

eDATA Informatics Platform – The Basics

Brian Stringer Proficiency Testing Technical Specialist

eDATA Informatics Platform – The Basics

- Key Learning Topics
 - Streamline data entry
 - Avoid common reporting errors
 - Submit results for a Quik Response
 - Access PT results
- Speaker Brian Stringer
 - Proficiency Testing Technical Specialist

Avoid common errors by reviewing the paperwork

- Review the packing slip
 - Match up lot numbers with container labels
- Before starting your analysis
 - Read the PT Tracker for important announcements and product changes
 - Read the instructions for the study type: WS, WP, etc.
 - Review sample instructions pages to see:
 - Storage requirements
 - Dilution instructions
 - Reporting information
 - Review Data Reporting Forms
 - o Concentration Ranges are the manufacturing ranges for the analytes
 - PTRL (Proficiency Testing Reporting Limit)
 - $_{\odot}$ The required reporting units, such as mg/L or $\mu g/L$

Avoid common errors reporting results



- Report results for the correct analyte
 - Demand (BOD or CBOD)
 - Solids (TSS, TDS or TS)
 - Microbiology Wastewater Coliforms and SourceWater
 - Options for Total Coliforms, Fecal Coliforms or E.coli
 - o Also, Membrane Filtration (MF) vs. MPN-Multiple Well vs. MPN-Multiple Tube
 - Heterotrophic Plate Count (HPC) and Enterococci also offer several options
- Report results from PT standards (WS, WP, DMR-QA, etc.) not from QC samples
 - Labels for PT standards have a green edge, list the study number and a lot number
 - Labels for QC samples have a blue edge, the name "QC", and a lot number that matches the Certificates of Analysis you received with the samples
- Report your results on time!

Logging in to eDATA

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- Go to <u>www.eraqc.com</u> and click on the blue "eDATA login" link at the top
- On the next page click the "eDATA login" button
- If you have a Username, enter it along with your Password
- Don't remember your password? Use the Create/Reset ERA Password on the right
- If you don't remember your Username, are new to eDATA, or have any trouble logging in, just let us know and we can help
- To update the contacts on your account, go to your customer number in the upper right, select Customer Information, then expand Contacts

Updating contact information

Contacts							Collapse 🔺
				\frown			
Name	Title	Work Phone Number	Email Address	Primary	Role	Edit	Delete
Brian Stringer	Technical Specialist	(800) 372-0122	Interlabgroup@waters.com	L/P	Administrator	1	•
Quality Manager	QA Manager	(800) 372-0122	Quality@demo.na		Administrator	1	•
Add a new Contact				\bigvee			

- Primary lab contact has the letter "L" under Primary
- Primary NPDES permittee contact has the letter "P"
- If the Role is empty, select the blue Edit pencil and enter a Username
 - We don't recommend using the customer number or full email address
- Select a Permission Level (Role)
 - Administrator can enter data, retrieve reports, and delete or add contacts
 - Data Entry allows for data entry and reports, but can't change contacts
- Select Save to receive an email to reset your password

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eDATA Home Page Study closing in 43 days Study closing in 43 days RAD-140 (1/13/2025 - 2/27/2025) (1/13/2025 - 2/27/2025) Progress to-date Progress to-date **PFAS Secondary Need to schedule** Source Standards your PTs for 2025? Wastewater, Drinking Water, Our customer service team is happy to assist. AVAILABLE NOW Waters | @ERA Welcome to eDATA™ UPCOMING STUDIES WP-348 (1/16/2024 - 3/1/2024) Study Summary Preliminary Limits You have no upcoming studies.

Step 1 – Ver Enter Mailing Address	ifying your in	formation		Waters™	ERA.
WS-342 (1/13/2025 - 2/27/2025)	Enter Select Agencies & Mailing Address Add Third Parties	Enter & Customize Agency Verify Data Reports (optional)			
Contact Information Existing Contacts Stringer, Brian	✓ ②				
First Name Brian Fax Number	Middle Name	Last Name Stringer EPA Lab ID C999999	Title Technical Specialist Receive Final Report PDF Only	Phone Number (800) 372-0122	

- Read the pop-up statement and answer "Okay"
 - Make changes for this contact, or select a different contact from the drop-down list
 For a new contact, go to customer number in the upper right, select Customer Information, then Contacts
 - This is the lab report recipient, for NPDES Permittee reports go to the DMR-QA tab

 - Verify the EPA Lab ID and your option for receiving the lab report
 - Click the green "Save & Continue" button

Step 2 – Agencies & Third Parties

Select Agencies & Add Third Pa	rties							
WS-342 (1/13/2025 - 2/27/2025) Enter Mailing	2 Select Agen Address Add Third P	cies & Enter & arties Submit Data	Customize Agency Reports (optional)					
Agency Selection		Agencies & ThirdPart	ies	Third Backs Calendian				
Select previously chosen agencies	Ente	You must either select a to Step 3 - Enter Data.	n agency or select 'N	o Agencies Required' to continue	25 Company	State	Edit	Delete
No agencies required				Okay	Environmental Lab	со	1	•
A2LA 😨				Add third party				
Florida 😨								
New Jersey 😨	NJ99	901						
• Add more agencies								
						SAVE	& CONTI	NUE

Step 2 – Agencies & Third Parties

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Select Agencies & Add Th	hird Parties									
WS-342 (1/13/2025 - 2/27/2025)	Enter Mailing Address	2 Select Agencies & Add Third Parties	3 Enter & Submit Data	Customize Ager Reports (option:	ency nal)					
Agency Selection						Third Party Selection				
Select previously chosen agen	cies	Enter agency	ID			Select existing third parties	Company	State	Edit	Delete
No agencies required						Lab Director	Environmental Lab	со	1	•
A2LA 😨						•Add third party				
Florida 🞯										
New Jersey 😵		NJ99901								
• Add more agencies										
								SAVE	& CONTI	NUE

Step 3 – Enter & Submit Data

Enter

Mailing Address Add Third Parties Submit Data Reports (optional)

Enter &

Select Agencies &

NOTE: All standards with check marks are saved and submitted. You will still be able to make changes to the results and save them until the study closes. For Quik Response or SSAS projects you must complete the evaluate and report step to close the study and receive your report.

Customize Agency

CSV DATA UPLOAD		Filter by
S Inorganics (cat# 591)	8 Metals (cat# 590)	

RETURN TO OPEN STUDIES

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Enrolled Standards

WS-342

(1/13/2025 - 2/27/2025)

Data Entry – Report Data by Standard

Data Entry	
WS-342 (1/13/2025 - 2/27/2025) > pH (cat# 552)	Add a new method
Method Title Method 1	
Check if NELAC code is not required Report Data by Analyte Report Data by Standard	Show More
Method Rev/Edition NELAC Code Tech Key Analysis Date	
No. Analyte Signs Datapoint Unit Concentration Range	
1000 pH S.U. 5.00 - 10.0	
RETURN TO STANDARDS LIST	VIEW SUMMARY SAVE

- On this data entry screen:
 - Method and Analysis Date are at the top, as they apply to all analytes in the standard
 - This is noted as "Report Data by Standard"
 - Can be changed to "Report Data by Standard" to enter different information for each analyte
 - "Method Title" is only used to keep track of multiple method tabs
- Start by clicking in the empty box under "Method"

Data Entry – Standard Methods

- Scroll or start typing to narrow down the search
- Standard Methods (SM) are listed two different ways
 - Pick the method with the revision year
 Such as SM 4500-H+ B-2011
 - $_{\odot}$ This will put the year in the Rev/Edition box
 - Or pick the one without the year
 - Such as SM4500H+ B
 - o This populate the Rev/Edition with "online"
 - Click in the Rev/Edition box to select the Edition you want, such as 22nd ED 2011



Data Entry – without NELAC Method Codes

	Check if NELAC code is not re	equired Report Data by	y Analyte 💿 Rep	oort Data by S	tandard		
Meth	od	Rev/Edition	NELAC Code		Tech Key	Analysis Date	
Q	In house method						8
No.	Analyte	Signs	Datapoint Unit	Concentration Range	Late/Revised Revise All		
1900	pH		S.U.	5.00 - 10.0	Revise		

- You are not limited to the methods in the drop-down lists
 - You can enter <u>anything</u> for the method description
- If you're using the study for in-house testing
- Or your agencies don't use NELAC method codes
 - Enter the method description as you want it
 - Check the box labeled "Check if NELAC code is not required"

Data Entry – International Laboratories

	heck if NELAC code is not re	quired Report Data by	Analyte 💿 Report D	Data by Standard	
Meth	od	Rev/Edition	NELAC Code	Tech Key	Analysis Date
9	SM4500H+ B 24th ED 2023				m
No.	Analyte	Signs	Datapoint Unit	Concentration Range	
1900	рН		S.U.	5.00 - 10.0	

- For our International Customers
 - Enter all your method information in the box for "Method"
 - This includes any method revisions or editions
 - Can also include preparatory or extraction methods
 - Please note: any information in the "Rev/Edition" box will <u>not</u> appear on the final performance report

Data Entry – meeting agency requirements for methods Waters[™] | ♦ ERA.

- If you enter your own method description but need a TNI Method Code
 - Enter your method description and revision/edition as you want it to read
 - Go to Resources at the top of the page, select TNI Method Code/Analyte Code Tables
 - Once on the TNI LAMS website, select Methods under TNI Codes (on the left), and search for your method to find the associated TNI Code
 - Enter the TNI Code in the NELAC Code field in eDATA
- It's very important to report the method you followed when analyzing the samples and that your agencies require
- Many agencies receive an EDD (Electronic Data Deliverable) with Method Codes
 Ask your agency or contact ERA to see if they receive an EDD
- Other agencies don't use Method Codes, but the method descriptions must exactly match your certification or accreditation
- Please confirm with your accrediting agencies what they require for reporting

Data Entry – Analysis Date, Datapoint & Analyst Name

Method Title Method 1								
Check if NELAC code is not re	equired Report Data by	Analyte Report Data b	y Standard	Analysis Date			Sho	w More
Q EPA 150.1	1982	10008409	ISE	01/15/2025				
No. Analyte 1900 pH	Signs	Datapoint Unit Con Ran 7.21 9U. 5.00	- 10.0					
RETURN TO STANDARDS LIST		Č				VIEW SUMMARY	SAVI	:

- Pick the Analysis Date using the calendar
- To report your analyst's name:
 - Select Show More over on the right and find the "Analyst Name" field
- Enter your test results in the Datapoint field
- Select Save and answer Yes to "Do you want to go to the list of Standards"

Data Entry – Enrolled Standards List

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Enrolled Standards								
WS-342 (1/13/2025 - 2/27/2025)	Enter Mailing Address	Select Agencies & Add Third Parties	Enter & Submit Data	Customize Agency Reports (optional)				
NOTE: All standards with check marks a and secsive your report.	re saved and submitte	d. You will still be able to	make changes to the r	esults and save them until	the study closes. Pr Quik Response or SSAS projects y	ou must complete the evaluat	e and report step to close t	the study
CSV DATA UPLOAD	EMAIL STUDY	SUMMARY	VIEW STUDY SUMM	MARY			Filter by	~
S Inorganics (cat# 591)					8 Metals (cat# 590)			
● <u>pH (cat# 552)</u>				View Summary				

RETURN TO OPEN STUDIES

Data Entry – Report Data by Analyte

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Method Method	1 Title												
Re	eport Data by Analyte												
No.	Analyte	Signs	Datapoint	Unit	PTRL	Concentration Range	Method	Rev/Edition	NELAC Code	NELAC Code Opt Out	Tech Key Analy	sis Date	More
1505	Alkalinity as CaCO3	<		mg/L	22	25.0 - 200	٩					8	•
1575	Chloride	<		mg/L	17	20.0 - 160	٩					ŧ	•
1610	Conductivity at 25°C	<		µmhos/cm	117	130 - 1300	٩					8	•
1730	Fluoride	<		mg/L	0.9	1.00 - 8.00	٩					8	•
1820	Nitrate + Nitrite as N	<		mg/L	2.6	3.00 - 10.0	٩					*	-
1810	Nitrate as N	<		mg/L	2.7	3.00 - 10.0	٩					8	•
1125	Potassium	<		mg/L	8.5	10.0 - 40.0	٩					#	•
2000	Sulfate	<		mg/L	21	25.0 - 250	٩					8	•
1955	Total Dissolved Solids at 180°C	<		mg/L	80	100 - 1000	٩					8	•
RE	TURN TO STANDARDS LIST										VIEW SUMMARY	SAVE	

Data Entry – Less Than Signs "<"

		$ \land$				
No.	Analyte	Signs	Datapoint	Unit	PTRL	Concentration Range
1505	Alkalinity as CaCO3	<		mg/L	22	25.0 - 200
1575	Chloride			mg/L	17	20.0 - 160
1610	Conductivity at 25°C	<		µmhos/cm	117	130 - 1300
1730	Fluoride	<		mg/L	0.9	1.00 - 8.00
1820	Nitrate + Nitrite as N	<		mg/L	2.6	3.00 - 10.0
1810	Nitrate as N	<		mg/L	2.7	3.00 - 10.0
1125	Potassium	<		mg/L	8.5	10.0 - 40.0
2000	Sulfate	<		mg/L	21	25.0 - 250
1955	Total Dissolved Solids at 180°C	<		mg/L	80	100 - 1000

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- Note: Below the word "Signs" are small less-than signs "<"
 - The boxes are not used to show you reported results for the analyte
 - They are only checked to indicate you were not able to detect the analyte
 - Normally only for Organics standards where not every analyte is spiked
- To report that an analyte was not spiked into a sample
 - Check the box by the < sign and enter a numerical value for the Datapoint, such as the PTRL value, or your own LOQ (Limit of Quantification)
 - You can also enter a value of 0 (zero) for the Datapoint, and don't check the < Sign

Data Entry – Review & Save

WS-342 (1/13/2025 - 2/27/2025) > Inorganics (cat# 591) • Add a new method Copy this method Delete this method Method Title Method Title Method 1 Method 2 Report Data by Analyte NELAC Code Opt Out Tech Key Analyte Signs Datapoint Unit PTRL Concentration Range Method Rev/Edition NELAC Code Analysis Date More w Q < 22 25.0 - 200 . Alkalinity as CaCO3 mg/L w Q EPA 300.1 01/15/2025 8 < 17 20.0 - 160 75.2 mg/L 1 1997 10275602 IC-COND Chloride • 9 8 Conductivity at 25°C < 117 130 - 1300 µmhos/cm w Q 8 < 0.9 1.00 - 8.00 Fluoride mg/L Ŧ Q < . Nitrate + Nitrite as N mg/L 2.6 3.00 - 10.0 w Q < 8 2.7 Nitrate as N mg/L 3.00 - 10.0 Ŧ Q < . 8.5 10.0 - 40.0 Potassium mg/L * Q 8 < mg/L 21 25.0 - 250 Sulfate w Q . Total Dissolved Solids at 180°C < mg/L 80 100 - 1000

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No.

1505

1575

1610

1730

1820

1810

1125

2000

1955

Data Entry – Enrolled Standards List



CSV DATA UPLOAD	EMAIL STUDY SUMMARY	VIEW STUDY SUMMARY			Filter by	~
	\sim	\sim				
Inorganics (cat# 591)			View Summary	S Metals (cat# 590)		
♥ <u>pH (cat# 552)</u>			View Summary			

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RETURN TO OPEN STUDIES

Enrolled Standards



Step 5 – NPDES Permittee Reporting

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IMPORTANT!Do not leave this page without releasing the data to any permittees listed in the queue in Step 3. The queue will be cleared if you leave the page without releasing.

Step 1: Select Permittees	Step 2: Select Analytes	Step 3: Release to Permittee
Search By: ADD	-	
Sort By Name O Sort By NPDesNo		
Filter By: All 🗸		
Select Status Permittee Permittee		
Needs CO0000001 ERA		
-	-	
PERMITTEE STATUS REPORT		
LINK ALL ANALYTES TO SELECTED PERMITTEES		
DELETE SELECTED PERMITTEES		
RELEASE SELECTED PERMITTEES		

RELEASE DATA TO YOUR PERMIT

Data Entry – CSV Upload

Enrolled Standards



NOTE: All standards with check marks are saved and submitted. You will still be able to make changes to the results and save them until the study closes. For Quik Response or SSAS projects you must complete the evaluate and report step to close the study and receive your report.

CSV DATA UPLOAD	EMAIL STUDY SUMMARY	VIEW STUDY SUMMARY		Filter by
Inorganics (cat# 591)		View Summary	8 <u>Metals (cat# 590)</u>	
♥ pH (cat # 552)		View Summary		

- We also offer the option of uploading results from a csv file
 - This is available for regular studies, just not for Quick Responses
 - Uploading can save time and reduce errors
 - If you want to explore this option, please reach out to the PT Group
 - We'll send you the information to get you started on creating the upload file from your LIMS
 - We can also create an example of your own test results from a previous study

						6		
Quick Res	ponse	Studi	ies				Waters™∣	ERA.
Enrolled Standards								
111818test (11/18/2018 - 12/31/2018)	0	0	0	•	0			
(1/102010-12012010)	Enter Mailing Address	Select Agencies & Add Third Parties	Enter & Verify Data	Customize Agency Reports (optional)	Evaluate & Report			
NOTE: All standards with check marks are :	saved and submitted. You v	will still be able to mak	ke changes to the results a	and save them until t	he study close Fo	r Quik Response or SSAS projects you must complete the evaluate and report step	to close the study and receive your report.	
CSV DATA UPLOAD	EMAIL STUDY SUMM	IARY V	IEW STUDY SUMMARY				Filter by	*
Solids Concentrate (cat# 403)	<u>2QR)</u>			View Summary	Verify Data	<u> </u>	View Summary	Verify Data

- You are in control of the close date for Quick Responses
 - If following TNI requirements, Quick Responses close on the date listed (45 days)
- So, you tell us when you're ready to submit your results
 - Enter and save your results
 - Review the study summary
 - Go to Step 5 Evaluate & Report



- Check the box for any standard you're ready to submit
 - You don't have to submit all standards at once
 Just let us know if you need us to send a partial report to your agencies
 - But you can't go back and submit results for additional analytes within a standard
- Select the button Submit Data for Evaluation
- Your graded report will be ready in seconds!



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Reports and tracking tools

Welcome to eDATA™



Final results for previous studies

Performance Report for historical studies

C ADD STUDIES CLEAR STUDIES Performance Report - All 2024 WP,All 2024 WS,All 2024 SOIL Evaluation Criteria: TNI 2016 V Show SOP: Study TNI Analyte Units Reported Value Assigned Value Acceptance Performance Z Score Method Description Analysis Date Analyst Name Study Mean Study Analyte Evaluation Standard Code Deviation ALL ALL ~ ~ Nitrite Z000057F 1840 Nitrite as N 0.443 0.442 EPA 353.2 2 1993 1/9/2024 Ana Lyst33 0.446 0.0269 0.376 - 0.508 Acceptable -0.105 mg/L Inorganics Z000057F 1820 Nitrate + Nitrite as N mg/L 5.72 5.99 5.09 - 6.89 Acceptable -1.18 EPA 353.2 2 1993 1/4/2024 Ana Lyst33 6.04 0.268 Nitrate as N Z000057F 1810 mg/L 5.72 5.99 5.39 - 6.59 Acceptable -1.17 EPA 353.2 2 1993 1/4/2024 Ana Lyst33 6.01 0.250 Diesel Range Organics (DRO) in Water Z000002J Diesel Range Organics (DRO) 1880 3780 949 - 4750 Acceptable CT ETPH 1 2005 1/25/2024 Ana Lyst32 2780 677 9369 µg/L -1.33 D Nitrite Z000056E 1840 0.153 Nitrite as N mg/L 3.74 3.77 3.27 - 4.27 Acceptable EPA 353.2 2 1993 1/9/2024 Ana Lyst33 3.78 Diesel Range Organics (DRO) in Soil Z000001I 9369 Diesel Range Organics (DRO) mg/kg 809 1650 428 - 2000 Acceptable CT ETPH 1 2005 1/25/2024 Ana Lyst32 1210 254 -1.59 □ Simple Nutrients EPA 353.2 2 1993 0.464 Z000056E 1820 Nitrate + Nitrite as N 5.66 5.94 4.89 - 6.94 Acceptable -0.382 1/4/2024 Ana Lyst33 5.84 mg/L Z000056E 1810 5.65 5.94 4.83 - 7.02 EPA 353.2 2 1993 1/4/2024 5.92 0.592 Nitrate as N mg/L Acceptable Ana Lyst33 Metals in Soil

EXPORT REPORT

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Wate

Custom Export Generator

Custom Export Generator

Report Columns	Lab Name:	Study Types:	Analytes:
StudyYear LabName ERAAccountNumber LabCity LabState PostalCode LabCountry TNIAnalyteCode MethodCode ZScore StudyMean StudyStandardDeviation		QR SOIL UST WP WS	Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Chromium Cobalt Copper
Ns	Study Years:	Studies:	Select Saved Layout
ADD ADD ALL Selected Columns	2023 2022 2021 2020 2017 2016 2015 2014 2013 2012	WP-336 WP-338 WP-339 WP-341 WP-342 WP-345	
ClosingDate StandardName	2011		DELETE UPDATE
Analyte Units ReportedValue AssignedValue	Evaluation:	Standards:	Selected Report Format
AcceptanceLimits PerformanceEvaluation	NotAcceptable	PH (cat# 577)	CSV Doumland
MethodDescription	NotReported	Settleable Solids (cat# 883) Complex Nutriente (cat# 579)	CSV Dominad
AnalysisDate AnalystName		Demand (cat# 578) Oil & Grease (cat# 582) Trace Metals (cat# 586)	Name To Save As New Layout(optional)
	-	Mercury (cat# 5/4)	
			GENERATE EXPORT CLEAR ALL FLITERS



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Z-Score Graph



ADD TO CHART



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PT Review

Filter by:		Matrix: WP → Date Range: 07/01/2022 - 01/17/2025									
Display:		Studies: Five most recent V	Iluation: TNI 2016 V D	isplay: Stu	dy Close Date	▼ Not	Acceptable	Exclude	e Revision		
Analyte	<u>Matrix</u>	Method	Revision	Tech		Last 5 S	Study Close	e Dates			
1,4-Dioxane	WP	EPA 8270D SIM	2007	GC-MS	08/31/2023 Acceptable	07/28/2022 Acceptable					
Total Dissolved Solids at 180°C	WP	SM 2540 C-2015	2015	GRAV	11/27/2023 Not Acceptable	08/17/2023 Acceptable	06/01/2023 Not Acceptable	11/28/2022 Acceptable	07/28/2022 Acceptable		
Mercury	WP	EPA 7470A	1 1994	CVAAS	11/27/2023 Acceptable	08/31/2023 Acceptable	06/01/2023 Acceptable	11/28/2022 Acceptable	09/01/2022 Acceptable		
Mercury	WP	EPA 245.1	3 1994	CVAAS	11/27/2023 Acceptable	08/31/2023 Acceptable	06/01/2023 Acceptable	11/28/2022 Acceptable	09/01/2022 Acceptable		
CBOD	WP	SM5210B	22nd ED 2011	GALV	09/01/2022 Acceptable						
BOD	WP	SM5210B	22nd ED 2011	POT	09/01/2022 Acceptable						
Aluminum	WP	EPA 200.7	4.4 1994	ICP-AES	11/27/2023 Acceptable	08/31/2023 Acceptable	07/23/2023 Acceptable	06/01/2023 Not Acceptable	11/28/2022 Acceptable		
Antimony	WP	EPA 200.7	4.4 1994	ICP-AES	11/27/2023 Acceptable	08/31/2023 Acceptable	06/01/2023 Acceptable	11/28/2022 Acceptable	09/01/2022 Acceptable		
Arsenic	WP	EPA 200.7	4.4 1994	ICP-AES	11/27/2023 Acceptable	08/31/2023 Acceptable	06/01/2023 Acceptable	11/28/2022 Acceptable	09/01/2022 Acceptable		
Barium	WP	EPA 200.7	4.4 1994	ICP-AES	11/27/2023 Acceptable	08/31/2023 Acceptable	06/01/2023 Acceptable	11/28/2022 Acceptable	09/01/2022 Acceptable		
Beryllium	WP	EPA 200.7	4.4 1994	ICP-AES	11/27/2023 Acceptable	08/31/2023 Acceptable	06/01/2023 Acceptable	11/28/2022 Acceptable	09/01/2022 Acceptable		

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Analyst Report Evaluation Criteria: TNI 2016 V Show SOP: Analyte Assigned Value Analysis Date Study Standard Analyst Name Study TNI Units Reported Acceptance Performance Method Description Z Score Study Total Ns Analyte Value Limits Evaluation Mean Code Deviation Silver ALL ALL ¥ ~ Metals Ana Lyst33 WS-321 1150 Silver µg/L 160 176 123 - 229 Acceptable EPA 200.7 4.4 1994 5/17/2023 -1.98 174 7.00 110 Ana Lyst43 WS-327 1150 µg/L 77.1 78.1 54.7 - 102 Acceptable EPA 200.7 4.4 1994 11/15/2023 -0.19477.9 4.06 105 Silver ■ Trace Metals EPA 200.7 4.4 1994 Ana Lyst33 WP-339 1150 Silver µg/L 306 336 286 - 386 Acceptable 5/17/2023 -1.62 336 18.4 202 Ana Lyst33 WP-339 1150 Silver µg/L 306 336 286 - 386 Acceptable EPA 6010D 2014 5/17/2023 -1.62 336 18.4 202 Ana Lyst43 WP-342 1150 980 861 732 - 990 Acceptable EPA 200.7 4.4 1994 8/23/2023 864 47.4 314 Silver µg/L 2.44 Ana Lyst43 WP-342 1150 980 861 732 - 990 Acceptable EPA 6010D 2014 8/23/2023 864 47.4 314 Silver µg/L 2.44 Ana Lyst43 WP-345 1150 µg/L 566 542 461 - 623 Acceptable EPA 200.7 4.4 1994 11/15/2023 0.741 542 33.0 171 Silver Ana Lyst43 WP-345 1150 Silver 566 542 461 - 623 Acceptable EPA 6010D 2014 11/15/2023 0.741 542 33.0 171 µg/L E Metals in Soil Ana Lyst58 EPA 6010D 2014 SOIL-121 1150 Silver mg/kg 16.5 51.0 33.0 - 61.6 Not Acceptable 2/16/2023 -6.36 47.3 4.84 161 Ana Lyst33 SOIL-123 1150 Silver mg/kg 79.0 88.6 58.5 - 106 Acceptable EPA 6010D 2014 8/24/2023 82.4 8.96 124

Analyst Report

ADD ANALYSTS

port

CLEAR ANALYSTS

Filter by:

Ma



Flag: Selected Flags >

Flag

- 01/17/2025

ALL

Risk Report The use of multi-rule examination of zScores for historical PT results is intended to aid the reviewer identify possible areas of concern for further investigation in regards to bias, variability and trends in your to represent performance criteria for the evaluation of PT data.

Matrix: WS v Date Range: 01/17/2022

Analyte

- L1of5 > 3SD L2of3 > 2SD L3 > 1SD L5x L3 L5
- : One or more of the last 5 data points was outside of 3 standard deviations : 2 of the last 3 data points were both outside 2 standard deviations on the same side of the mean : The last 3 data points were outside 1 standard deviation on the same side of the mean : The last 5 data points were all on the same side of the mean : The last 5 data points all trend in the same direction : The last 5 data points all trend in the same direction

atrix	Standard		Method Description
	Metals	EPA 200.7	

ws	Metals	EPA 200.7	Thallium	L1of5 > 3SD L2of3 > 2SD
ws	Metals	EPA 200.8	Arsenic	L1of5 > 3SD L2of3 > 2SD
WS	Metals	EPA 200.8	Chromium	L1of5 > 3SD
WS	Metals	EPA 200.8	Molybdenum	L1of5 > 3SD
WS	Metals	EPA 200.8	Nickel	L1of5 > 3SD
WS	Metals	EPA 200.8	Selenium	L1of5 > 3SD L2of3 > 2SD
WS	Metals	EPA 200.8	Vanadium	L1of5 > 3SD
WS	Inorganics	SM2510B	Conductivity at 25°C	L1of5 > 3SD
WS	Inorganics	SM2540C	Total Dissolved Solids at 180°C	L1of5 > 3SD
WS	Silica	EPA 200.7	Silica as SiO2	L1of5 > 3SD



HOYL Re	eports			Wa	iters™ �era
		Filter by: 18 Months	✓ All	All	APPLY RESET FILTERS
WP Studies					
Studies	Pass Rate My Laboratory	Pass Rate All Participants	My Acceptable Evaluations	My Not Acceptable Evaluations	My Total Evaluations
<u>Z0000023</u>	100%	98%	1	0	1
<u>Z000056E</u>	100%	93%	3	0	3
<u>2000050T</u>	100%	90%	3	0	3
<u>WP-345</u>	98%	97%	485	<u>6</u>	<u>491</u>
<u>Z000045B</u>	100%	96%	42	0	42
<u>WP-342</u>	99%	97%	236	1	237
<u>Z000029C</u>	100%	96%	40	0	<u>40</u>
<u>WP-341</u>	100%	88%	1	0	1
<u>Z000021G</u>	95%	93%	21	1	22

WS Studies

Studies	Pass Rate My Laboratory	Pass Rate All Participants	My Acceptable Evaluations	My Not Acceptable Evaluations	My Total Evaluations
<u>Z000057F</u>	100%	93%	3	0	3
<u>Z0000495</u>	100%	84%	2	0	2
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Statistics – Study Summary

WS-321 Study Summary Statistics

VIEW ALL STANDARDS

Hardness (cat#555)

Standard: < 1 of 8 > Hardness (cat#555)

*‡*555)

×

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 ** Indicates that the values are reported as a percentage of the assigned value B- Bi-Modal, F- Fax Data

		Uncertainty	Mean (%)**		Standard Deviation (%)		Acceptance Limits (%)**				Failure I	Rate (%)			
Analyte	Assigned Value	(%)	Study	Est	Hist	Study	Est	Hist	Study	Final	Hist	<mark>(</mark> n)	Study	Hist	Anomaly
Calcium	83.1 mg/L	0.281	99.6	100	99.8	4.40	7.50	4.60	90.9 - 108	85.0 - 115	90.6 - 109	100	4.0	4.4	
Magnesium	11.9 mg/L	0.280	101	100	99.9	4.80	7.50	5.10	91.1 - 110	85.0 - 115	<mark>89.8 - 110</mark>	94	5.3	7.9	
<u>Sodium</u>	33.2 mg/L	0.280	102	100	100	4.10	7.50	5.00	93.8 - 110	85.0 - 115	90.0 - 110	81	1.2	4.6	
Calcium Hardness as CaCO3	208 mg/L	0.281	100	100	99.7	3.50	7.50	4.20	93.3 - 108	85.0 - 115	91.4 - 108	83	4.8	7.5	
Total Hardness as CaCO3	257 mg/L	0.376	99.7	100	99.7	4.10	7.50	3.70	91.6 - 108	85.0 - 115	92.4 - 107	119	3.4	3.0	

Statistics – Analyte Review

Analyte Review WS-321 Hardness

Sodium		_											Analyte:	< 3 0	f 5 >	Sodium		~
VIEW	ALL STANDARDS																	
Me					Mean (%)** Str			Star	andard Deviation (%)			ceptance Li	mits (%)**			Failure Rate (%)		
Analyte		Assigned Value	Uncertainty (%)	Study	Est	H	Hist	Study	Est Hist		Study Final		I Hi	t	n)	Study	Hist	Anomaly
Sodium		33.2 mg/L	33.2 mg/L 0.280		100 100		100	4.10	7.50	5.00	93.8 - 110 85.0		115 90.0 -	.0 - 110 81		1.2	4.6	
View in New Win	dow											Chart	Selected	Stat	tistics	Mean	Std. Dev	/. (n)
Total N's: 81 Acceptable N's: 80								Not Acceptable N's: 1								(%)**	(%)**	
No Evaluation: 0 Outlief: 2 Suspect Data: 1 Manufacturing Range: 12.0 - 50.0 PTRL: 11.0									0			hmetic	101.8	4.1	79			
											Arithmetic w/ Outliers		102.1	6.3	81			
Show Lots:	NR: Technology Key: All Apply Filter Apply Highlig							Apply Highlight		۲	Bi-V	Weight	102.1	4.1	81			
L, QR, R and * indicate that data was not used in the calculation of statistics. F indicates that data point was faxed and entered by ERA.											0	Historical		100.0	5	N/A		
											0	Estimated		100.0	7.5	N/A		
Customer	Reported Value	% Recovery	Outlier Over	ride Out	lier Su	ispect	Evaluat	ion	Method Desc Tech Key			Tash Kau		Ch.J. I		llune Dete	(-)	
	28.2				Fina	al Lower	Acceptance	Limit				Tech Key	(%)**	(%)	** Fa	(%)	(n)	
	20.5*	05.0					Assessable		Deels			071150	ICP-AES	101.5	3.3	7	0	44
	28.5*	85.8	U				Accepta	ible	PTOD			DIHER	FAAS	102.1	6.3	7	9,1	13
	29.8	89.8	89.8				Accepta	eptable SM 3500-Na B OTHER			OTHER	ICP-MS	102.0	4.1	5	0	10	
	29.9	Historical Lower Acceptance Limit													4.1	5	0	3
	30.1	90.7)		Accepta	ble	1	EPA 200.7	I	CP-AES						
	31.1 Study Lower Acceptance Limit																	
	31.2	94.0)		Accepta	ble	1	EPA 6020B	1	CP-MS						
	31.2	94.0		C)		Accepta	ble		EPA 200.8	1	CP-MS						
	31.3	94.3)		Accepta	ible	1	EPA 200.7	I	CP-AES						
	31.7	95.5)		Accepta	ble	1	EPA 300.0	I	C-COND						
	31.8	95.8)		Accepta	ble		Prob		OTHER						
	31.9	96.1		C)		Accepta	ble	, i	EPA 200.7	I	CP-AES						
<u>E667506</u>	32.0	96.4)		Accepta	ble	0	EPA 200.7	I	CP-AES						

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Corrective Action Process

- That's my great segue into corrective action
- We look at corrective action as a process, not just running another PT sample
- We recommend reviewing the paperwork and information we talked about earlier for avoiding common errors
 - Such as checking for any dilution requirements, reviewing the reporting instructions, checking the reporting units, reviewing lot numbers on the sample labels, etc.
- eDATA includes many tracking and trending tools, as well as the Statistics view
 As part of a correction action process, and for routine monitoring of PT performance
- Waters ERA also offers technical support from our experienced staff
- CRMs (QCs) are available for every PT product in our inventory
- Don't hesitate to reach out and let us know how we can help



eDATA Informatics Platform – The Basics

Brian Stringer Proficiency Testing Technical Specialist

Webinar survey – your feedback is appreciated!



eDATA Informatics Platform – The Basics

- Key Learning Topics
 - Streamline data entry
 - Avoid common reporting errors
 - Submit results for a Quik Response
 - Access PT results
- Speaker Brian Stringer
 - Proficiency Testing Technical Specialist