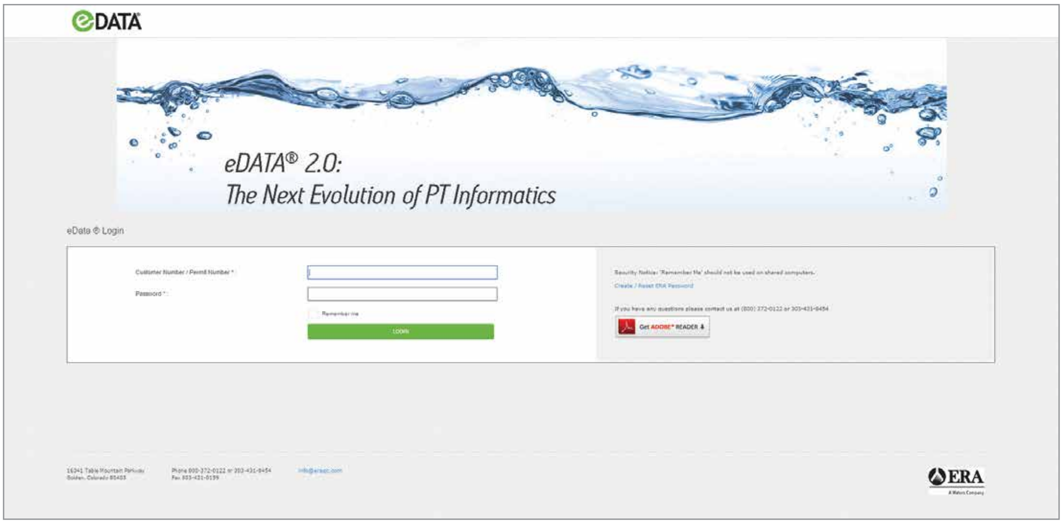
eDATA 2.0 User Manual

CONTENTS

I. LOG IN TO eDATA

Access eDATA® from the ERA® website, www.eraqc.com. Click on the eDATA login link in the upper right corner.

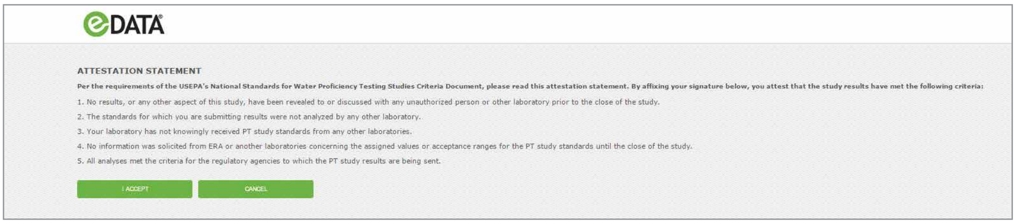
Log in to eDATA using your ERA customer number or NPDES permit number and password. If you need to reset your eDATA password, click on the link to create/reset ERA password to reset by entering your ERA customer number and email address registered to your account. For any additional assistance accessing your account, please contact ERA's Customer Service at **800.372.0122** or **303.431.8454**.



Access eDATA from the ERA website, www.eraqc.com. Click on the eDATA login link in the upper right corner.

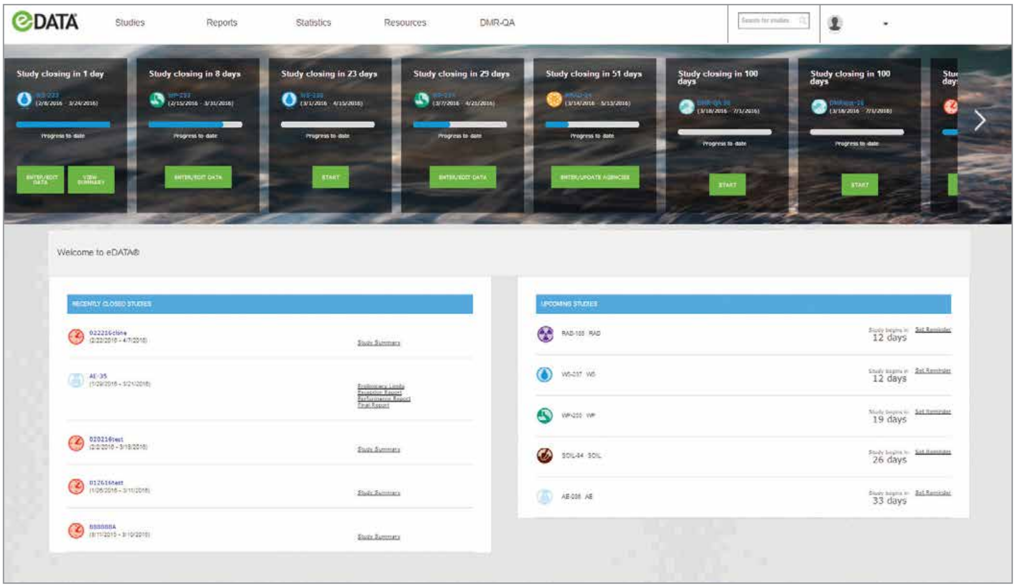
II. ATTESTATION STATEMENT

Before entering the site you are required to acknowledge and accept ERA's Attestation Statement, which is required as part of ERA's ISO 17043 accreditation.



III. eDATA HOME PAGE – YOUR PT DASHBOARD

Once you have logged into your account and accepted the Attestation Statement, you will be automatically directed to the eDATA home screen and your PT dashboard.



The PT dashboard is your main hub in eDATA that provides an overview of critical items such as current open enrolled studies and provides quick access to data entry confirmations, closed studies, performance reports and other critical information.

The study panel displays your enrolled open studies in chronological order, starting with the study with the nearest closing date, and displays the time remaining until the study closes. You can see what you have completed to-date in the PT process using the blue status bar, and the large green icons allow you to easily navigate back to where you may have left off in the PT process.

Once a study has closed it moves to the Recently Closed Studies section of your dashboard, which provides a quick link to your study reports.

Your enrolled studies that have not opened yet are listed on the dashboard in the Upcoming Studies section which allows you to set a reminder for the study open date in most calendar applications.

Top menu selections

The top menu provides easy access links to detailed pages dedicated to all of your open and closed studies via the Studies menu. The Reports menu provides access to:

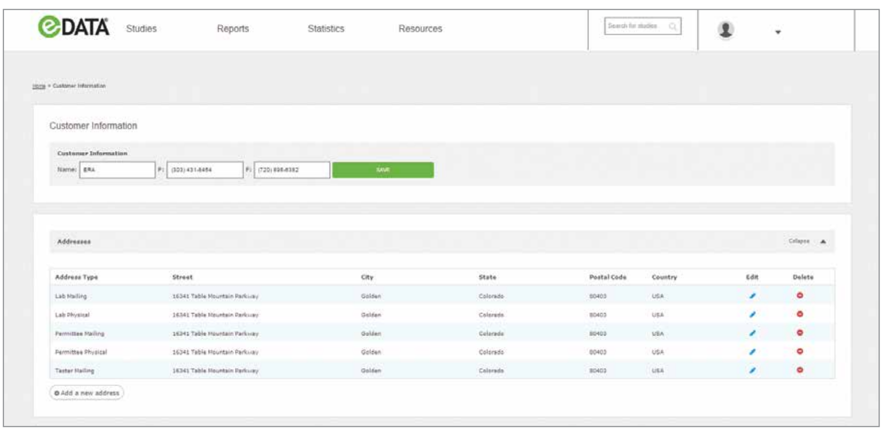
- Custom export generator
- Z-score graph
- PT review
- Performance report
- Exception report
- Analyst report
- Risk report
- Health of Your Lab (HOYL)
- Final PT reports

The Statistics menu provides a link to overall study statistics. The Resources menu provides other useful links and information pertinent to your PT. The search bar allows you to search your eDATA account for a specific open or closed study.

The drop down menu under your customer number provides links to manage your customer information, e-mail us, access FAQs, and change your password.

IV. MANAGING YOUR CUSTOMER INFORMATION

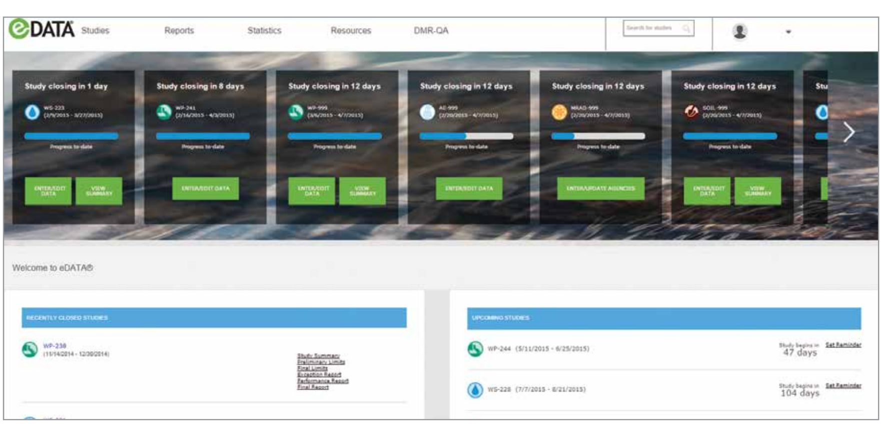
The Customer Information menu allows you to manage your address, contacts, third parties and delivery preferences. You can edit the primary contact by expanding the contact section and clicking the edit icon. The edit contact screen allows you to specify the primary contact using the selection boxes.

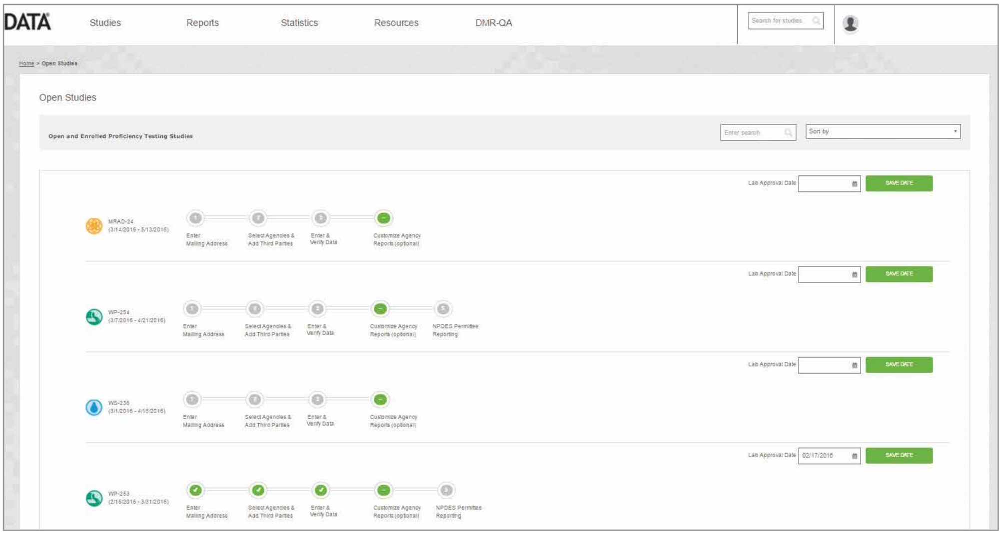


V. COMPLETING AN OPEN STUDY

Navigate to an open study by clicking the green box on the desired open study panel displayed on the PT dashboard.

Alternatively, you can view open studies by highlighting the Studies menu and clicking the Open Studies tab.





The open studies page displays all your enrolled open studies. The drop down filter allows you to filter your open studies by either nearest closing date or study type.

The status bar displays your progress toward the completion of each of the steps for the open study. You can access each step from this menu by clicking on the text below the status bar for the desired step.

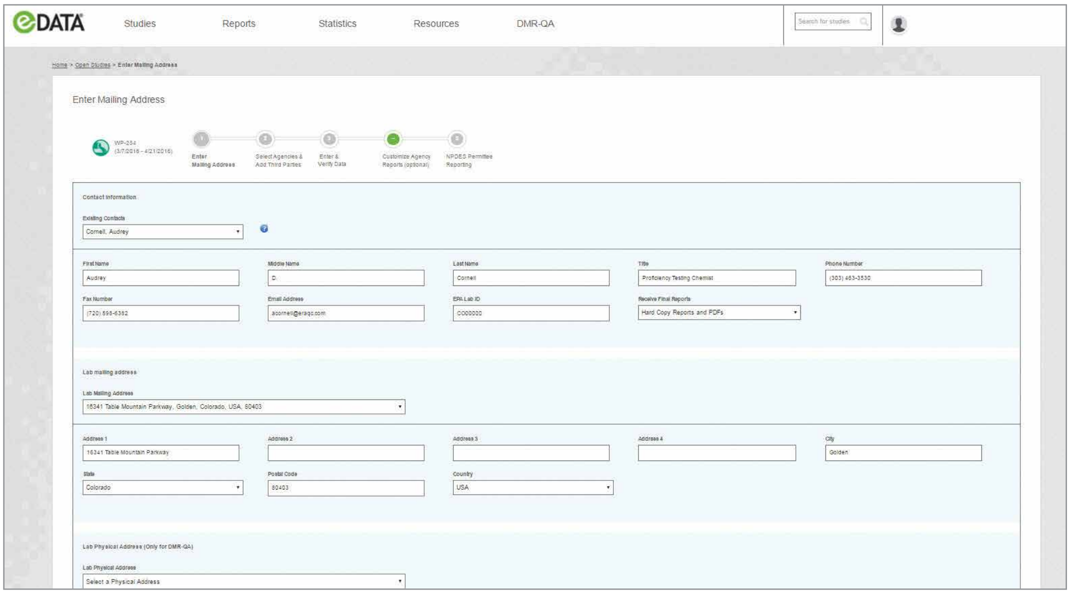
There are 3 required steps to complete an open study:

- Step 1: Mailing address
- Step 2: Agencies and third parties
- Step 3: Enter data

TIPS:

- Breadcrumbs in the upper left of each page allow you to navigate to a previous level.
- You can also go back to the home screen by clicking the eDATA logo.

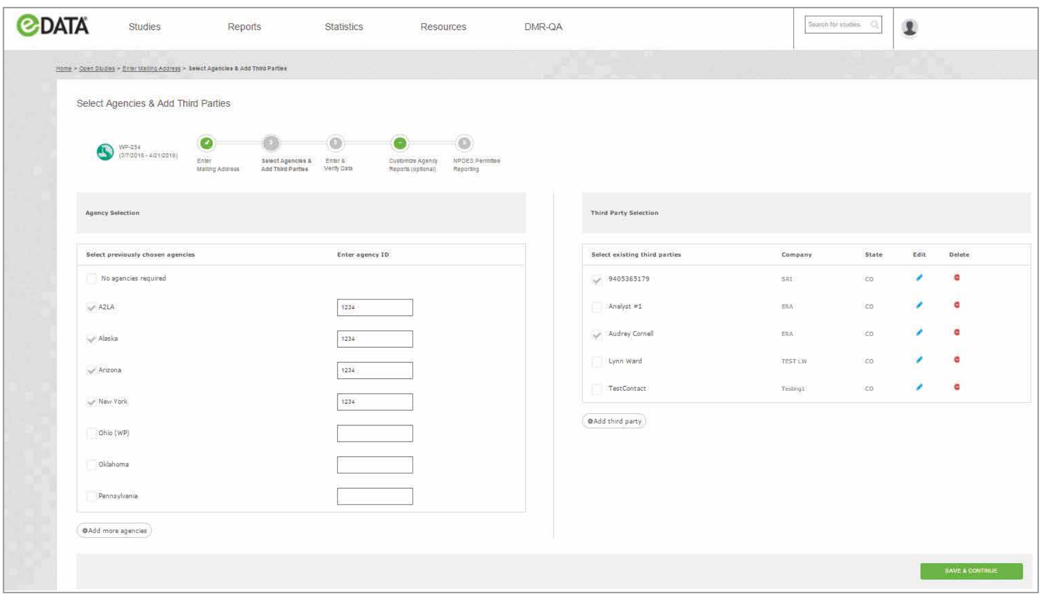
a. Step 1: Mailing address



1. Designate the individual at your company that will receive your final report.
2. Review and update your account information, if required.
3. Select your preferred final report delivery option.
4. Select **Save and Continue** to proceed to Step 2: Agencies and third parties.

NOTE: Electronic PDF is the recommended delivery method. You can retain an electronic copy and/or print a copy of the PDF.

b. Step 2: Agencies and third parties



Choose **Agencies** from the menu at left and **Third Parties** from the menu at right.

Agencies

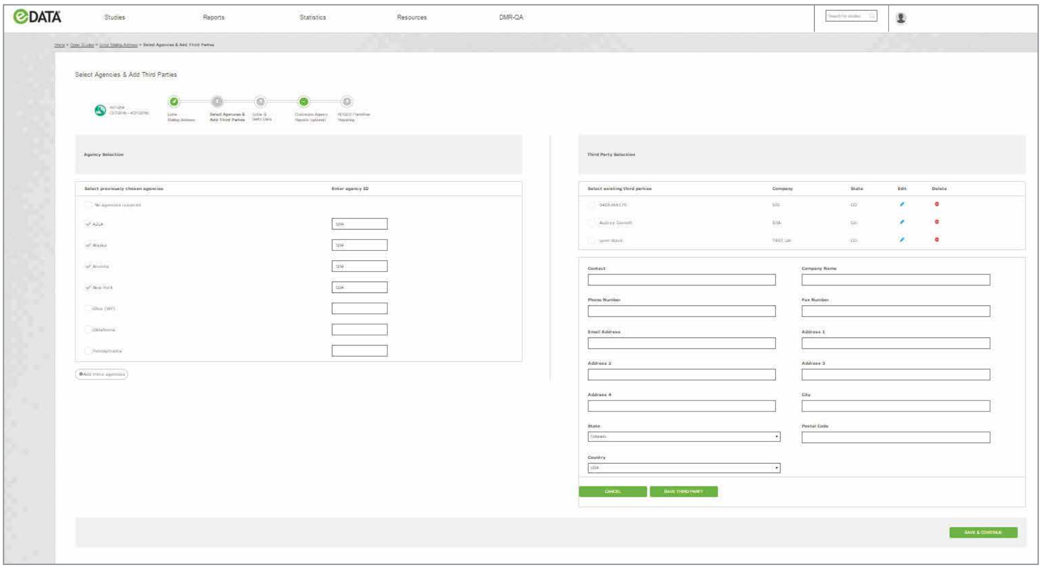
To select the Agencies you would like your final PT report sent to:

1. Select the **check box** for the Agencies you require for your study.
2. Enter your **agency-specific laboratory ID** in the adjacent box.
3. View the contact information for the specific agency by clicking the **Agency Lookup** link under the **Resources** menu.
4. If you are using a study for internal purposes or do not need to report to any of the specified U.S. Agencies, select the **No Agencies Required** check box at the top of the list of Agencies.

Third parties

On the Third Party tab, there are three options to help you manage and select third parties for reporting:

- Select a Third Party from the list displayed
- Add a Third Party
- Delete a Third Party

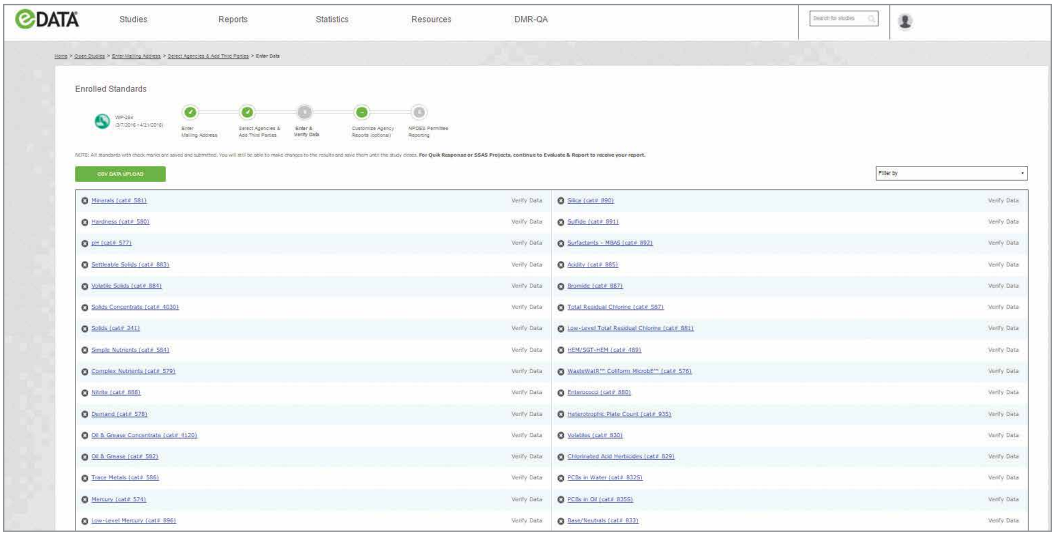


1. To add a Third Party, click on the **Add Third Party** button and complete the required fields.
2. To edit a Third Party, click on the **Edit** icon.
3. To delete a Third Party, click on the **Delete** icon.

A master record for your Third Parties can also be added, edited or deleted from the Customer Information page. Once added to the master record, Third Parties can be selected to receive future study reports.

Click **Save & Continue** to proceed to Step 3: Enter data.

c. Step 3: Enter data



Step 3 begins with a list of the standards you're enrolled in for this study. The X icon denotes that no data has been entered for that standard.

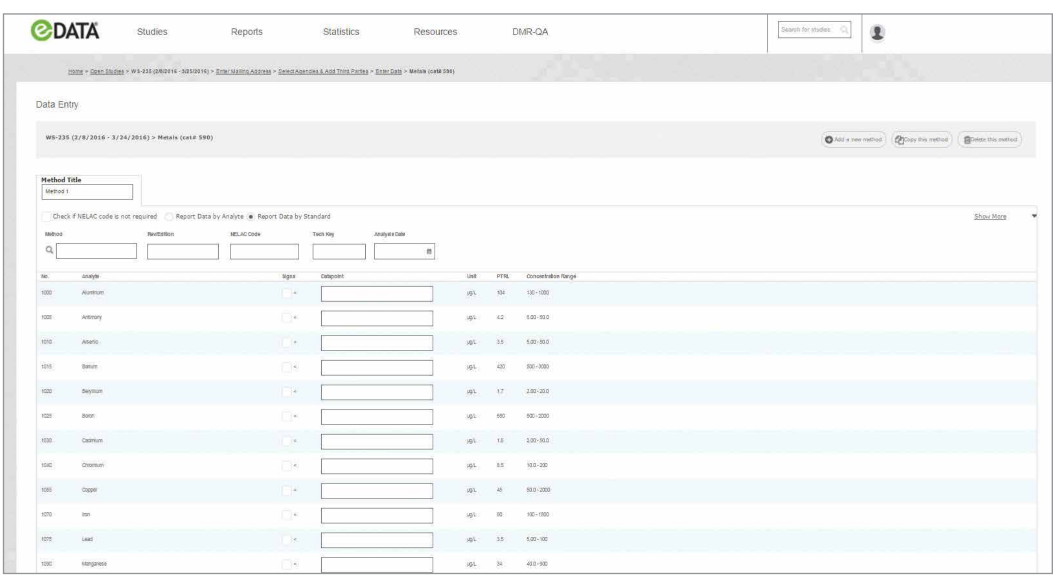
eDATA gives you two options to enter study results:

- Manual entry of data
- CSV data upload

i. Manual entry of data

Data can be entered by standard when one method can be used for the entire analyte list (A) or you may choose to enter by analyte to designate a different analytical method for each analyte (B). If a standard requires more than one analytical technique such as Demand (Catalog No. 578), Report By Analyte will be the only option available.

Data entry by standard



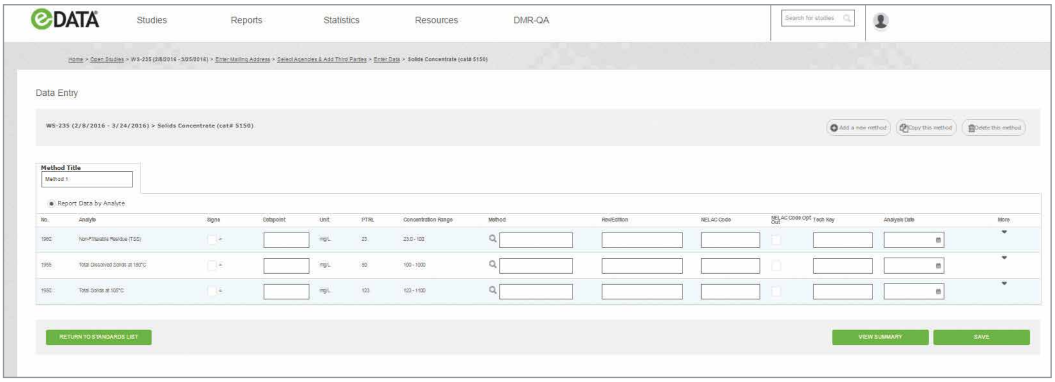
To enter data by standard:

1. Ensure that the radial button for **Report Data by Standard** is selected.
2. Begin typing your analytical method in the **Method** field and select from the list in the drop down box or enter your complete method manually.
3. Select your method **Rev/Edition** from the drop down box, if required.
4. A **NELAC Code** and **Tech Key** will automatically populate based on the method you reported, if selected from the drop down list. If you have manually entered your method, check **NELAC Code is Not Required** or **NELAC Code Opt Out** if a NELAC Code is not required.
5. Click on the **Analysis Date** field and select the date the sample was analyzed from the calendar.
6. Click the **More** or **Show More** drop down to record any desired optional information to report with your PT results. This may include **Analyst**, **SOP** and **SOP Revision.**
7. Enter the analytical result(s) in the **Datapoint** field.
8. Click the check box under the **Sign** column to specify a less than (<) result.
9. Continue to the next analyte.
10. Click **Add Method** to add a blank data set for entry of results from an additional method, if needed.
11. When you have entered all data for this standard, click **Save.**
12. Click **View Summary** to view a data entry summary for the standard you have just entered.
13. Click **Return to Standards List** to return to the standards menu to select another standard for manual data entry.

TIPS

- Use the tab key to move between fields.
- Use a decimal point in place of a comma when reporting data; i.e., 15.5 instead of 15,5.
- Report your PT results to three significant figures.
- A NELAC Code is a unique numerical identifier for each method assigned by The NELAC Institute (TNI). Method Codes are used by accreditors in the United States for automated data validation. If you choose a method from ERA's drop down list, eDATA will match the method you enter with the Method Code listed in the database of current TNI Method Codes.
- A list of TNI Method Code / Analyte Codes can be accessed by clicking on the link under the **Resources** menu.
- You will not be able to move past the enter data page or save data until you have entered a correct NELAC Code or have indicated that a NELAC Code is not required.
- **International laboratories** are not required to report NELAC Codes unless they are accredited in the United States.

Data entry by analyte



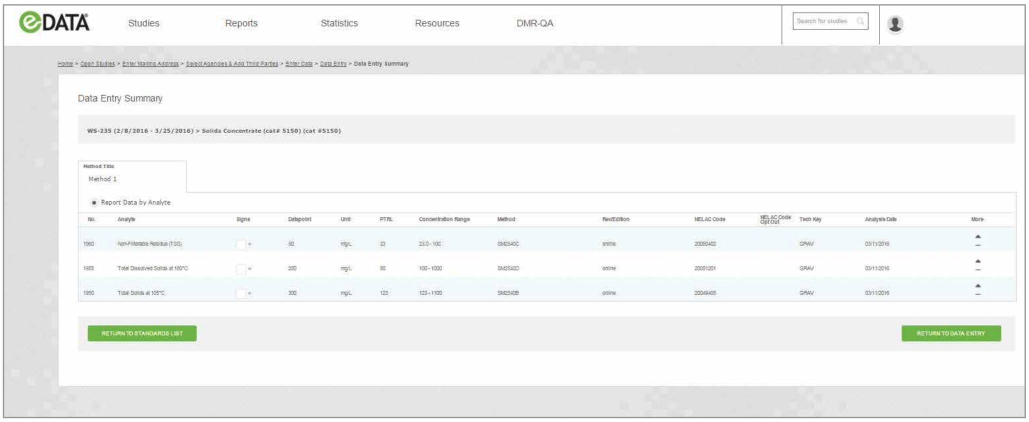
To enter data by analyte:

1. Ensure that you have the radial box for **Report Data by Analyte** is selected. If the standard contains a list of analytes that require different methods this will be the only option displayed.
2. Begin typing your analytical method in the **Method** field and select from the list in the drop down box or enter your complete method manually.
3. Select your method **Rev/Edition** from the drop down box, if required.
4. A **NELAC Code** and **Tech Key** will automatically populate based on the method you reported, selected from the drop down list. If you have manually entered your method, check **NELAC Code is Not Required** or **NELAC Code Opt Out** if a NELAC Code is not required.
5. Click on the **Analysis Date** field and select your analysis date from the calendar.
6. Click the **More** or **Show More** drop down to record any desired optional information to report with your PT results. This may include **Analyst**, **SOP** and **SOP Revision.**
7. Enter the analytical result(s) in the **Datapoint** field.
8. Click the check box under the **Sign** column to specify a less than (<) result.
9. Continue to the next analyte.
10. Click **Add Method** to add a blank data set for entry of results from an additional method, if needed.
11. When you have entered all data for this standard, click **Save.**
12. Click **View Summary** to view a data entry summary for the standard you have just entered.
13. Click **Return to Standards List** to return to the standards menu to select another standard for manual data entry.

TIPS

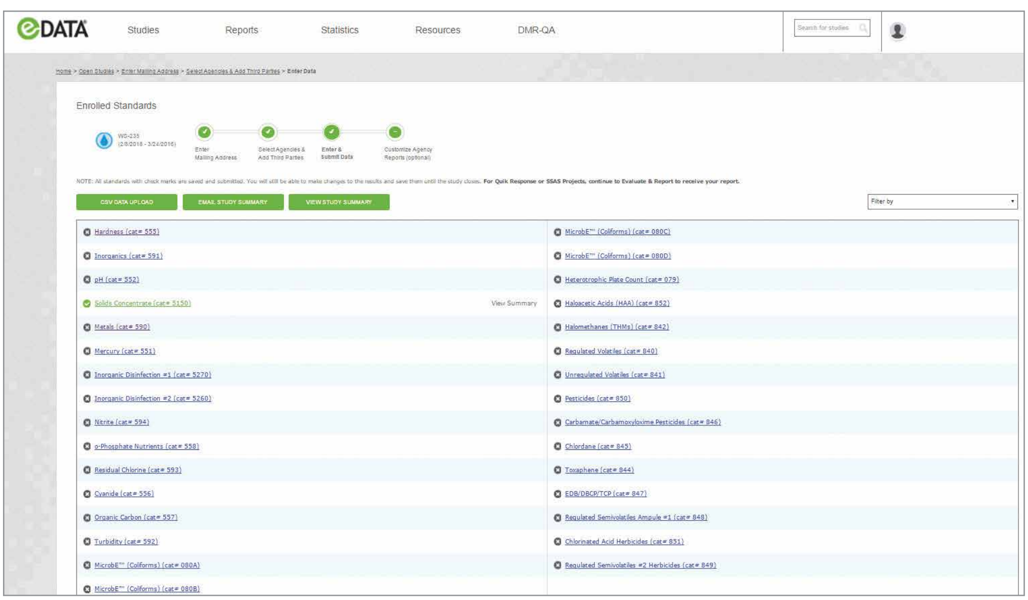
- Use the tab key to move between fields.
- Use a decimal point in place of a comma when reporting data; i.e., 15.5 instead of 15,5.
- Report your PT result to three significant figures.
- A NELAC Code is a unique numerical identifier for each method assigned by The NELAC Institute (TNI). Method Codes are used by accreditors in the United States for automated data validation. If you choose a method from ERA's drop down list, eDATA will match the method you enter with the Method Code from the database of current TNI Method Codes.
- A list of TNI Method Code/Analyte Codes can be accessed by clicking on the link under the Resources menu.
- You will not be able to move past the Enter Data page or Save Data until you have entered a correct NELAC Code or have indicated that a **NELAC Code is Not Required** by selecting the box in the upper left.
- **International laboratories** are not required to report NELAC Codes unless they are accredited in the United States.

View summary



After reporting your data by standard or analyte and saving your work, click **View Summary** to review the data you reported.

Click **Return to Standards List** to continue entering your data for another standard.



After you have entered data for a standard the X icon will change to a check mark icon to indicate that you have reported data for that standard.

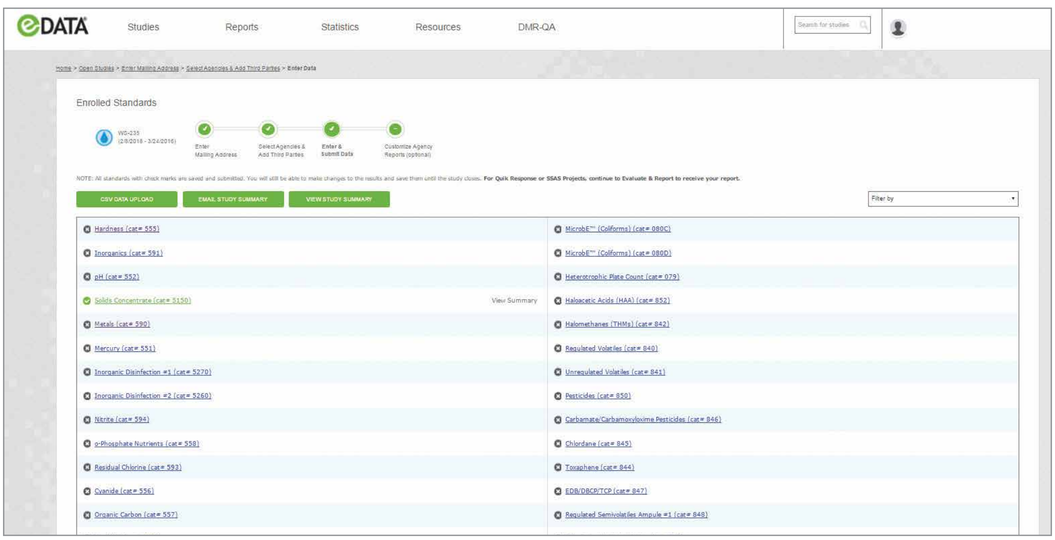
NOTE: Data is not required to be reported for all analytes for a given standard in order for a check mark to be displayed. This is because laboratories have the option to report PT results for all analytes or only the analytes they wish to be evaluated for.

TIPS

- You can make changes to your PT results until the study closes.
- Always select View Study Summary to review your data. You can also receive a copy of your summary by email by clicking Email Study Summary.

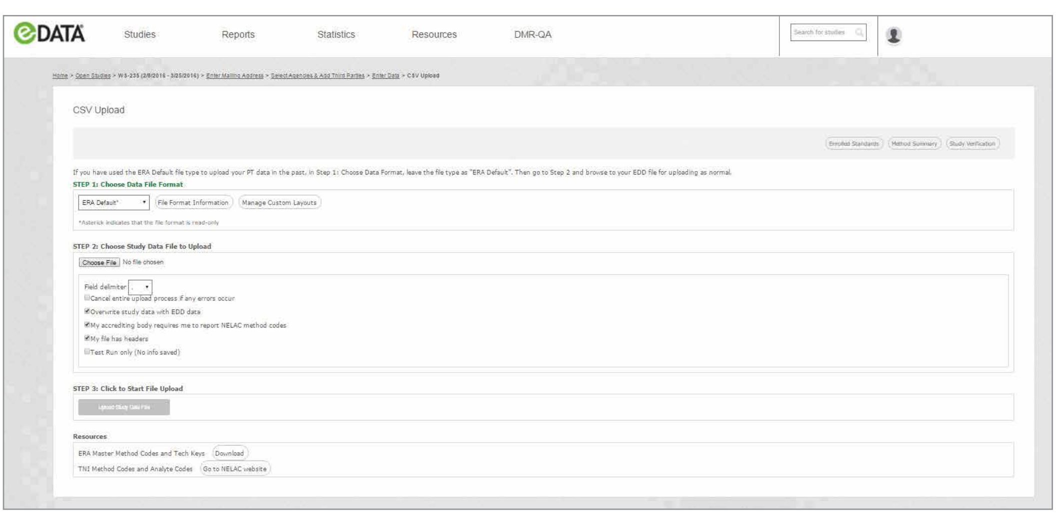
ii. CSV upload

In addition to manually entering your data for an open study, you also have the option to upload your results directly to eDATA as a CSV (Comma Separated Value) file generated from your LIMS.



Access the menu to upload your CSV file from the data entry standards list menu by clicking the CSV Data Upload button.

Uploading an eDATA compatible CSV file (ERA default format or your custom format)



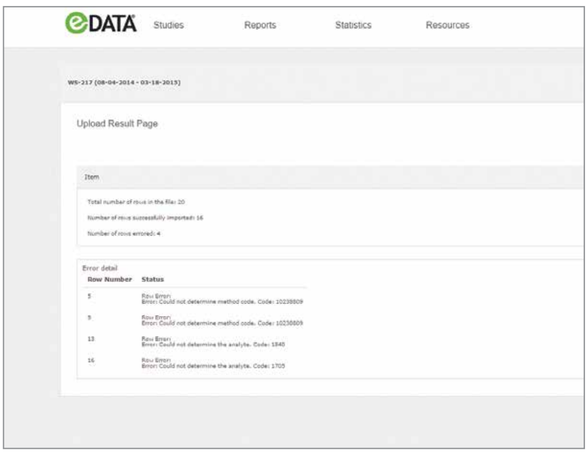
Once you have entered the CSV Upload menu, complete the 3 steps to upload your eDATA compatible CSV file.

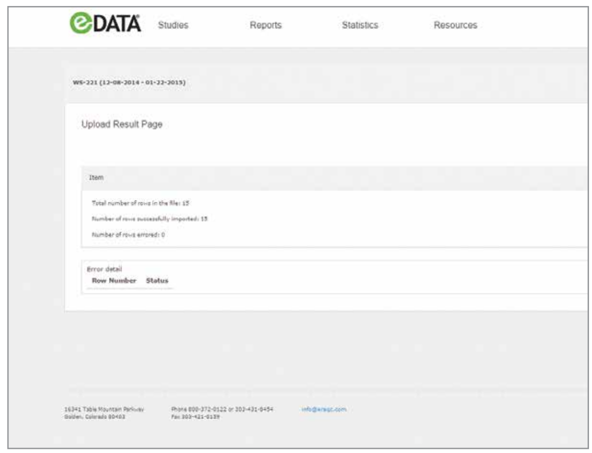
Step 1 – Select the appropriate file format from the dropdown box (either ERA default, required only, or a custom layout you have previously created).

Step 2 – Click Choose File to select your file to attach and select or deselect the checkboxes you would like to apply to your upload.

Step 3 – Click Upload Study File to upload your file to eDATA.

Upload results page



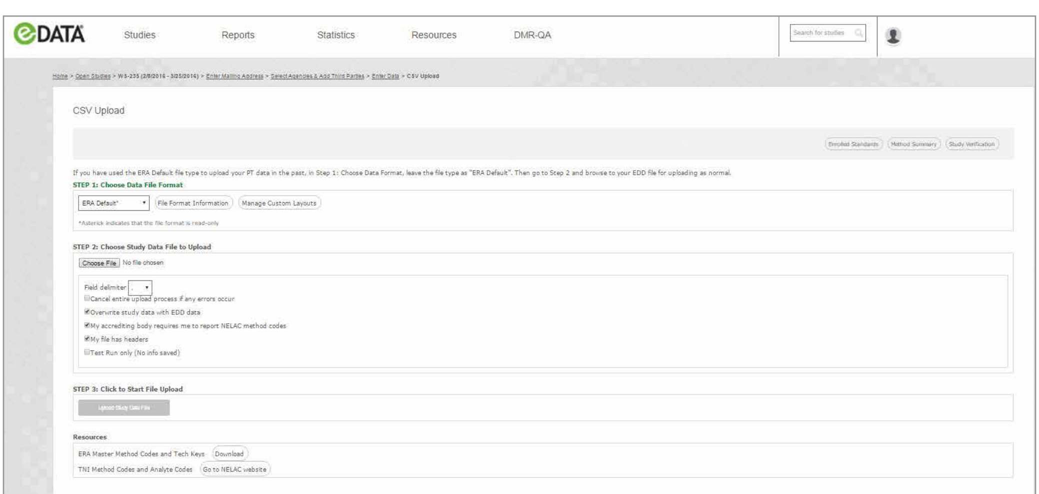


Once the upload is complete, you will be automatically directed to the Upload Result Page to view the status of your upload. If errors were detected, these will be listed in the error detail section with a description of the error encountered.

If you receive an error message and have questions or need assistance, please contact ERA's Interlab Group at 800.372.0122 or 303.431.8454 or interlabgroup@eraqc.com

Creating a CSV format compatible with eDATA

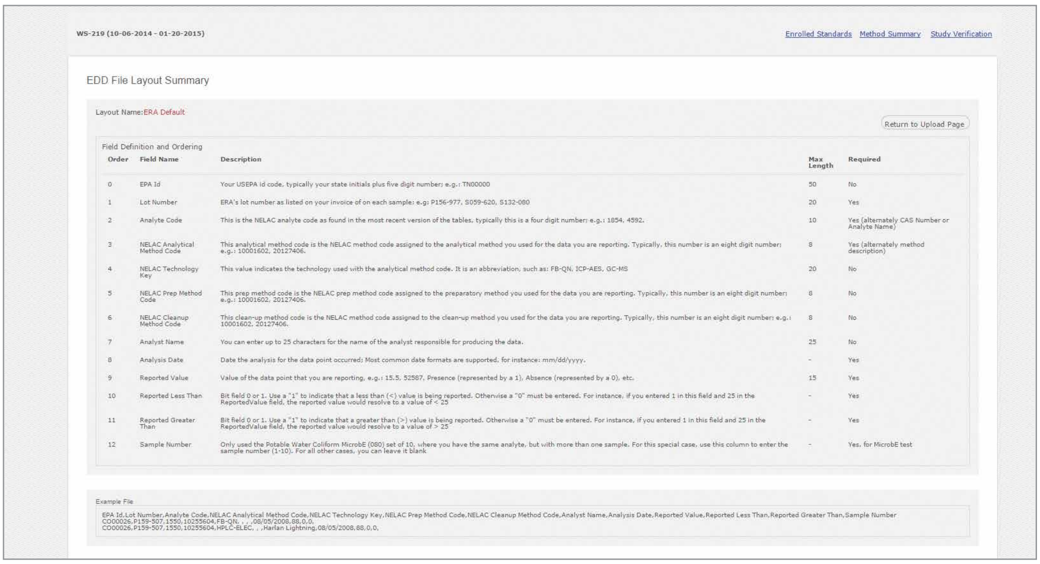
1. Requirements to create your CSV template in ERA Default Format



Once at the CSV Upload menu, click on the File Format Information link for details on the ERA Default File format.

Links at the bottom of the pages will allow you to find TNI Method Codes and Tech Key Information for the ERA Default File Format.

ERA default format specifications


WS-219 (10-06-2014 - 01-20-2015)

Enrolled Standards Method Summary Study Verification

EDD File Layout Summary

Layout Name: ERA Default

Return to Upload Page

Field Definition and Ordering

Order	Field Name	Description	Max Length	Required
0	EPA Id	Your USEPA id code, typically your state initials plus five digit number; e.g.: TN00000	50	No
1	Lot Number	ERA's lot number as listed on your invoice of on each sample: e.g: P156-977, S059-620, S132-080	20	Yes
2	Analyte Code	This is the NELAC analyte code as found in the most recent version of the tables, typically this is a four digit number; e.g.: 1854, 4592.	10	Yes (alternately CAS Number or Analyte Name)
3	NELAC Analytical Method Code	This analytical method code is the NELAC method code assigned to the analytical method you used for the data you are reporting. Typically, this number is an eight digit number; e.g.: 10001602, 20127406.	8	Yes (alternately method description)
4	NELAC Technology Key	This value indicates the technology used with the analytical method code. It is an abbreviation, such as: FB-QN, ICP-AES, GC-MS	20	No
5	NELAC Prep Method Code	This prep method code is the NELAC prep method code assigned to the preparatory method you used for the data you are reporting. Typically, this number is an eight digit number; e.g.: 10001602, 20127406.	8	No
6	NELAC Cleanup Method Code	This clean-up method code is the NELAC method code assigned to the clean-up method you used for the data you are reporting. Typically, this number is an eight digit number; e.g.: 10001602, 20127406.	8	No
7	Analyst Name	You can enter up to 25 characters for the name of the analyst responsible for producing the data.	25	No
8	Analysis Date	Date the analysis for the data point occurred; Most common date formats are supported, for instance: mm/dd/yyyy.	-	Yes
9	Reported Value	Value of the data point that you are reporting, e.g.: 15.5, 52587, Presence (represented by a 1), Absence (represented by a 0), etc.	15	Yes
10	Reported Less Than	Bit field 0 or 1. Use a "1" to indicate that a less than (<) value is being reported. Otherwise a "0" must be entered. For instance, if you entered 1 in this field and 25 in the ReportedValue field, the reported value would resolve to a value of < 25	-	Yes
11	Reported Greater Than	Bit field 0 or 1. Use a "1" to indicate that a greater than (>) value is being reported. Otherwise a "0" must be entered. For instance, if you entered 1 in this field and 25 in the ReportedValue field, the reported value would resolve to a value of > 25	-	Yes
12	Sample Number	Only used the Potable Water Coliform MicrobE (080) set of 10, where you have the same analyte, but with more than one sample. For this special case, use this column to enter the sample number (1-10). For all other cases, you can leave it blank	-	Yes, for MicrobE test

Example File

```
EPA Id,Lot Number,Analyte Code,NELAC Analytical Method Code,NELAC Technology Key,NELAC Prep Method Code,NELAC Cleanup Method Code,Analyst Name,Analysis Date,Reported Value,Reported Less Than,Reported Greater Than,Sample Number
CO00026,P159-507,1550,10255604,FB-QN, , , ,08/05/2008,88,0,0,
CO00026,P159-507,1550,10255604,HPLC-ELEC, , ,Harlan Lightning,08/05/2008,88,0,0,
```

The EDD file Layout Summary page displays a list of the ERA electronic data deliverable (EDD) default file requirements.

The data file will have one header row and will consist of a string of values separated by commas.

All fields listed must be included in your CSV file with the specified header, you do not need to provide data in the fields listed as not required.

Limits to the character length are specified in the EDD File Layout Summary Table. If a number is not specified, there is no restriction on the character length.

An example of the ERA default CSV format looks like this when opened in MS Excel:

ERAID	LotNumber	Analyte Code	NELAC Analytical Method Code	NELAC Technology Key	NELACPrep Method Code	NELAC Cleanup Method Code	Analyst Name	Analysis Date	Reported Value	Reported Less Than	Reported Greater Than	Sample Number
C000000	S221-5262	1540	10053200	IC-COND			CV	1/15/15	218	0	0	
C000000	S221-667	1870	10053200	IC-COND			CV	1/15/15	5.33	0	0	
C000000	S221-667	1870	10070005	UV-VIS			c1v	1/15/15	5.29	0	0	
C000000	S221-667	1870	20124601	UV-VIS			c1v	1/15/15	5.29	0	0	
C000000	S221-698	1575	10053200	IC-COND			CV	1/15/15	45.7	0	0	
C000000	S221-698	1730	10053200	IC-COND			CV	1/15/15	1.56	0	0	
C000000	S221-698	1810	20116409	UV-VIS			C1V	1/15/15	9.88	0	0	
C000000	S221-698	1820	10053200	IC-COND			CV	1/15/15	9.28	0	0	
C000000	S221-698	1820	10067604	UV-VIS			c1v	1/15/15	9.88	0	0	
C000000	S221-698	1610	20048402	COND			JOC	1/15/15	507	0	0	
C000000	S221-698	2000	10053200	IC-COND			CV	1/15/15	67.2	0	0	
C000000	S221-699	2055	20044400	TITR			JOC	1/15/15	2.48	0	0	
C000000	S221-779	1900	20105004	ISE			SHA	1/15/15	6.96	0	0	
C000000	S221-983	1645	10061402	UV-VIS			c1v	1/15/15	0.219	0	0	
C000000	S221-983	1645	20092404	UV-VIS			c1v	1/15/15	0.219	0	0	

The Comma Separated Values for an example file would look like this:

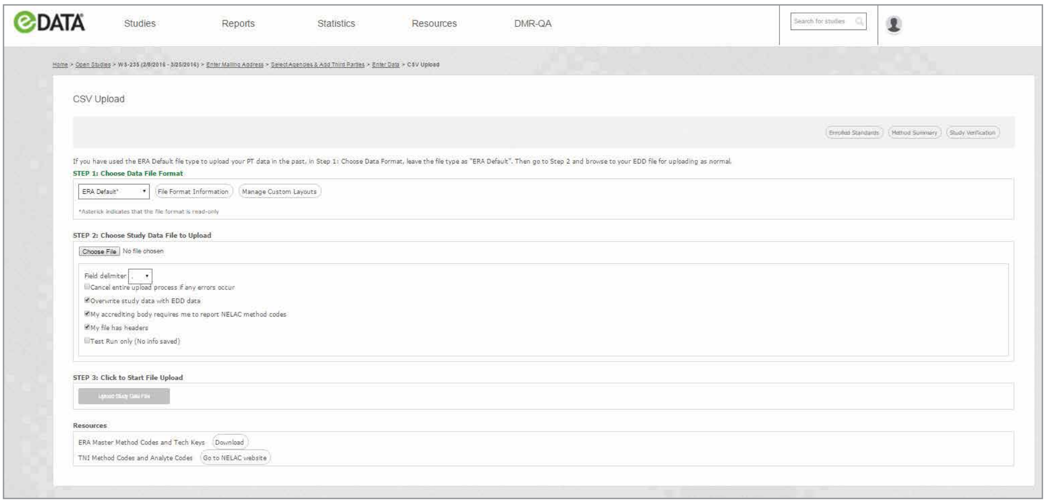
Example File

```
EPA Id,Lot Number,Analyte Code,NELAC Analytical Method Code,NELAC Technology Key,NELAC Prep Method Code,NELAC Cleanup Method Code,Analyst Name,Analysis Date,Reported Value,Reported Less Than,Reported Greater Than,Sample Number
CO00026,P159-507,1550,10255604,FB-QN, , , ,08/05/2008,88,0,0,
CO00026,P159-507,1550,10255604,HPLC-ELEC, , ,Harlan Lightning,08/05/2008,88,0,0,
```

Mapping your own CSV format to a custom eDATA layout

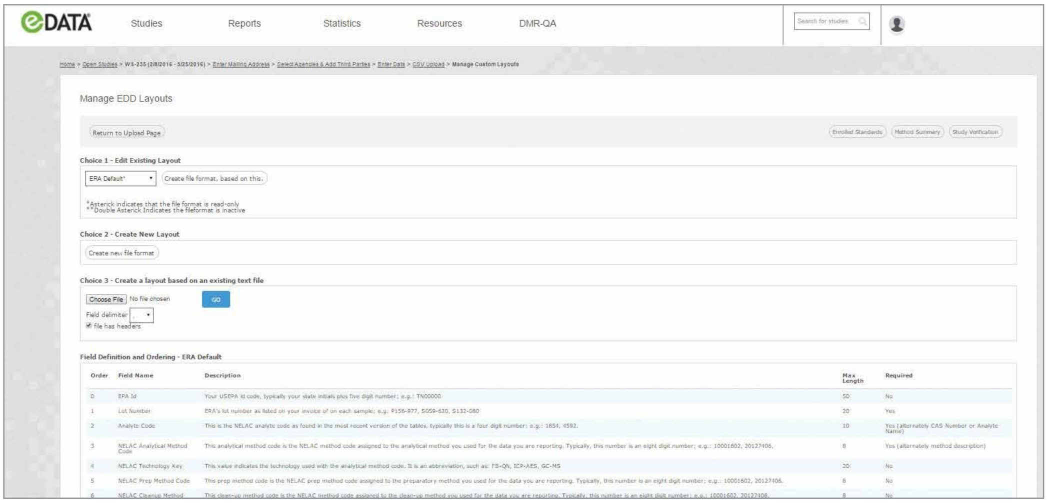
Many laboratories are already able to create EDD's for their customers from their LIMS. Since creating a new EDD requires additional time and/or IT resources, ERA has made it easy for you to use one of your existing CSV electronic data deliverables to submit your PT data.

To do this, you will need to create a custom layout in eDATA that is mapped to the layout of your existing file.



To create a custom layout, click the **Manage Custom Layouts** button.

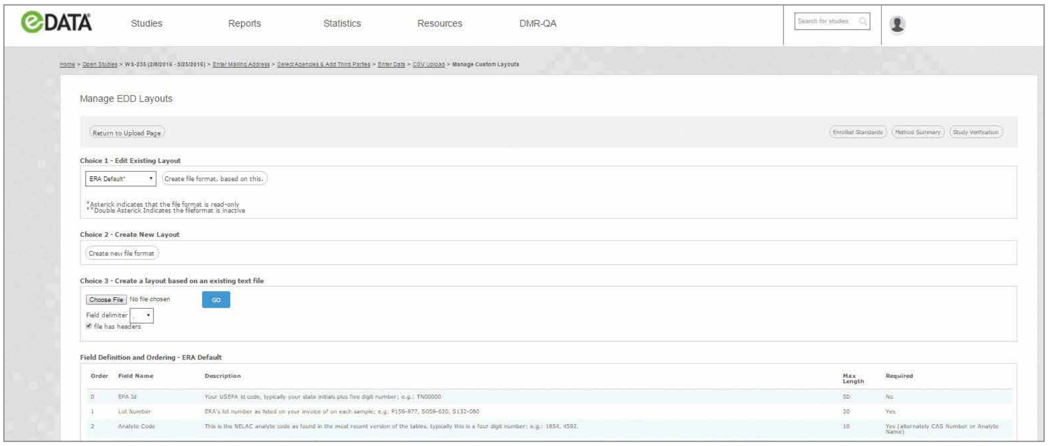
Manage custom EDD layouts



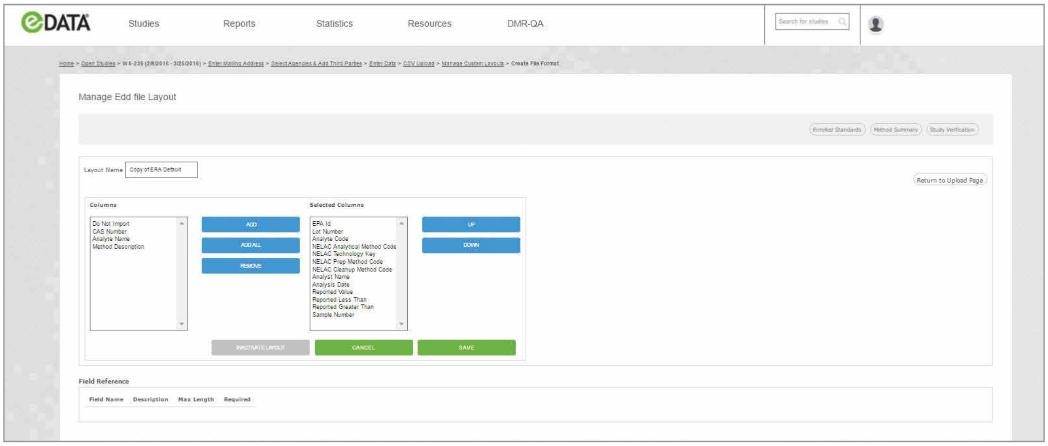
eDATA gives you 3 different ways to create your custom layout that will allow you to upload your CSV files:

Option 1 – Edit an existing layout to map to your file
Option 2 – Create a new layout by selecting and ordering the fields to map to your file
Option 3 – Upload an example of your CSV to map the eDATA fields to your fields

Option 1 – Edit a CSV layout that already exists in eDATA to create your custom layout



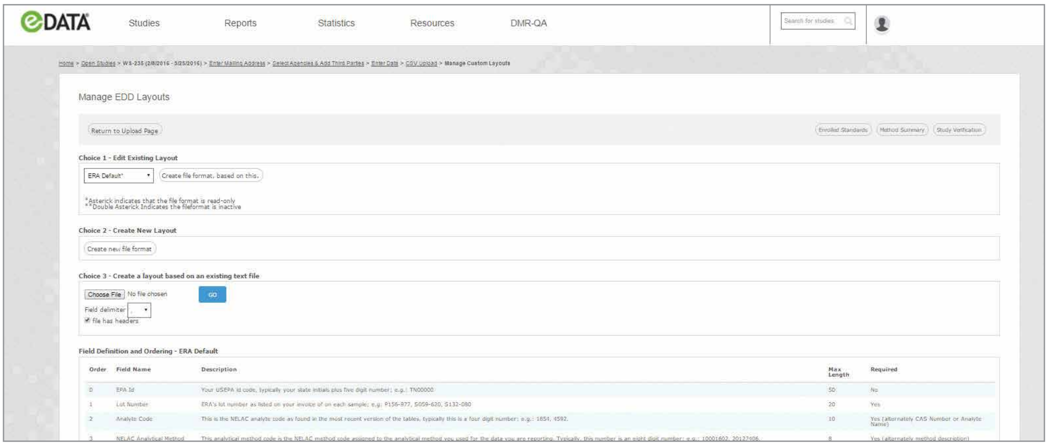
Select the format you want to edit from the dropdown box and click **Create file format, based on this**.



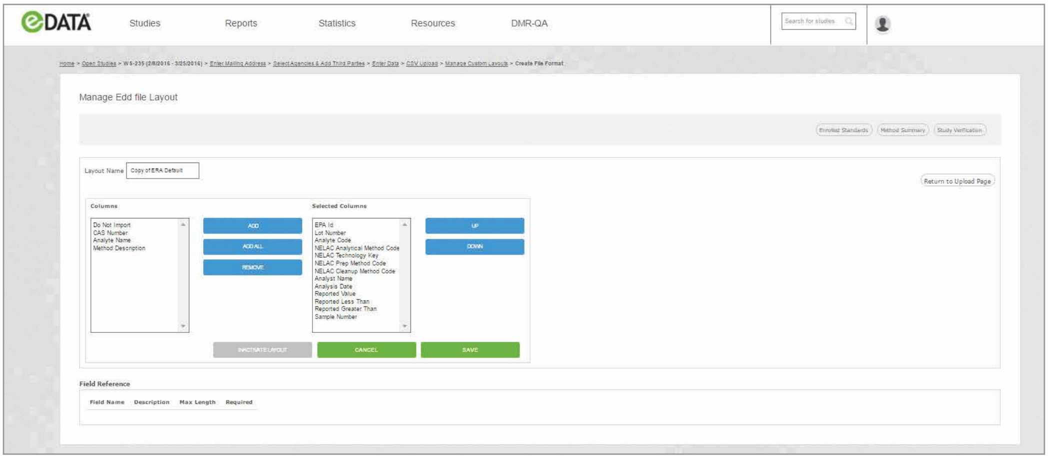
To edit an existing format to create your new CSV format:

1. The **Selected Columns** box lists the fields that are included in the format you are basing your custom layout on and the order.
2. **Add** additional columns or remove columns from the list of columns available.
3. You can set column order by moving the field selections **up** or **down.**
4. Place a **Do Not Import** for any fields that are in your CSV that are not on the list provided or that you do not want to import.
5. Name your new layout in the **Layout Name** field. Be sure to create a name that is recognizable for future uploads.
   A defaulted name is prepopulated and will be used if you do not enter a name.
6. When all of the above steps are completed, click **Save.**

Option 2 – Create a new layout by matching the field selections and order to your CSV file



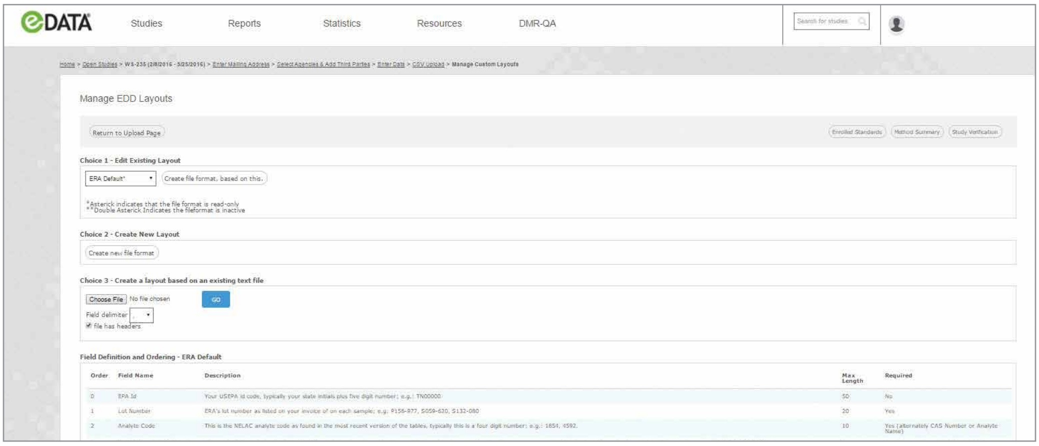
Click **Create New File Format** to manage EDD file Layout.



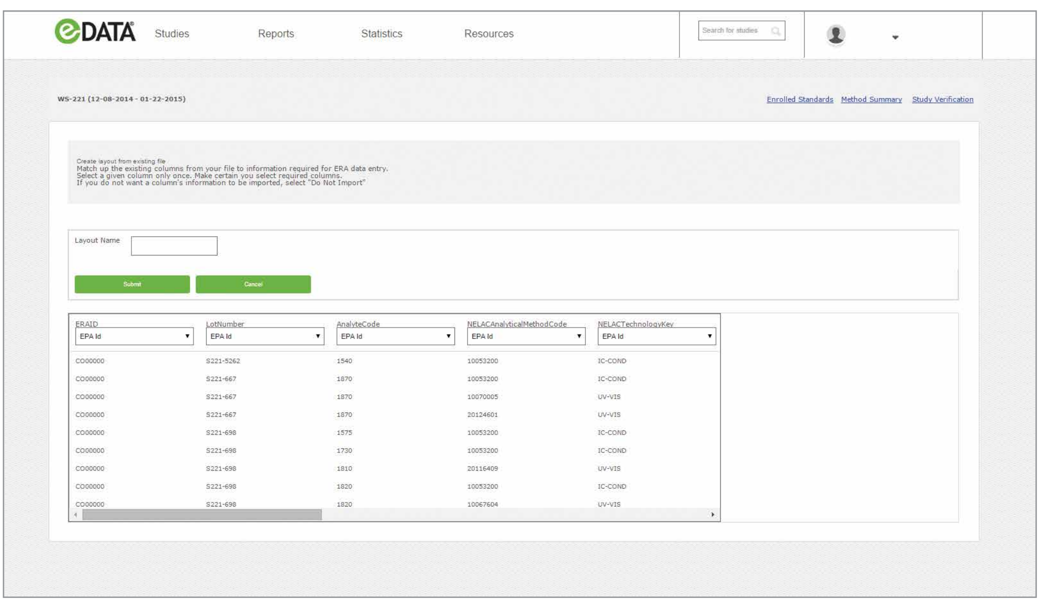
To create a new file format:

1. Required columns are listed in **Selected Columns** shown on the right.
2. Additional available columns can be added from the selections on the left by clicking on the **Column Name** and then the **Add** button.
3. For extra fields in your CSV that are not listed, use **Do Not Import.**
4. Move the selected columns **up** or **down** to match the order of your CSV file.
5. Provide a name for your layout in the **Layout Name** field.
6. **Save** your layout.

Option 3 – Upload an example of your existing CSV file and map to eDATA fields to create your layout



To create your new layout by uploading an example of your existing CSV file, click **Choose File** then select your example CSV for upload. Click the GO button.



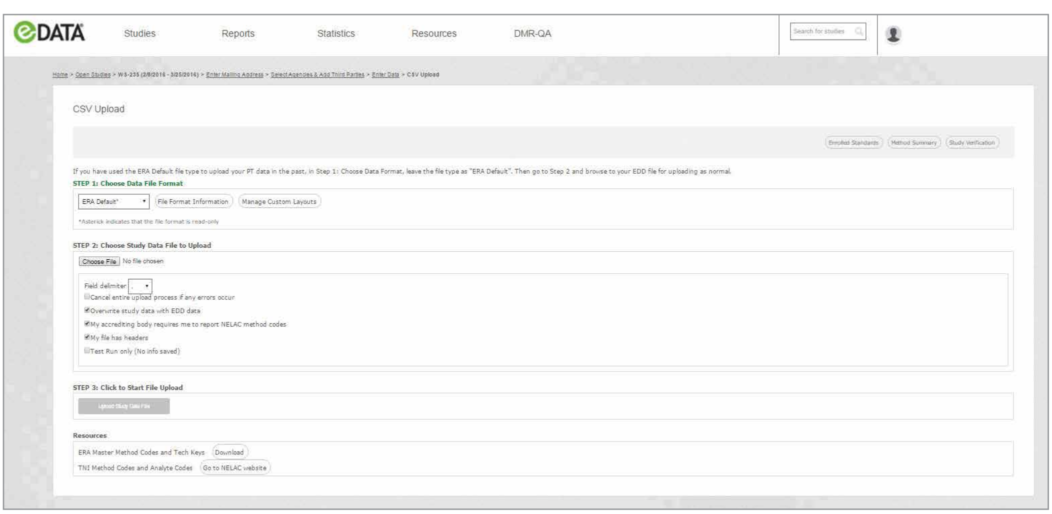
To map eDATA fields to your CSV:

1. Use the drop down box to select and map the appropriate eDATA field match to your CSV field.
2. The header provided in your CSV is provided above the drop down for reference with the data reported in that field below.
3. Enter the name of your layout in the **Layout Name** field. When you have completed mapping and named your file.
4. Click **Submit.**

TIPS

- Please note that QuiK Response PT results cannot be uploaded.
- Upload the data for all analytes to be reported for the standard.
- Multiple uploads of the same standard may cause your data to be overwritten.
- Error logs will provide you with the type of error and the line number where the error occurred.
- If your file contains a header row, the row number in the error log will not include the header row of your file.
- Always review your study summary to ensure your results were uploaded correctly.
- Be sure to name the format before you save the file.
- **International laboratories** are not required to report NELAC Method Codes unless they are accredited in the United States.
- Always select **View Study Summary** to review your data. You can also receive a copy summary by selecting **Email Study Summary.**
- While you are basing a layout on your existing CSV, you need to ensure that all required data are presented in your CSV that you plan to use.
- If you have additional fields in your CSV file that you do not wish to import or upload, the fields can be excluded by designating the fields with **Do Not Import.**
- You will need to have a field for both **Reported >** and **Reported <** that has a bit flag of 0 or 1. 0 indicates there is no symbol reported while a 1 indicates that the symbol was reported.
- A listing and description of the fields required can be found by clicking the **File Format** Information button from the CSV Upload menu.
- The following information is required to upload your PT data:
  - ERA Lot # as the sample number/ID or your lot number/id
  - The data system will recognize either TNI analyte codes, CAS numbers or analyte names
  - Method Description or TNI Method Code
  - Analysis Date
  - Reported Value
  - Greater than (>) bit flag (value either 0 or 1)
  - Less than (<) bit flag (value either 0 or 1)
  - Sample number for the WS Microbiology 10 sample set
- If you have any questions concerning any part of the eDATA website, please contact ERA at 800.372.0122 or 303.431.8454 or send an email to interlabgroup@eraqc.com

Upload your custom file layout



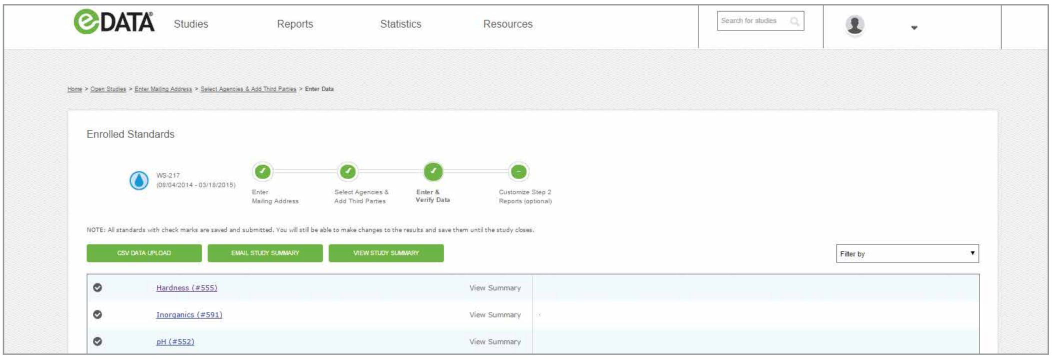
Once you have created your CSV custom layout it will become available in the dropdown selection box in step 1 of the CSV Upload menu. You will then be able to complete the 3 steps to upload your file.

Step 1 – Select the appropriate file format from the dropdown box. (Either ERA default, or a custom layout you have previously created)

Step 2 – Click **Choose File** to select your file to attach and select or deselect the check boxes you would like to apply to your upload

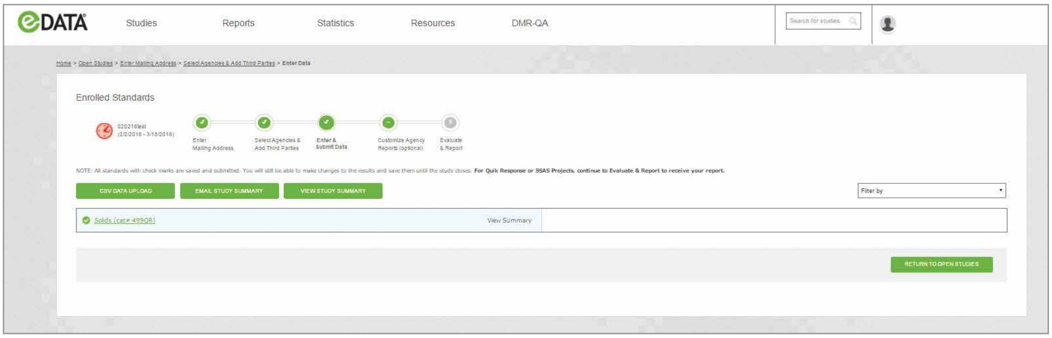
Step 3 – Click **Upload Study File** to upload your file to eDATA

View summary



When you have successfully uploaded your CSV without errors, return to the standards menu.
Click **View Study Summary** or **Email Study Summary** to review your data.

III. QUIK RESPONSE

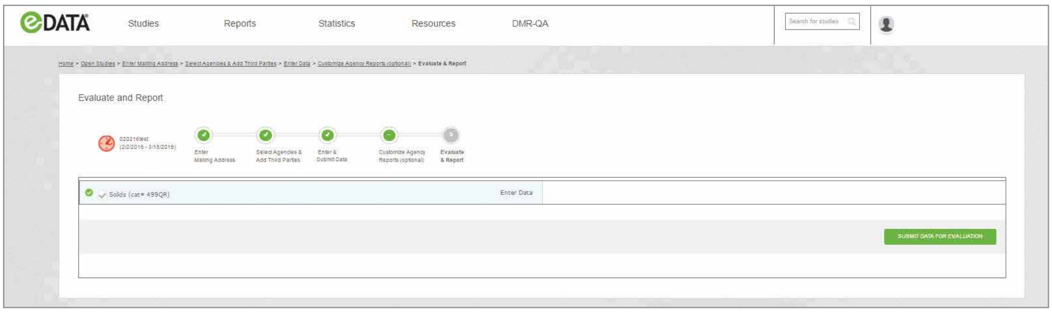


The QuiK Response™ reporting process is completed using the same procedure as described for other PT studies for Step 1: Mailing address, Step 2: Agencies and third parties, and Step 3: Enter data.

For Quik Response PTs, a step 5: Evaluate and Report icon will be visible on the PT process status bar.

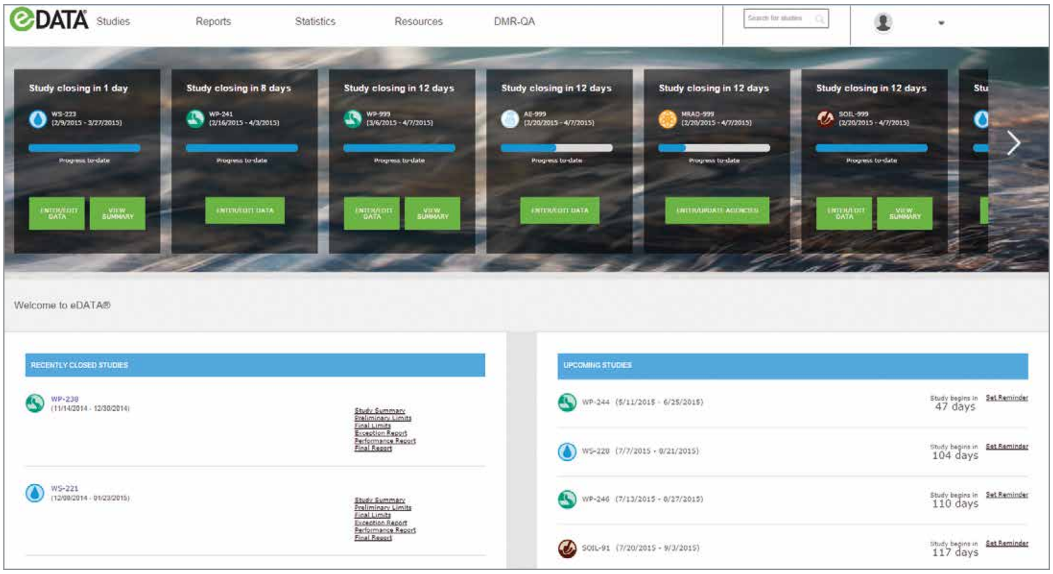
To report your Quik Response PT to ERA after completing all data entry and review:

1. Click on **Evaluate & Report** (found below the Step 5 icon on the progress bar).
2. On the **Evaluate & Report** page, check the standards you wish to be evaluated.
3. Click **Submit Data** for evaluation.



VI. REVIEWING YOUR PT RESULTS

a. Closed studies



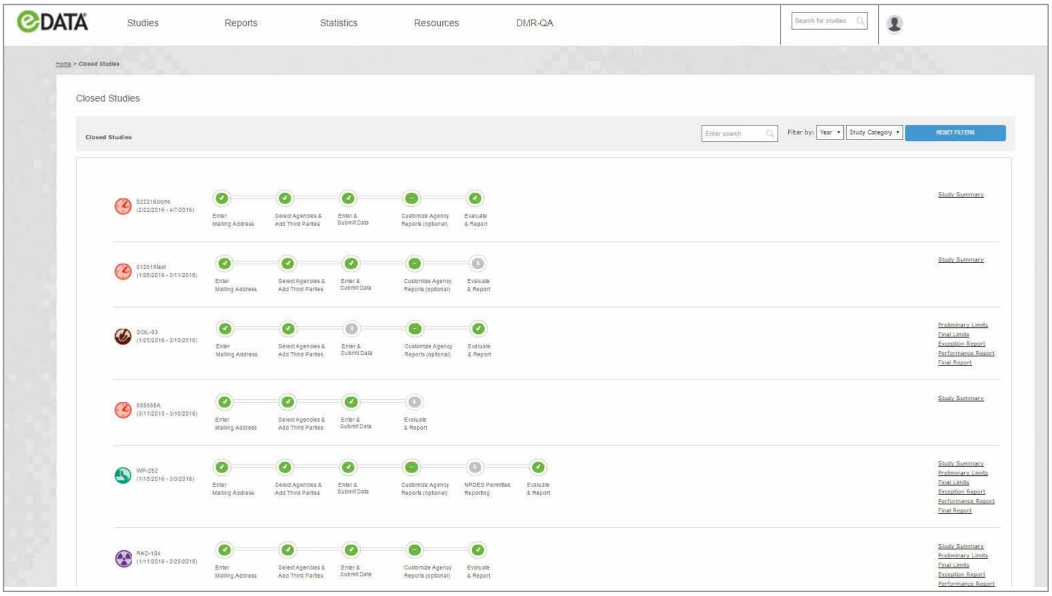
There are two methods to access closed studies:

1. eDATA Home Screen and PT Dashboard: **Recently Closed Studies**

Once a study has closed it moves to the recently closed studies section of your dashboard, which provides a quick link to your study reports.

2. Studies Menu: **Closed Studies**

The **Studies** menu is accessible from each eDATA page and provides a link to a complete list of all your closed studies.

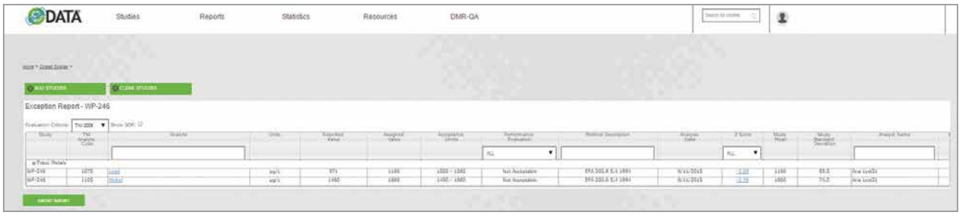


The closed studies search bar allows search for a specific study number or filter by year or study type.

The buttons provided at the right of each closed study allow you to access reports and information for the specified study including:

- **Performance report** – summarizing your PT performance for the study
- **Exception report** – indicating only your results for analytes that receive a "Not Acceptable" or "Unsatisfactory" performance evaluation
- **Final PT report** – available after the closed study has been evaluated and released to participants
- **Study summary** – Data entry summary for the study
- **Preliminary limits** – report available the morning after the closing date of the study, which includes your reported result and the preliminary assigned value and acceptance limits
- **Final limits** – report available when the study has been completed showing your reported results, assigned value, acceptance limits and evaluation, essentially an abbreviated version of your final PT report

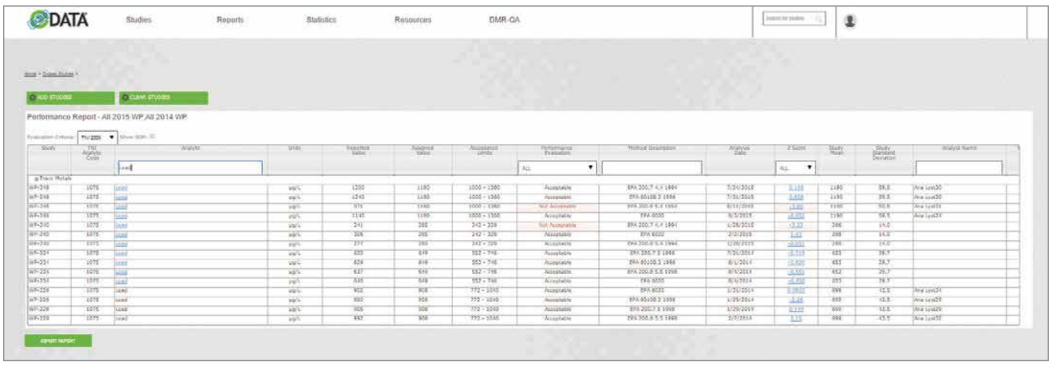
i. Exception report



On the closed studies page, click the **Exception Report** button at the right of the applicable closed study to access your exception report for the study. You can also use the performance report to explore your complete PT history for unsatisfactory results by selecting the **Matrix**, **Year** and **Studies** to review.

The exception report provides a list of only the analytes with a not acceptable or unsatisfactory performance evaluation and includes information about your PT result including reported value, the assigned value, acceptance limits, evaluation, method, study mean and standard deviation, the analyst name if it was reported and the total number of datapoints reported for this analyte from all participants. Click export to download your exception report as a CSV file.

ii. Performance report



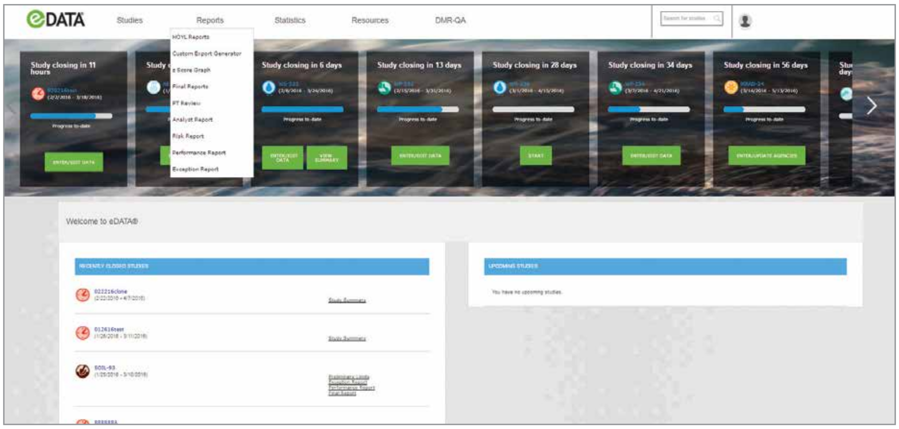
On the closed studies page, click the **Performance Report** button at the right of the applicable closed study to access your performance report for the study. You can use the performance report to explore your PT performance history for more than one study by selecting the Matrix, Year and Studies to review.

The performance report provides a complete overview of your performance for the selected study and includes information about your final PT result including your reported value, the assigned value, acceptance limits, evaluation, method, study mean and standard deviation, the analyst name if it was reported and the total number of datapoints reported for this analyte, as well as SOP name and revision if it was reported in the optional section on the data entry page.

The performance report is searchable by analyte, performance evaluation, method, and analyst name. Click export to download your performance report as a CSV file.

For U.S customers, the performance report was designed to include all of the information required in the 2009 TNI standard for Demonstration of Capability including the optional analyst name, SOP and SOP Revision fields that are optional for data entry. These fields are required if you intend to use the performance report for DOC purposes.

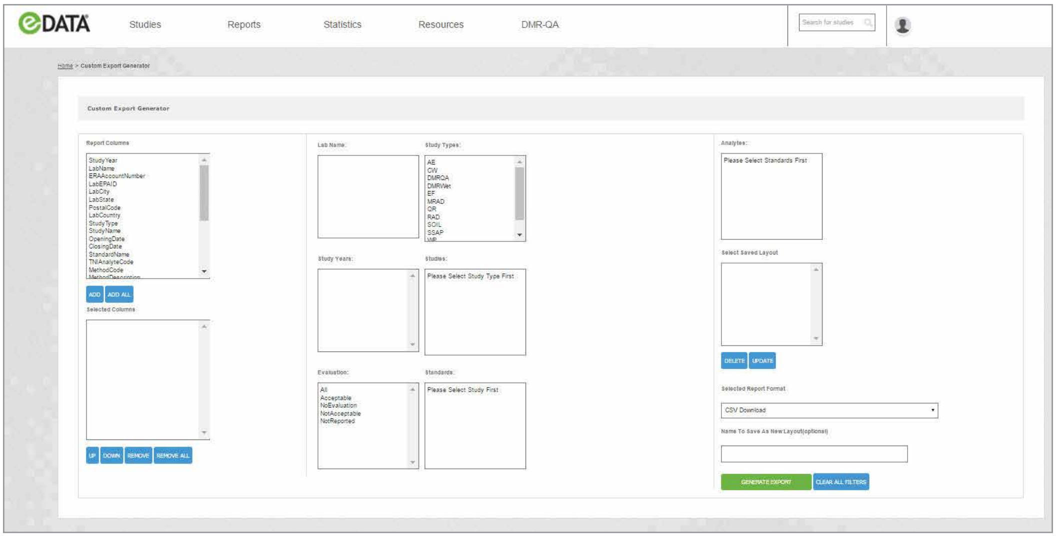
VII. TOOLS FOR QA MANAGERS



Additional tools to assist in reviewing and understanding your PT performance are available under the **Reports** menu. These include:

- Custom export generator
- Z-score graph
- PT review
- Analyst report
- Risk report
- HOYL reports

a. Custom export generator



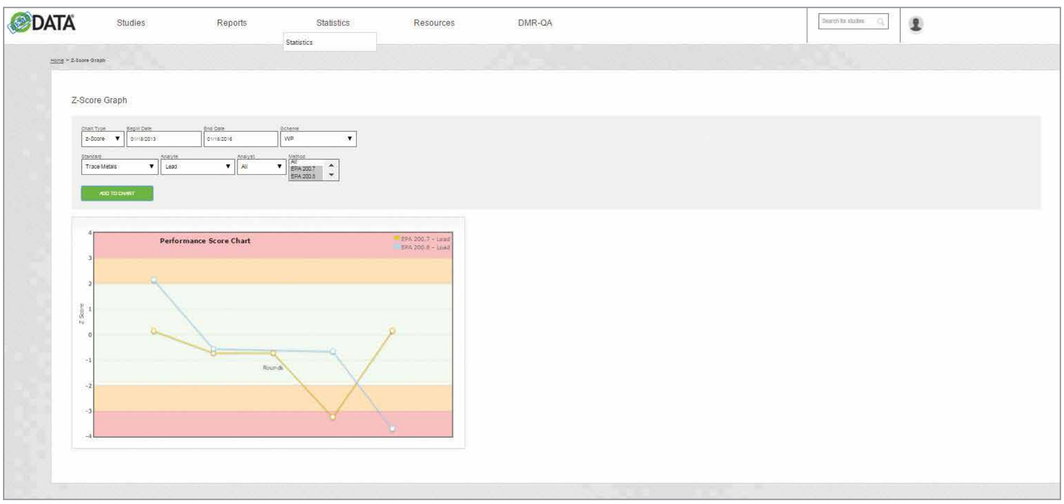
The custom export generator is a tool that allows you to filter and download your historical PT data to your own specification.

To create a custom export:

1. Choose from the **Report Columns** list to add reporting fields to your **Selected Columns** list.
2. Specify the order for reporting by highlighting the desired column field and using the buttons provided to move the field up or down.
3. Begin by selecting the year(s) you would like to report.
   Note: Addition filter fields are populated based on the data available from your selections in the previous field.
   Hold down the control or shift keys to make multiple selections.

4. Next apply data filters to select the study type, laboratory (available only for corporate networks), specific study or studies, evaluation, standard and/or analytes to be reported.
5. Once you've selected the data and the order to be reported, you can name and save your selected columns and order as a template for future use.
6. Click **Generate Report** to download your data as a CSV file and open in Microsoft Excel.

b. Z-score graph



The z-score is a great measure for comparing your analytical performance from one round to another.

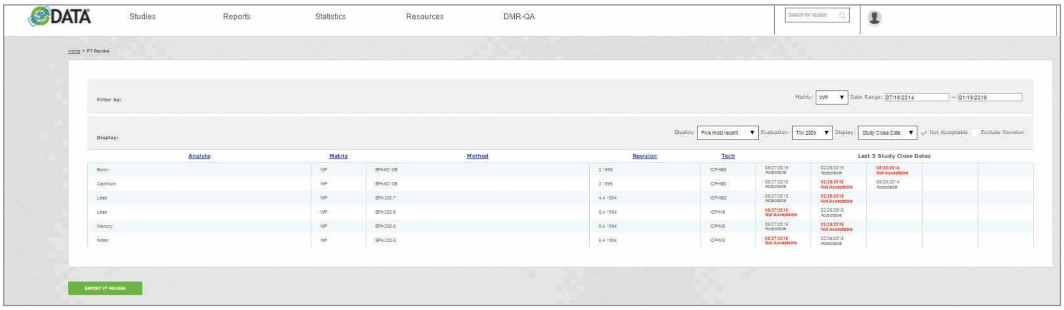
Generally speaking, an acceptable z-score ranges from -2 to 2, shown as white on the graph. A z-score of > absolute 2 to < absolute 3 indicates a warning of questionable results and is color coded orange on the graph. A z-score of greater than or equal to absolute 3 is unsatisfactory and highlighted in red on this graph. A negative z-score indicates a low bias, and a positive z-score indicates a high bias in the reported result relative to the assigned value used for the performance evaluation.

It must be noted that these interpretations of z-scores are as described in international standards for Proficiency Testing such as ISO 13528, however, there can be some differences in the interpretation of z-scores and what constitutes an acceptable or unacceptable result depending on the specific requirements set out by your Accrediting Body, and/or applicable regulations. For consistency we have color coded the trending chart based on the general scale.

To create a z-score graph for an analyte:

1. Select the **Lab** (applicable for laboratory networks).
2. Specify the **Date Range** – select a date range based on your PT participation that will provide sufficient data points for review.
3. Select the desired **Scheme** (study) type.
4. Select the desired **Standard.**
5. Select the **Analyte**.
6. Select the **Analyst** (optional).
7. Select the **Method** (optional) – select from the available methods or report all methods.
8. Click **Add To Chart** to create your z-score chart based on your selections.

c. PT review



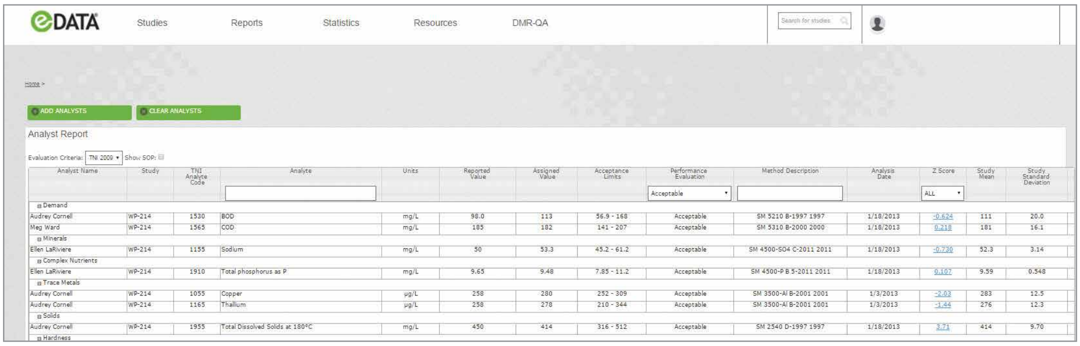
The PT Review report allows you to quickly and easily identify any analytes that you may need to be concerned about for accreditation purposes, depending on the proficiency testing requirements to maintain your accreditation.

To generate your PT review, make your selections using the dropdown filters at the top of the report:

1. Select the **Study Matrix.**
2. Select the **Date Range** to be examined.
   Note: the date range selected should be based on how often you participate in PT and how many studies you would like to display
3. Select whether you want the table to be based on **Study Close Date** or **Analysis Date.**
4. Select review either your last **3 or last 5 PT results** within the specified date range.
5. Select **display evaluation based on either the 2003 or 2009 TNI standard.**
6. PT review will default to show only analytes that have been given a **not acceptable evaluation** within the selected matrix and date range. Deselect the **Not Acceptable** checkbox to view all analytes.
7. Click **Export** to download your PT Review report as a CSV file.

The PT Review table is listed by analyte in alphabetical order, and includes the matrix, method/revision and technology for each analyte. Performance evaluation and either the analysis date or study close date depending on the reporting option you selected are displayed. Analytes that were given a **not acceptable** evaluation are **highlighted in red** to make them easily identifiable.

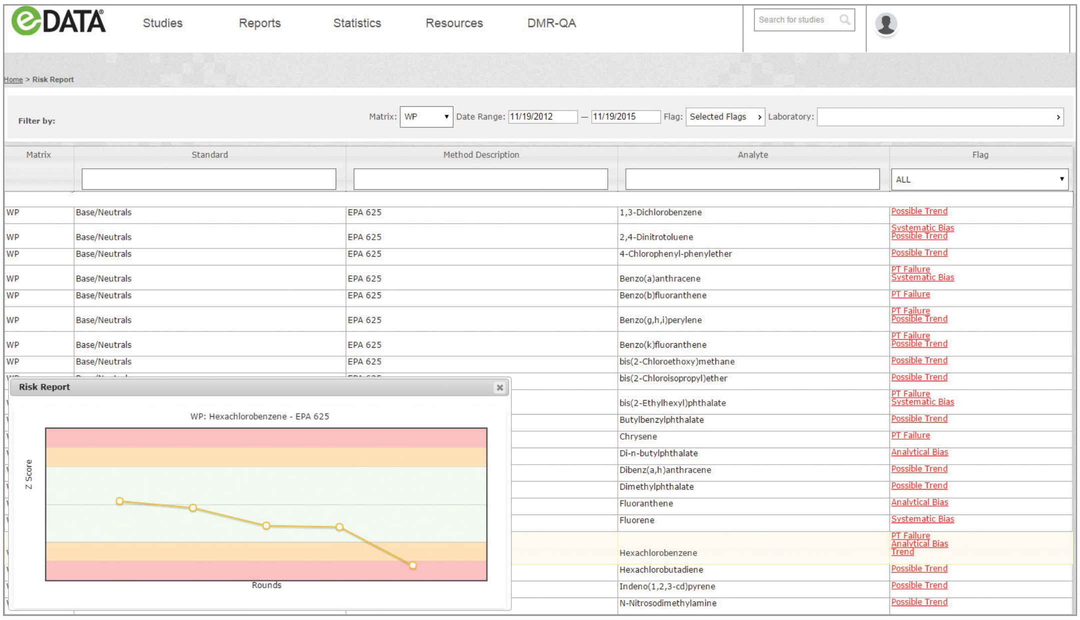
d. Analyst report



The Analyst Report provides a complete summary of your analysts PT performance history.

1. Hover your cursor over **Select an Analyst**.
2. Click on the **Year** to select all analysts, matrices, and studies for the year or hover over the **Fly-Out Menu** to select a specific analyst and study.
3. Click **Add Analysts** or **Clear Analysts** to modify your selections.
4. Click **Export** to download your analyst report as a CSV file.

e. Risk report



The Risk Report analyzes laboratory or corporate network proficiency testing performance history against a series of rules to help Quality Managers quickly and easily identify analyte trends that may indicate current or future risk of unsatisfactory PT results to assist with corrective and preventive action. Use the Risk Report to:

- Identify bias and directional trends in method performance
- Determine what methods need the most attention
- Anticipate and prevent PT failures

To create your Risk Report:

1. Select the **Matrix**.
2. Select the **Date Range**.
3. Select up to 6 risk criteria. All 6 criteria will be selected by default. Deselect the check boxes to remove risk criteria from your report.
4. Double click on an analyte to display a z-score chart for the selected analyte. The risk criteria applicable to each analyte are described in the flag column.
5. Hover your cursor over each data point to display the study, method, and z-score.

The six risk criteria and flags include:

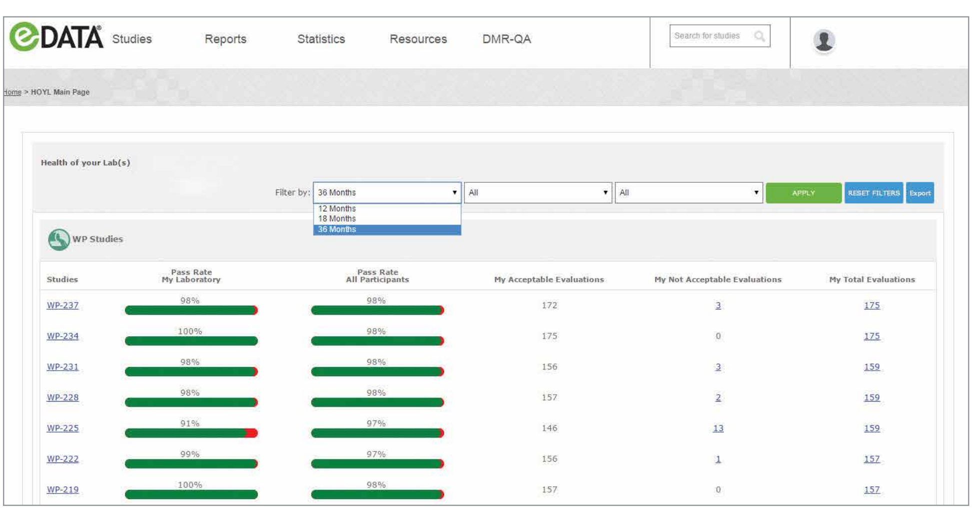
- **L1of5 > 3SD:** One or more of the last five data points was outside of 3 SD (1.3s)
- **L2 of 3 > 2SD:** Two of the last three data points were both outside two SD on the same side of the mean (2of3.2s)
- **L3 > 1SD:** Last three data points were outside one SD on the same side of the mean (3.1s)
- **L5x:** Last five data points were all on the same side of the mean (5x)
- **L3:** Last three data points all increase/decrease in the same direction from the mean (3t)
- **L5:** Last five data points all increase/decrease in the same direction from the mean (5t)

f. Health of Your Lab (HOYL) reports

Health of Your Lab (HOYL) is your all access pass for insight into your PT performance history. HOYL reports are designed to take you from a high level overview and comparison of your performance relative to your peers, down to performance statistics for individual analytes. HOYL is perfect for either a quick snapshot to give you general peace of mind or the deep dive required for effective corrective and preventive action. Data within HOYL is linked to other reports in eDATA to help you visualize and investigate the results. The three reporting levels of HOYL are:

- HOYL studies
- HOYL standards
- HOYL analytes

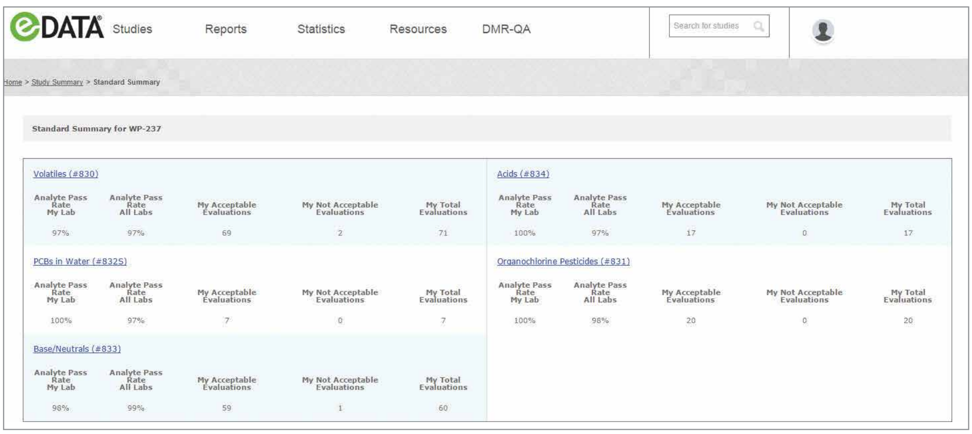
HOYL studies:



Compare the performance of your lab to all participating laboratories using pass rates for the analytes within each of your studies over the last 12, 18 or 36 rolling months.

- Click on a **study** to view the HOYL standard report for that study.
- Click on **My Not Acceptable Evaluations** to access the **exception report** for that study.
- Click on **My Total Evaluations** to access the **performance report** for that study.

HOYL standards:

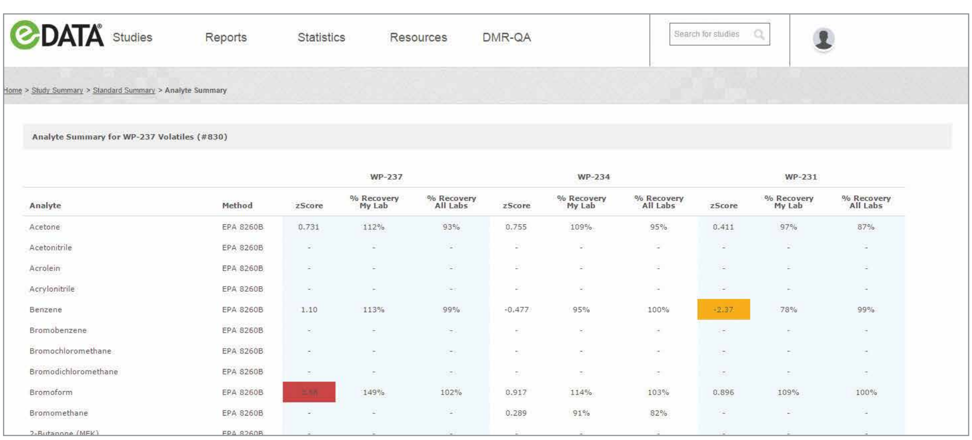


Standard	Analyte Pass Rate My Lab	Analyte Pass Rate All Labs	My Acceptable Evaluations	My Not Acceptable Evaluations	My Total Evaluations
Volatiles (#830)	97%	97%	69	2	71
Acids (#834)	100%	97%	17	0	17
PCBs in Water (#832S)	100%	97%	7	0	7
Organochlorine Pesticides (#831)	100%	98%	20	0	20
Base/Neutrals (#833)	98%	99%	59	1	60

Compare the performance of your lab to all participating laboratories using pass rates for the analytes for each of the standards in the study you selected.

- Click on the **standard** to access the **HOYL analytes report**.

HOYL analytes:



		WP-237			WP-234			WP-231		
Analyte	Method	zScore	% Recovery My Lab	% Recovery All Labs	zScore	% Recovery My Lab	% Recovery All Labs	zScore	% Recovery My Lab	% Recovery All Labs
Acetone	EPA 8260B	0.731	112%	93%	0.755	109%	95%	0.411	97%	87%
Acetonitrile	EPA 8260B	-	-	-	-	-	-	-	-	-
Acrolein	EPA 8260B	-	-	-	-	-	-	-	-	-
Acrylonitrile	EPA 8260B	-	-	-	-	-	-	-	-	-
Benzene	EPA 8260B	1.10	113%	99%	-0.477	95%	100%	-2.37	78%	99%
Bromobenzene	EPA 8260B	-	-	-	-	-	-	-	-	-
Bromochloromethane	EPA 8260B	-	-	-	-	-	-	-	-	-
Bromodichloromethane	EPA 8260B	-	-	-	-	-	-	-	-	-
Bromoform	EPA 8260B	[illegible]	149%	102%	0.917	114%	103%	0.896	109%	100%
Bromomethane	EPA 8260B	-	-	-	0.289	91%	82%	-	-	-
2-Butanone (MEK)	EPA 8260B	-	-	-	-	-	-	-	-	-

Review and compare percent recovery and z-score for each of the analytes in the standard you selected over the last 18 months.

- Orange shading is used to highlight analyte results with z-score greater than 2.
- Red shading is used to highlight analyte results with z-score greater than or equal to 3.
- Click on the z-score to view the z-score chart for the analyte for visual analysis of analyte trends.

ERA
16341 Table Mountain Pkwy
Golden, CO 80403 U.S.A.
T: 800 372 0122 (or)
303 431 8454
F: 303 421 0159

Waters Technologies
Ireland Limited
IDA Business Park
Drinagh, Wexford
Ireland
T: +353 53 91 60549

www.eraqc.com/edata

THE SCIENCE OF WHAT'S POSSIBLE.®

Waters Corporation
34 Maple Street
Milford, MA 01757 U.S.A.
T: 1 508 478 2000
F: 1 508 872 1990
www.waters.com