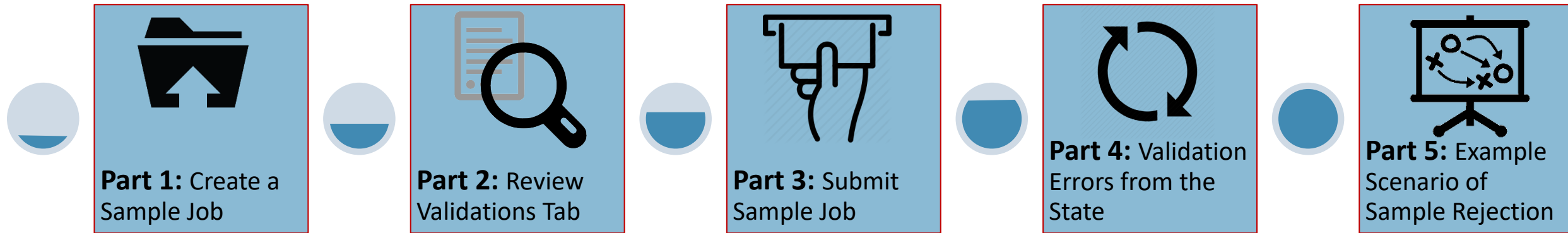


SAMPLE VALIDATION & SUBMISSION PROCESS (WEB ENTRY)

This document is divided into five separate parts (as shown below) and provides instruction for how to create a Sample Job in CMDP, items to consider when addressing validation errors within CMDP and highlights the most common reasons why samples are rejected from the State in CMDP.



Part 1: Create a Sample Job

Step 1: To create a new Sample Job, go to the **Drinking Water Sample Jobs** tab and select **Create New Job**.

Step 2: From the pop-up window, select the **Enter a group of samples** option.

Then, enter the sample name into the **Job Description** field. Then, click the **OK** button.

NOTE: Consider using a consistent naming convention for your organization which will promote data consistency and regularly track samples/results entered.

Step 3: To enter a new sample submission, click on the Sample Result sub-tab and click the **Add** drop down menu. Users have the option to select three different types of sample submissions including Microbial, Chem/Radionuclides and Cryptosporidium.

Step 4: After selecting the submission type (as appropriate), you are now ready to enter the sample/result information into CMDP.

As a reminder, use the **Data Submission Guides** provided to you to help ensure the data is complete. **NOTE:** Confirm the appropriate analysis **Method** is reported and a **Sampling Location** is entered prior to uploading the data into CMDP as these are state required fields.

Step 5: After entering the appropriate information, be sure to click the **Save** button located in the upper left corner of the web entry form.

A blue bar with the wording of **Information saved successfully** will appear along the top of the web entry form if the federally required information is entered appropriately (screen shot below).

Submission Entered Successfully

Fields denoted with an asterisk (*) located to the right of the field name are considered federally required. If one of these fields are **left blank and missing data**, CMDP will notify the user with a warning icon and will highlight the field(s) in blue (screen shot below). Then, the user will need to fix the federal error.

Submission Entered Unsuccessfully

NOTE: If the **Sample Category** column (located on the Job Maintenance View tab) is blank, this also indicates that data was unsuccessfully uploaded.

In either case, the user will need to check the **Validations** tab to confirm the sample submission is free from all errors.

For guidance on reviewing the **Validations** tab, proceed to [Part 2](#).



Part 2: Review Validations Tab

Step 1: After the user has entered the appropriate sample/result into CMDP successfully, as part of the review process be sure to check for validation errors under the **Validations** tab. This is a very important step because addressing errors listed here will reduce the number of submission rejections issued by the State.

NOTE: The “No items to show” notification will be displayed under the XML Submittal Validation section when submitting information from a web entry form.

- If the “No items to show” notification is displayed in **Section A**, this indicates that no validation errors were identified within the entered web entry form (see screen shot below).

If no validation errors are listed under this tab, the user can submit the sample/results to the State.

For guidance on how to submit this information to the state, proceed to **Part 3** of this document.

The screenshot shows the 'Compliance Monitoring Data Portal' interface. The user is logged in as Rachel Westbrook. The 'Validations' tab is selected. The 'Federal Reporting Validation Results' table is empty, displaying 'No items to show.' This area is highlighted with an orange box and labeled 'Section A'. Below it, the 'XML Submittal Validation Summary' table is also empty, showing 'No items to show.' The 'XML Submittal Validation Error Details' table at the bottom is also empty, showing 'No items to show.'

- If one or more messages are displayed within **Section A**, this indicates that validation errors were identified within the web entry form (see screen shot below).

If any validation errors are listed under this tab, the user must make the appropriate corrections prior to submitting the sample/results to the State.

For guidance on how to address the information within **Section A** refer to **page 3**.

The screenshot shows the 'Compliance Monitoring Data Portal' interface with a validation error. The 'Validations' tab is selected. The 'Federal Reporting Validation Results' table is highlighted with an orange box and labeled 'Section A'. It contains one row with the following data:

Category	Sample Identifier	Validation Category	Error Description
Microbial	jobId=13437, wslid=AK2240456, facilityName=DS CITY OF HOMER WATER SYSTEM, sampleCategory=Microbial, collectionDate=08/20/2018, labSampleCd=5007044811	Federally Required or Conditionally Required	Missing Data for Fields [Collection Time]

Below this, the 'XML Submittal Validation Summary' table is empty, showing 'No items to show.' The 'XML Submittal Validation Error Details' table at the bottom is also empty, showing 'No items to show.'

Section A: Federal Reporting Validation Results Table

Step 2: This table contains results of validations checked against fields that are federally required/conditionally required to see if there is a value. If fields are left blank or information is entered incorrectly, they will be listed as errors in this table. *If the user double clicks on an individual row in this table, they will be brought to the specific sample submission.*

1 Category	2 Sample Identifier	3 Validation Category	4 Error Description
Microbial	jobId=13437, wsId=AZ0401234, facilityName=DS CITY OF HOMER WATER SYSTEM, sampleCategory=Microbial, collectionDate=08/20/2018, labSampleCd=5007044811	Federally Required or Conditionally Required	Missing Data for Fields [Collection Time]

The information below provides a brief description of each column within **Federal Reporting Validation Results** table and how users can navigate through the information.

1 Category: This column lists the type of sample group as it relates to the specific sample with an error. The categories listed can include Microbial, Chem/Radionuclides or Cryptosporidium.

Sample Identifier: This column provides details on the sample that contains the Federal reporting error(s). The information merely identifies the sample, it does not describe the error. For instance, the screen shot above (highlighted text under column 2) identifies that an error occurred with the sample job **13437** and this sample job is from **AZ0401234** with a facility name of **DS CITY OF HOMER WATER SYSTEM**. It is a **Microbial** sample with a collocation date of **08/20/2018**, assigned a lab sample identification number of **500704481**. Specifically, the type of information displayed within this section includes the following:

- jobId:** Job sample identification code assigned by CMDP
- wsId:** Public Water System identification number
- facilityName:** Water system facility name entered in CMDP
- sampleCategory:** Type of sample classification (i.e., Microbial, Chem/Radionuclides, Cryptosporidium)
- collectionDate:** Date sample collected (MM/DD/YY)
- labSampleCd:** Lab sample identification number

3 Validation Category: This column identifies the severity level for the type of error identified (e.g., federally required/conditionally required).

4 Error Description: This column describes the specific error that has occurred with the sample submission.

The table below highlights the various *CMDP error messages* as displayed within **Error Description** column along with an *explanation of the error*. This table also highlights the specific fields within the Excel template that could generate the error.

NOTE: This is not an all-inclusive list of every error that can occur and only identifies the most common errors. If you run into an error message that is not listed in the table below, please contact the CMDP Transition Team and we will add it to the list.

CMDP Error Message	Explanation of Error	Fields for Labs to Review
Missing Data for Fields [sampleReceievedDt]	No data entered in Sample Received Date field.	Add data into Sample Received Date field.
Missing Data for Fields [sampleVolume]	No data entered in Sample Volume (ML) field. <i>NOTE: Only required for Microbial Samples.</i>	Add data into Sample Volume (ML) field.
Missing Data for Fields [Collection Time]	No data entered in Collection Time field.	Add data into Collection Time field.
Missing Data for Fields [Missing Sample Result for E.coli Given Reported TC+ Sample Result]	<i>E.coli</i> sample result was not submitted with TC+ sample result.	Add <i>E.coli</i> sample result to sample submission.
Missing Data for Fields [Volume Assayed]	No data entered in Volume Assayed (ML) field.	Add data into Volume Assayed (ML) field.
Missing Data for Fields [Method]	No data entered in Method field.	Add data into Method field.
Missing Data for Fields [Analysis Start Date]	No data entered in Analysis Start Date field.	Add data into Analysis Start Date field.
Missing Data for Fields [analysis StartTime]	No data entered in Analysis Start Time field.	Add data into Analysis Start Time field.

Step 3: Once the user has reviewed the all validation errors listed within this section, make note of all errors, and then **double click on the individual row within the Validations tab and edit the web entry form**. After the appropriate edits are made, be sure to review the **Validations** tab again to confirm that no additional errors have occurred.

If no additional errors appear on the Validations tab, proceed to Part 3.

Part 3: Submit Sample Job

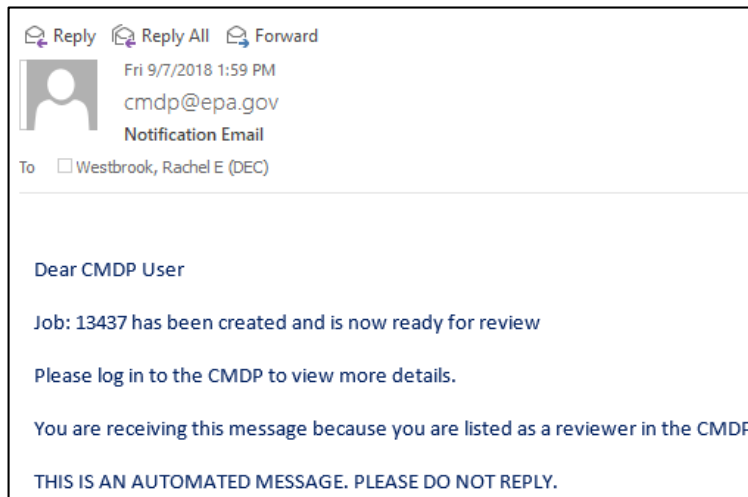
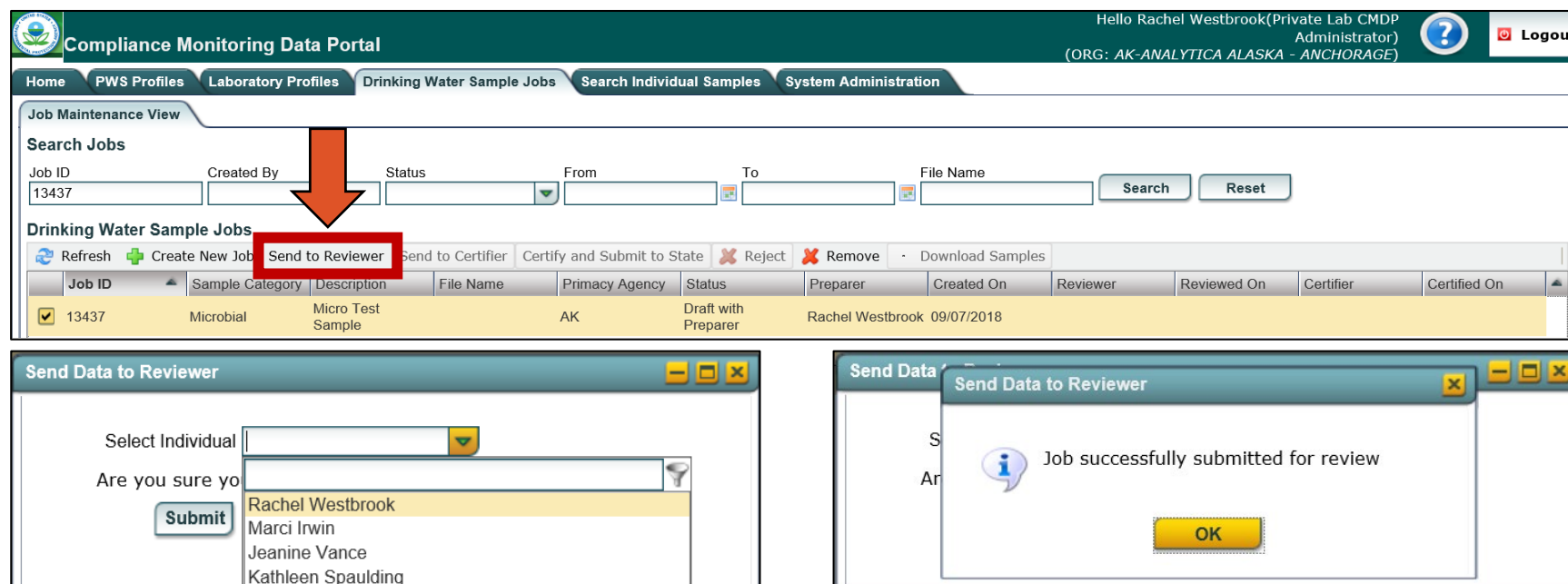
Step 1: Once the user has confirmed that **no errors exist from the Validations tab**, the Sample Job can be submitted to the State. To submit a sample, go to the **Job Maintenance View** tab, enter the **Job ID** into the search bar and click on the **check box** to select the appropriate job.

Step 2: Click the **Send to Reviewer** button on the Drinking Water Sample Jobs menu.

A pop-up will ask you to select the appropriate individual. After the user has selected the reviewer, click the **Submit** button.

Then, a confirmation window will pop-up stating the job was successfully submitted for review. Click **OK**.

An email will be sent to the assigned reviewer's email indicating that a job is ready for review (example screen shot to the right). The email is simply an instant notification. The user does not have to do anything with the email or even exit out of CMDP. This convince feature was integrated into CMDP in case there are multiple individuals in different roles within a single organization.



Step 3: Then, the Sample Job should be sent to the certifier by clicking the **Send to Certifier** button.

Again, a pop-up will ask the user to select the appropriate certifier.

Then, a confirmation window will pop-up stating the job was successfully submitted to the certifier.

An email will be sent to the assigned certifier's email indicating that a job is ready for the final evaluation.

Step 4: When the certifier or Lab System Administrator is prepared to submit the Sample Job, click the **Certify and Submit to State** button.

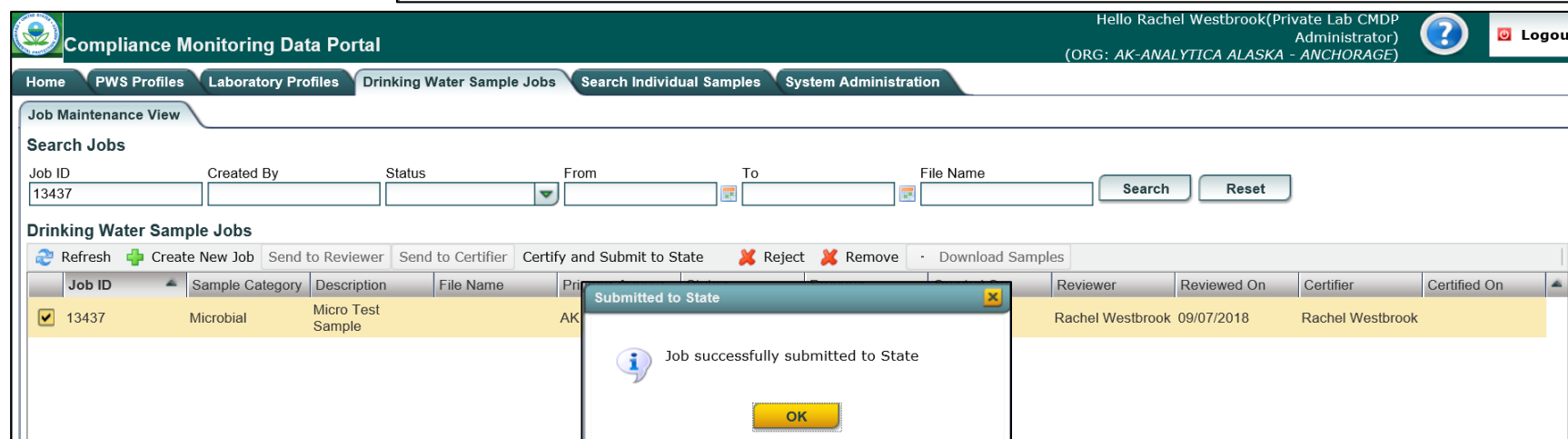
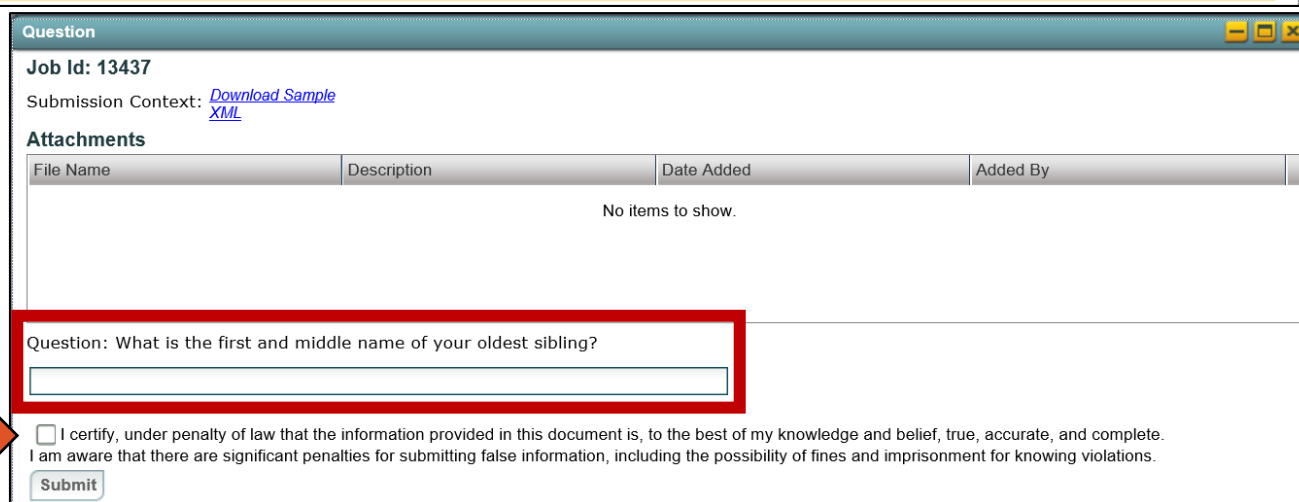
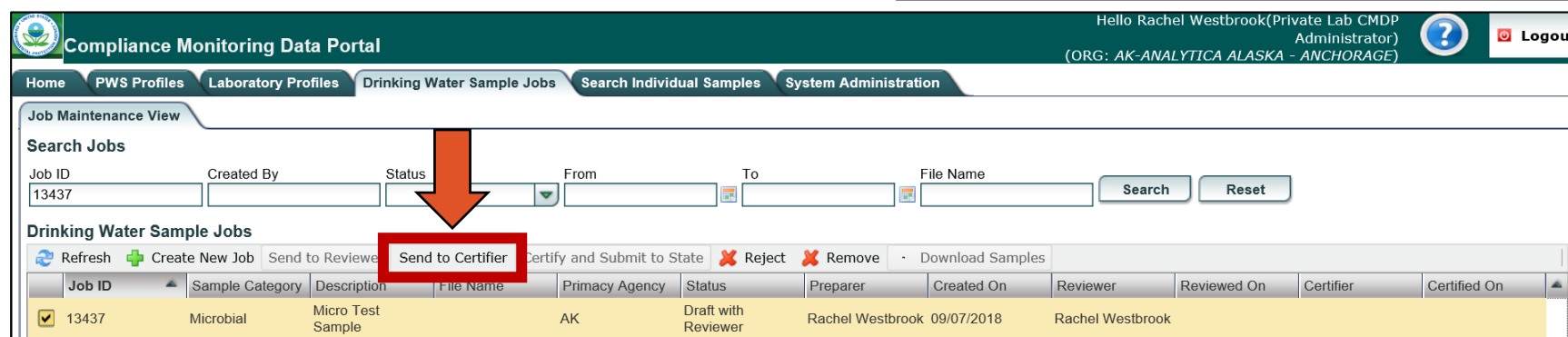
Then, enter your **user name** and **password**.

The user will be asked a security question (highlighted by red box in screen shot to the right) and must click the **check box** (indicated by red arrow in screen shot to the right) to certify the information provided was true and accurate.

To move forward, click the **Submit** button.

A final confirmation window will pop-up. Then, click the **OK** button to complete the submission process.

The user will be able to see exactly when the data was submitted to the State and who the preparer, reviewer and certifier were and when the certification steps were completed as displayed in the job details row. This row will update automatically once the user clicks **OK** on the pop-up window.





Part 4: Validation Errors from the State

After the Sample Job is submitted to the State there is still a possibility the sample may be rejected during the state validation process (meaning the errors will not necessarily be listed on the **Validations** tab in CMDP). The following steps outline how to deal with rejected sample submissions.

Step 1: If a data error was identified in a sample submission AFTER it was accepted by the State, the State will notify laboratory staff via email explaining the sample has been rejected along with the reason for the rejection.

In order to understand the type of error that occurred, refer to the table below. This table highlights the *rejection message* as displayed on the email along with an *explanation of the rejection*, and the specific fields within the web entry form that could generate the error.

NOTE: The (xxxx) denoted in the **Rejection Message** column acts as a placeholder indicating unique information related to the sample submission will be displayed here (e.g., analyte code, method code).

Rejection Message	Explanation of Rejection	Fields for Labs to Review
Invalid data: Lab sample ID is too long. Maximum allowed length: 20 characters	Sample ID field exceeds the maximum allowed 20 character limit.	Enter Sample ID that is within 20 character limit.
Lab is not certified for this method (xxxx) and analyte (xxxx) for the given analysis date	Method field contains method code that Analyzing Lab is not certified for.	Confirm Method field contains method code that Analyzing Lab is certified for.
Sample age for Sample Result (xxxx) is beyond the allowed limit	Sample result exceeds hold time. Analysis Start Date value entered is more than 30 hrs. from Collection Date .	Confirm Analysis Start Date value and Collection Date value are correct.
Required field: Sample collection date is missing	Collection Date field is blank.	Add data to Collection Date field.
Required field: Sample collection time is missing	Collection Time field is blank.	Add data to Collection Time .
Required field: Lab receipt date is missing	Lab Sample Received Date field is blank.	Add data to Sample Received Date field.
Required field: Sample collection location is missing	Sampling Location field is blank	Add data to Sampling Location field.
Required field for Sample Result (xxxx) Analysis start date is missing	Analysis Start Date field is blank.	Add data to Analysis Start Date field.
Required field for Sample Result (xxxx) Analysis start time is missing	Analysis Start Time field is blank.	Add data to Analysis Start Time field.
REJECT: Inconsistent result data: Review rules for populating Presence Indicator (ResultMeasurementQualifier), Count (ResultMeasurementValue), and/or Interference. (SAMPLE RESULT)	(e.g. A/P field listed as Present but Count field does not have value.) <i>NOTE: Only required for Microbial Samples.</i>	If contaminant is <i>Present</i> in sample, Count field may need data (determined by method used).
REJECT: Inconsistent result data: Presence Indicator is "A" (absent) and Count Value is not "0". (SAMPLE RESULT)	(e.g. A/P field listed as Absent but Count field has value.) <i>NOTE: Only required for Microbial Samples.</i>	If contaminant is <i>Absent</i> in sample, Count field should not have data entered.
REJECT: Laboratory Received Date supplied was prior to Sample Collection Date. (SAMPLE)	The sample has to be collected before it is received by the laboratory.	Confirm the Sample Received Date is <i>before in time</i> of the Collection Date .
REJECT: Sample Result failed duplicate by data check. A sample result for the same analyte is already present for this sample (SAMPLE RESULT)	A sample result with the same information in the Analyte (as it relates to the sample) has already been submitted to the State.	Review previous sample result(s) submitted and if indeed information is correct, confirm the Sample ID field is different compared to the previous sample submitted. Contact the CMDP Helpdesk if issue persists.

Step 2: Once the user understands the issue, you will need to submit a lab report to the state with the correct or revised information.

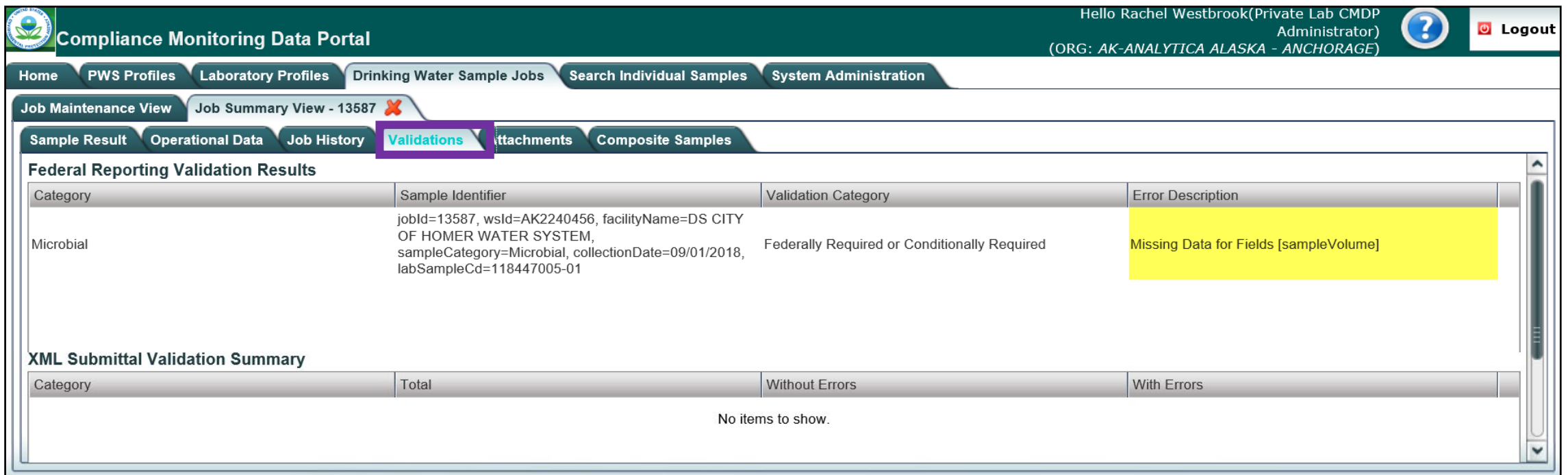
NOTE: CMDP will not allow for the same Sample ID number to be used twice. This is why we ask for a revised lab report for submissions submitted with errors.

Part 5: Example Scenario of Sample Rejection

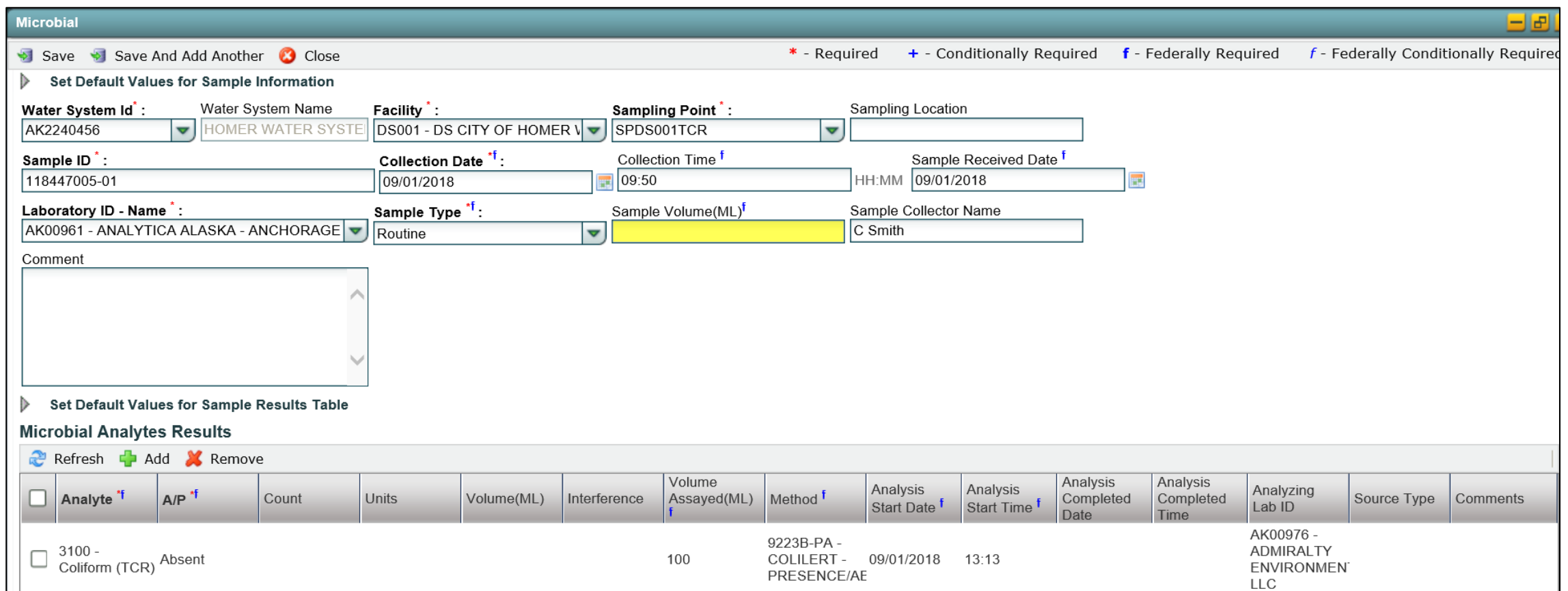
EXAMPLE: The scenario below outlines how Ms. Heather Olson, who is enrolled as a CMDP Lab System Administrator working for LabTech, identifies/corrects a federal reporting error with an initial sample submission and how she addresses a second error identified by the State.

Step 1: After Heather creates a new web entry form, containing sample data, into CMDP she confirms that all sample submittals are listed on the **Sample Results** sub-tab (refer to [page 1](#) for the screenshot of a **Submission Entered Successfully** example).

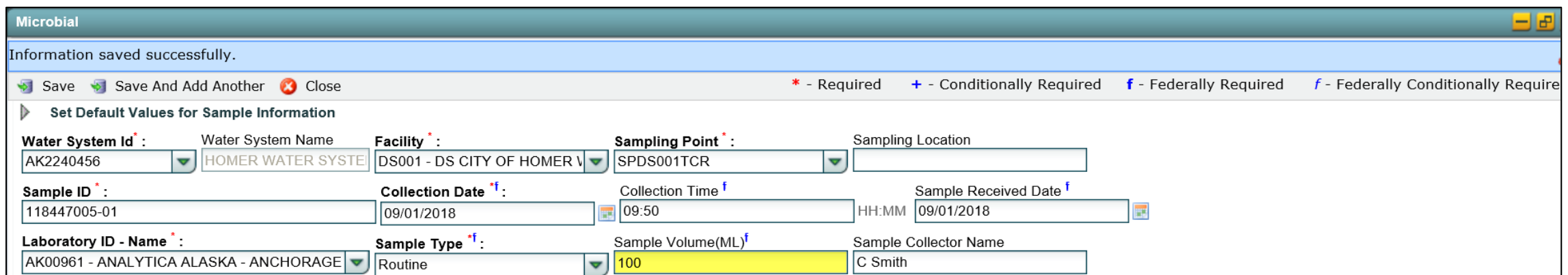
Then, Heather reviews the **Validations** tab. During her review, she notices one validation error listed under the **Federal Reporting Validations Results** table. The CMDP error message (highlighted text noted in the **Error Description** column) indicates the **Sample Volume (ML)** field is either blank or the information is entered incorrectly. Before clicking on this row for additional information, Heather reviews the rest of the **Validations** tab to confirm no additional errors are listed under the **Federal Reporting Validations Results** table.

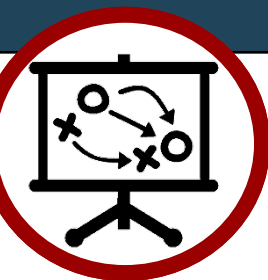


After confirming that only one validation error occurred, Heather double clicks on the error message located under the **Error Description** column and is brought to the specific sample submission. From this web view, she can see that she accidentally left the **Sample Volume (ML)** field blank (highlighted field in screen shot below). Now, with an understanding of the error Heather knows exactly what should be corrected within the web entry form.



Step 2: Now, Heather can edit the web entry form of the sample submission that had the error by adding the appropriate data into the **Collection Time** field (highlighted field in screen shot below). Once the form is updated appropriately, she selects the **Save** button and receives the **Information saved successfully** notification.





EXAMPLE CONTINUED: The scenario below outlines how Ms. Heather Olson, who is enrolled as a CMDP Lab System Administrator working for LabTech, identifies/corrects a federal reporting error with an initial sample submission and how she addresses a second error identified by the State.

Step 3: Once she reviews the **Validations** tab again to confirm no validation errors exist (screenshot below), she submits the sample/results to the State by following the process outlined in [Part 3](#).

The screenshot shows the 'Compliance Monitoring Data Portal' interface. The user is logged in as Rachel Westbrook (Private Lab CMDP Administrator). The 'Validations' tab is selected, showing two empty tables: 'Federal Reporting Validation Results' and 'XML Submittal Validation Summary'. A red box highlights the 'No items to show.' message in the first table.

Step 4: After the Sample Job is submitted to the State, the next day Heather receives an email indicating that the submission was rejected because it did not have a **Sampling Location** listed (highlighted field in screen shot below). **REMEMBER! The Sample Location and Method fields are state required and errors within these fields will not be identified within the Validations tab.**

REJECTED: Submission with missing Sampling Location

The screenshot shows the 'Microbial' sample entry form. The 'Sampling Location' field is highlighted in yellow. The form includes fields for Water System ID, Facility, Sampling Point, Sample ID, Collection Date, Collection Time, Sample Received Date, Laboratory ID, Sample Type, Sample Volume, and Sample Collector Name.

To correct this error, she submits a lab report/revised lab report showing the correct sampling location for this sample to the State.