESERVATION AND INVENTORY

- 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.



Spring Creek, GA





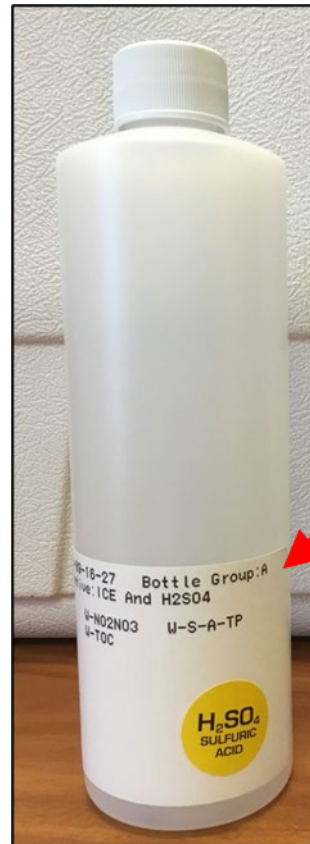
# DOCUMENTATION PRESERVATION AND INVENTORY

## 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 ( $\leq 6^{\circ}\text{C}$ ) 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.



Lake Norris Conservation Area





# 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.



Otter Lake, St. Marks National Wildlife Refuge







# 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.

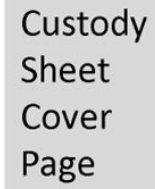




# CUSTODY SHEET PACKETS

- Copies of custody sheet packets needed for:
  - Laboratory.
  - Tallahassee Watershed Monitoring Section.
  - Sampling Agency.
- Digital custody sheet packets.
  - Email to [lab.receiving@floridadep.gov](mailto: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  
Page 1

Custody Sheet  
Page 2

Custody Sheet  
Page 3

[illegible]

Page 4

Custody Sheet  
Page 4

U.S. Customs and Border Protection  
Form 100  
U.S. Customs Declaration  
10/12/09

Country of Origin: USA Country of Destination: USA  
Mode of Transport: Truck Type of Cargo: General  
Weight: 1000 Value: 1000

Quantity: 1 Description: Truck Value: 1000 Weight: 1000 Unit: kg

Remarks: Truck

Signature of Declarant: [Signature] Signature of Customs Officer: [Signature]

Page 4

**Patient History**

University of Michigan Medical Center

Patient Name: John Doe

Date of Birth: 12/12/1980

Sex: Male

Race: Caucasian

Allergies: Penicillin, Sulfonamides

Medications: Aspirin, Ibuprofen

Date: 12/12/2010

Print

Custody Sheet  
Page 5





# 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

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

Other options:

- Call 1.800.GOFEDEx (1.800.463.3339).
- Visit [www.FedEx.com](http://www.FedEx.com) and select “schedule pickup.”



Sister Sinks





# 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

**Rachael Dragon**

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

Contact Information:

850-245-7544

[Rachael.Dragon@FloridaDEP.gov](mailto:Rachael.Dragon@FloridaDEP.gov)