# SAMPLE VALIDATION & SUBMISSION PROCESS (WEB ENTRY)

This document is divided into five 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

**Part 2:** Review Validations Tab

**Part 3:** Submit Sample Job

**Part 4:** Validation Errors from the State

**Part 5:** Example Scenario of Sample Rejection

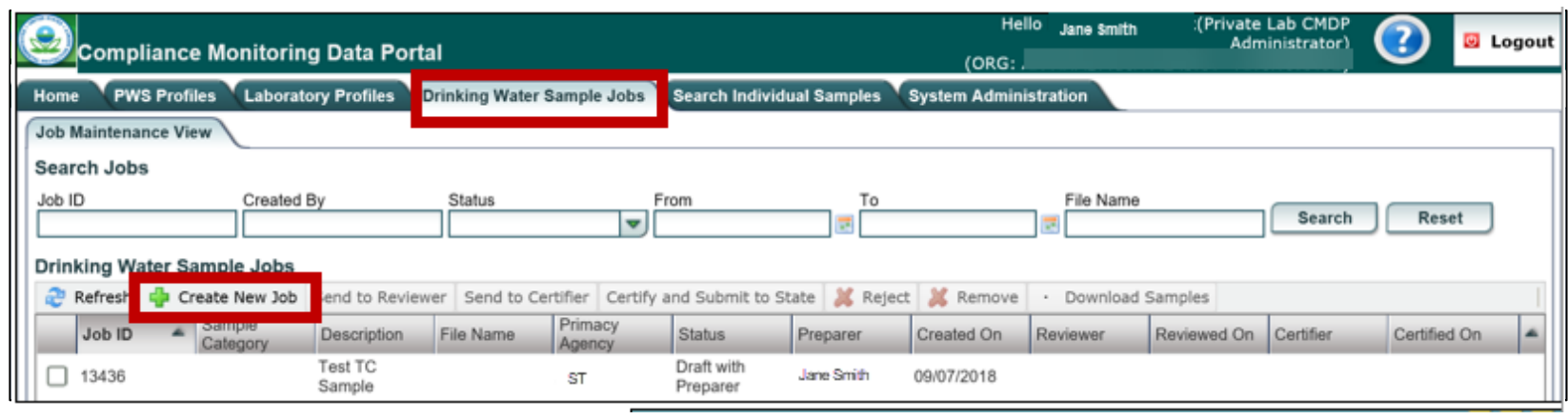
## Part 1: Create a Sample Job

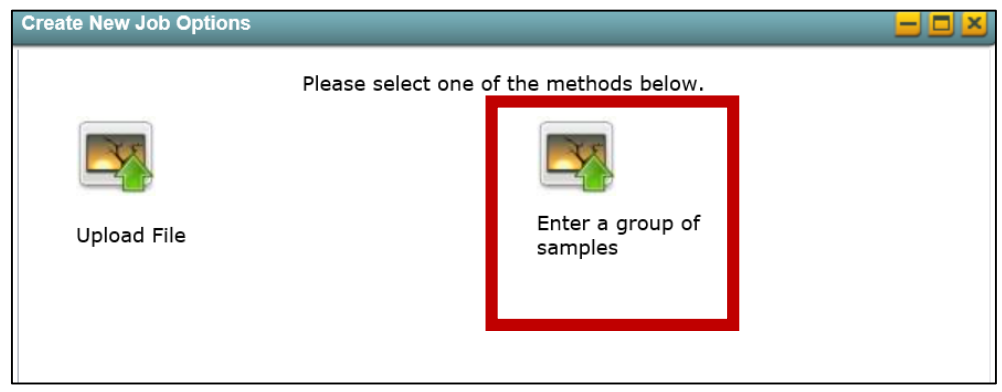
**Step 1:** To create a new Sample Job, go to the **Drinking Water Sample Jobs** tab and select **Create New Job**.

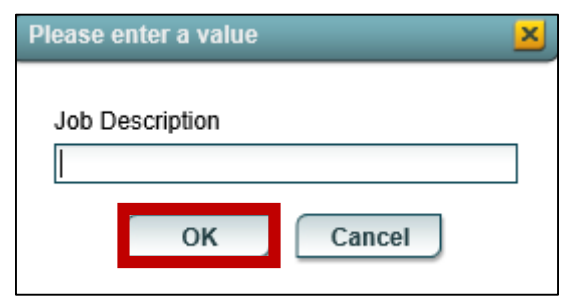
**Step 2:** From the pop-up window, select the **Enter a group of samples** option.

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

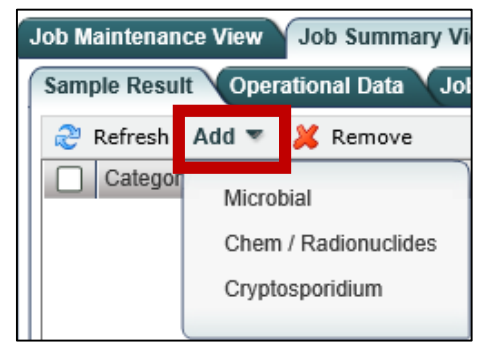
**NOTE**: Consider using a consistent naming convention for your organization which will promote data consistency and regularly track samples/results entered.




**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: Microbial, Chem/Radionuclides and Cryptosporidium.

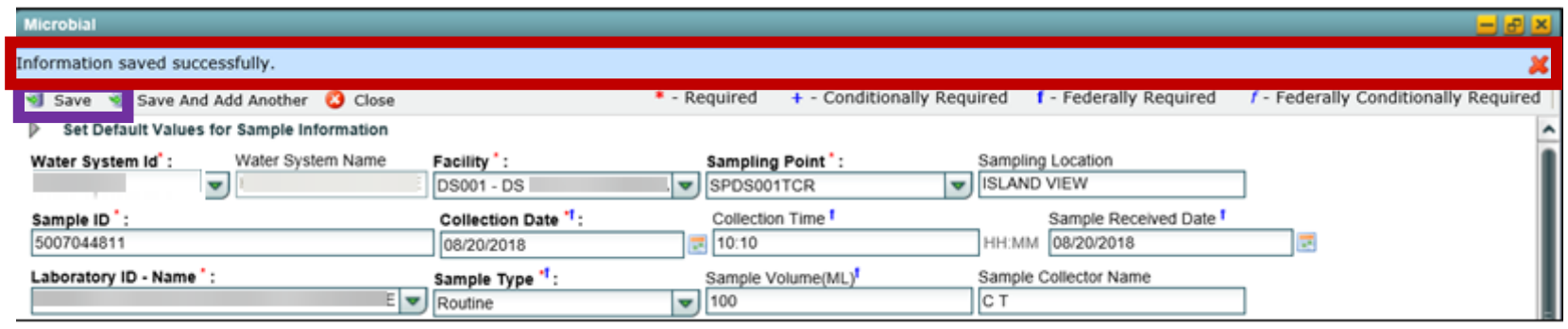



**Step 4:** After selecting the submission type (as appropriate), you are ready to enter the sample/result information into CMDP.

**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.

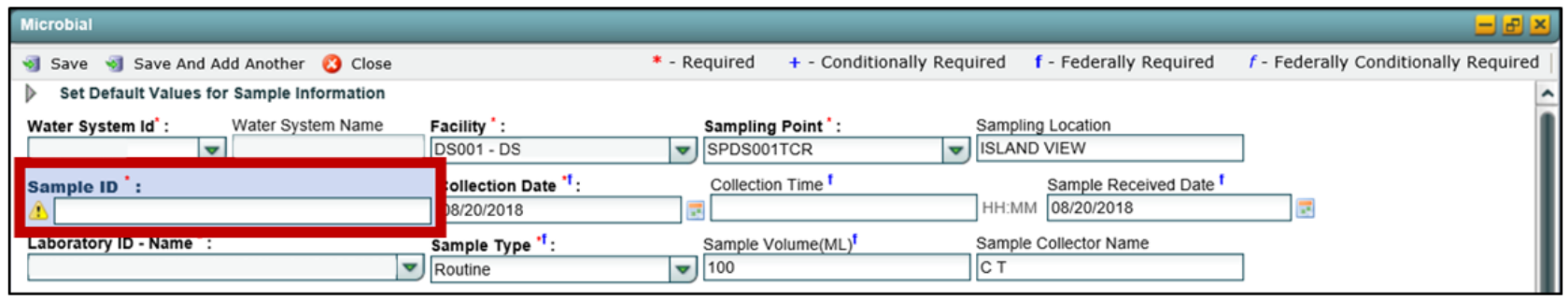
**Step 5:** After entering the appropriate information, be sure to click the **Save** button located in the upper left corner of the web entry form. A blue bar with the statement "Information saved successfully" will appear along the top of the web entry form if the federally required information is entered appropriately (screen shot below).

***Submission Entered Successfully***




Fields denoted with an asterisk (*) 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 highlight the field(s) in blue (screen shot below). The user will need to fix the federal error.

***Submission Entered Unsuccessfully***




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

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

## Part 2: Review Validations Tab

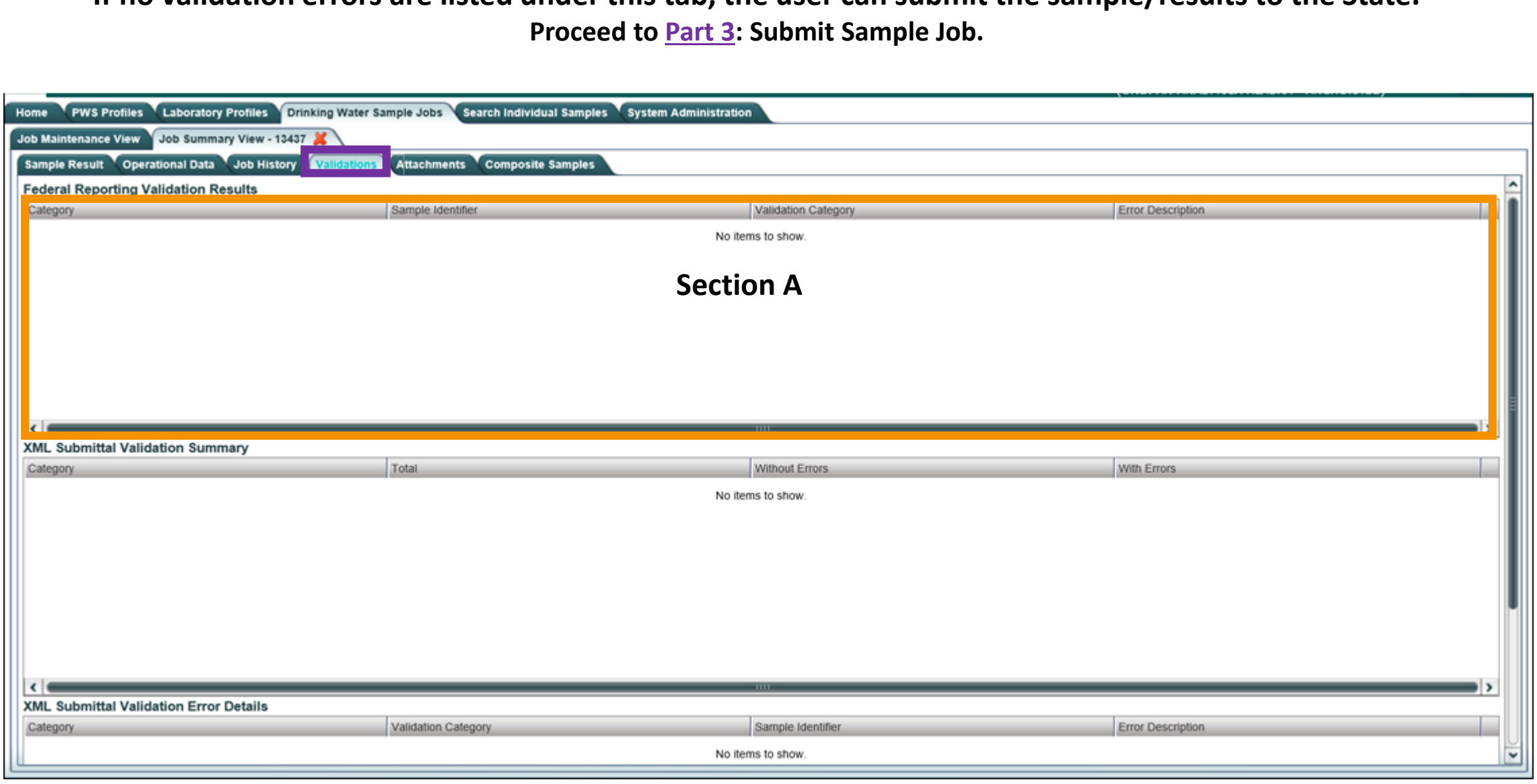
**Step 1:** After the user has entered the appropriate sample/result into CMDP successfully, as part of the review process be sure to check for validation errors under the **Validations** tab. This is a very important step because addressing errors listed here will reduce the number of submission rejections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

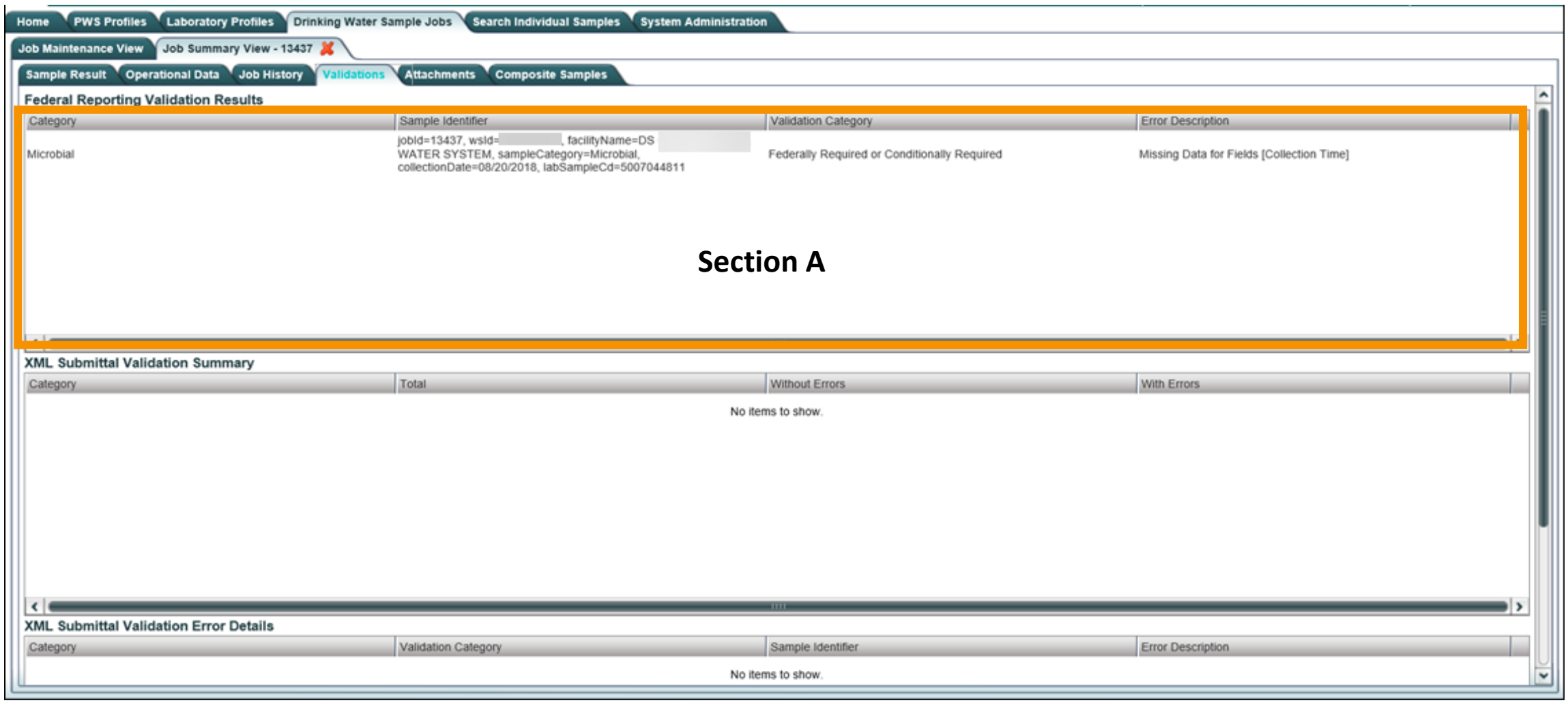
**Proceed to Part 3: Submit Sample Job.**



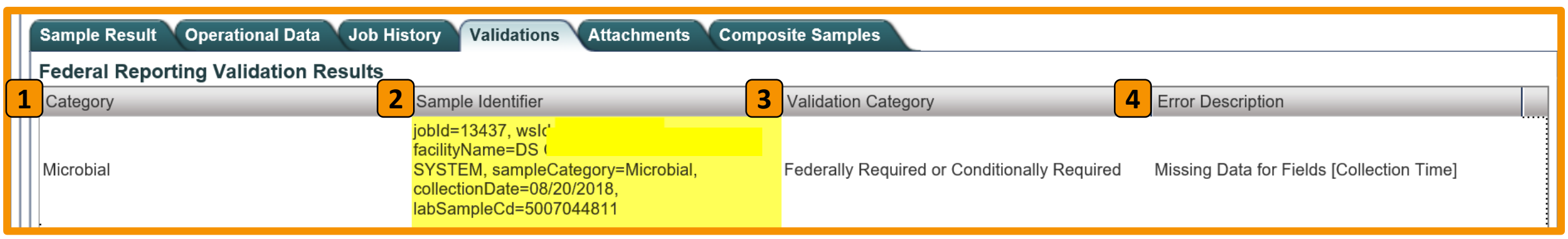

- If one or more messages are displayed within **Section A**, this indicates that validation errors were identified within the web entry form (see screen shot below).

**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 validation results within Section A, refer to page 3.**



**Step 2:** The **Federal Reporting Validation Results 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**.




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.

2 **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 a PWS with a facility name of DS. 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 common CMDP error messages 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 may occur. 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.

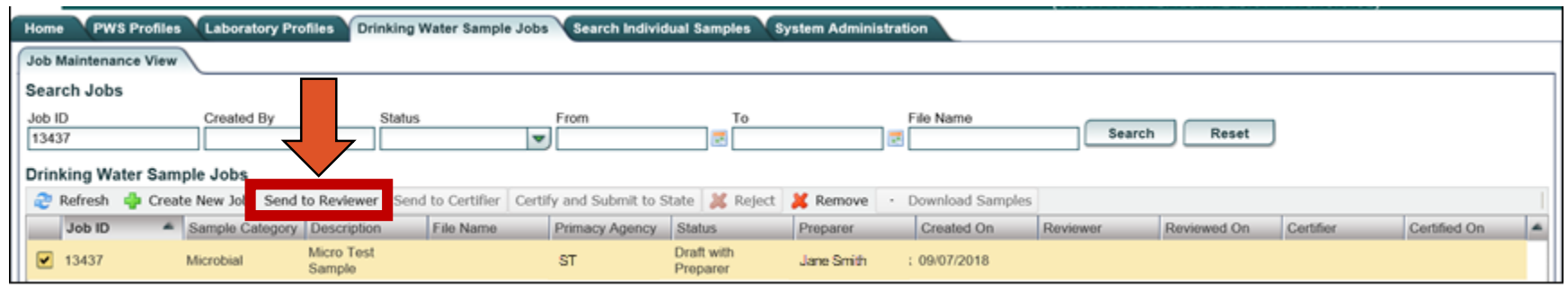
| CMDP Error Description | Explanation of Error | Fields for Labs to Review |
|---|---|---|
| **Missing Data for Fields [sampleRecievedDt]** | No data entered in **Sample Received Date** field. | Add data into **Sample Received Date** field. |
| **Missing Data for Fields [sampleVolume]** | No data entered in **Sample Volume (ML)** field. *NOTE: Only required for Microbial Samples.* | 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]** | *E.coli* sample result was not submitted with TC+ sample result. | Add *E.coli* 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.

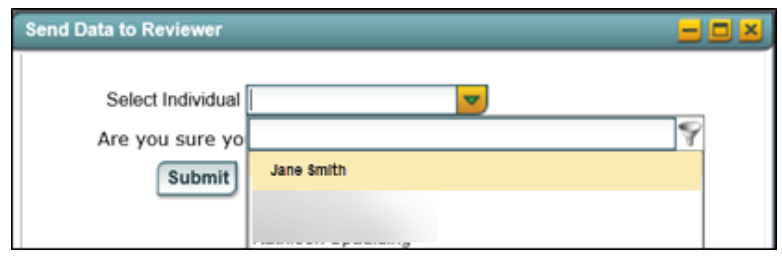
**If no additional errors appear on the Validations tab, proceed to Part 3: Submit Sample Job.**

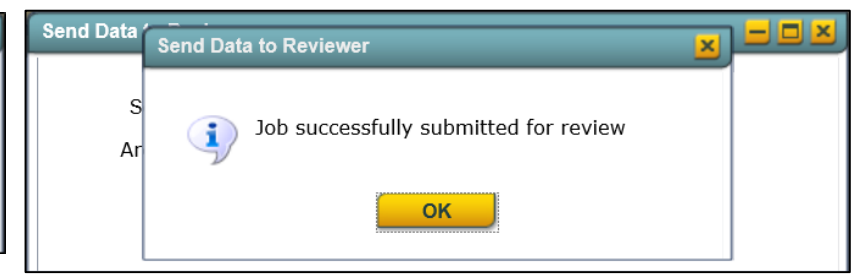
## Part 3: Submit Sample Job

**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 **checkbox** to select the appropriate job.




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



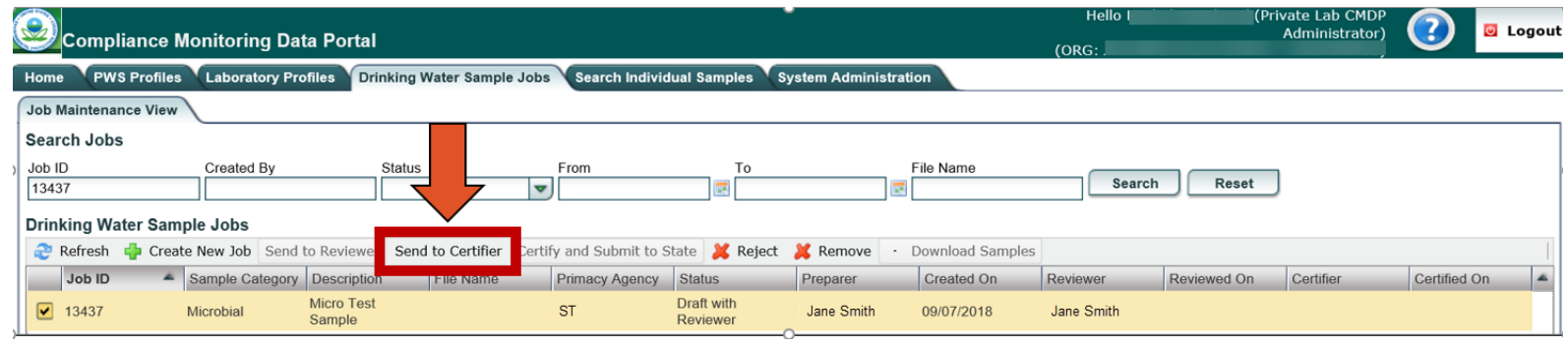




A pop-up will ask you to select the appropriate individual. After the user selects the reviewer, click the **Submit** button.

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 indicating that a job is ready for review (example screen shot to the right). Note: The email is simply an instant notification. The user does not have do anything with the email or even exit out of CMDP. This 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.

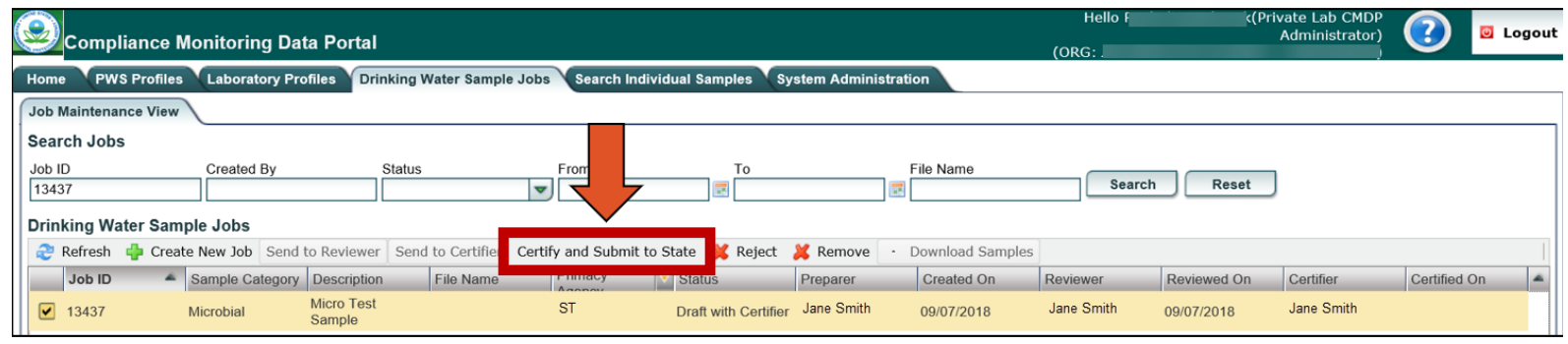



Again, a pop-up will ask the user to select the appropriate certifier.

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 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.



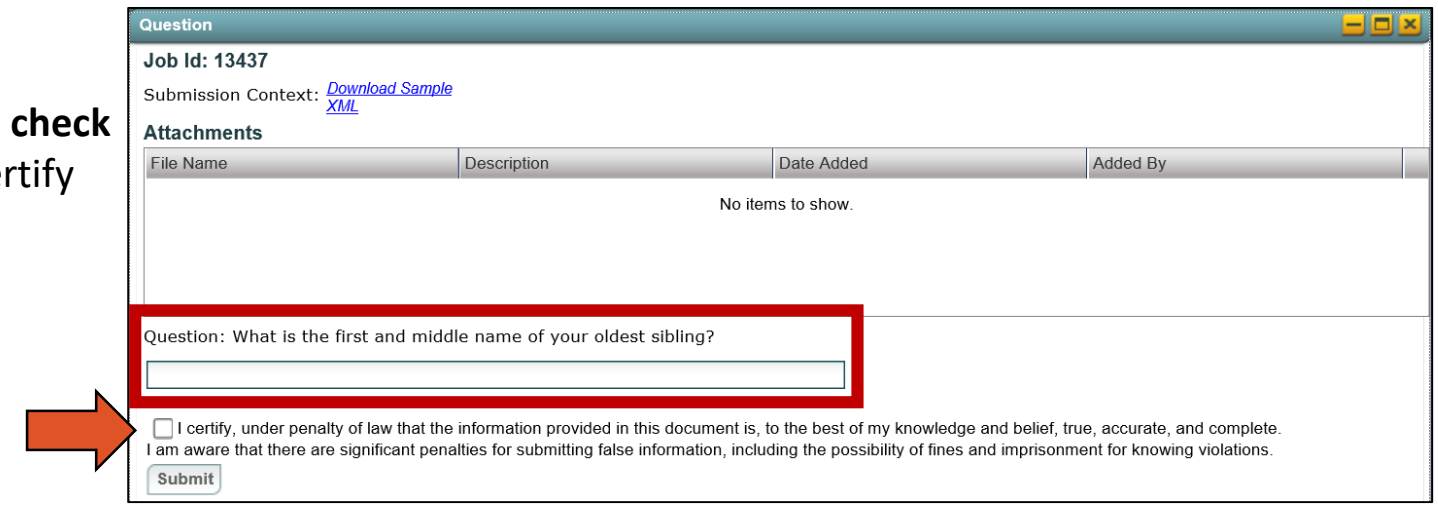

Then, enter your **username** and **password**.

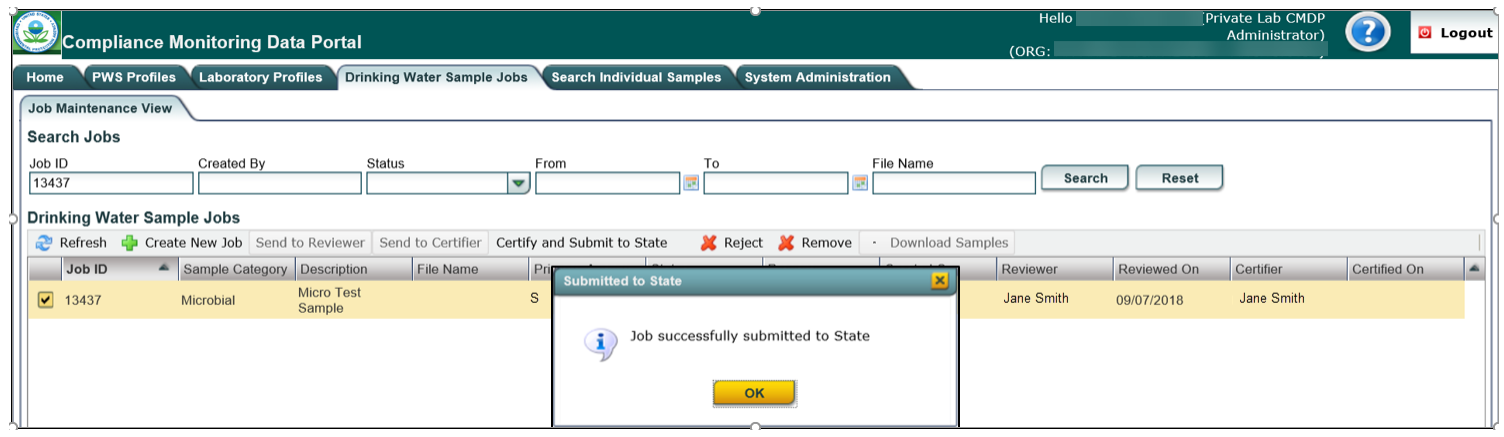
The user will be asked a security question and must click the **check box** (indicated by red arrow in screen shot to the right) to certify the information provided was true and accurate.

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.

-----Original Message-----
From:
Sent: Wednesday, June 20, 2018 7:09 AM
To:
Subject: Drinking Water Sample Validation Error for TESTWAS1 no3***TEST***

Drinking Water Sample Validation Error Sample Id: TESTWAS1 no3 Lab is not certified for this method (353.2) and analyte (1040) for the given analysis date

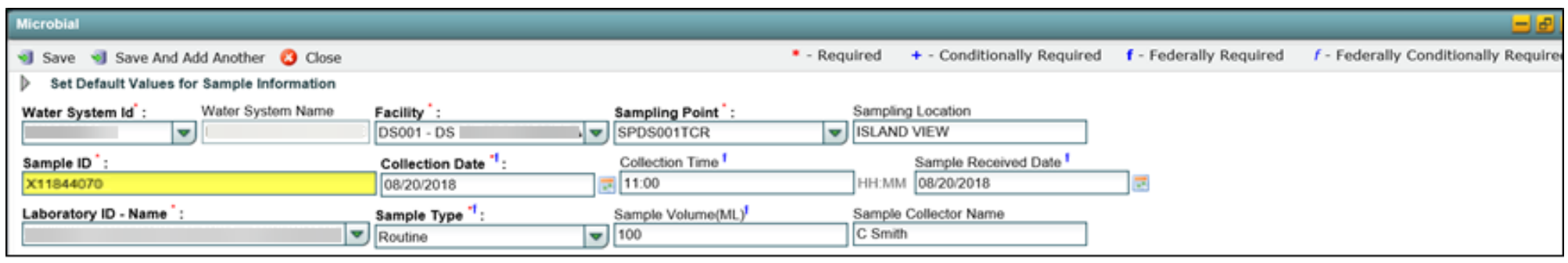
To understand the type of error that occurred, refer to the table below. This table highlights the rejection message as displayed on the email along with an explanation of the rejection, and the specific fields within the web entry form that could generate the error.
**NOTE**: The **(xxxx)** denoted in the **Rejection Message** column acts as a placeholder indicating unique information related to the sample submission will be displayed (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.)<br>*NOTE: Only required for Microbial Samples.* | If contaminant is *Present* 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.)<br>*NOTE: Only required for Microbial Samples.* | If contaminant is *Absent* 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 *before in time* 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:** You will need to re-submit the sample/results through CMDP. However, this process is different than any errors corrected prior to the sample submission to the State (i.e., errors list on the **Validations** tab).

To correct errors after the sample has been submitted to the State, the user must **create a new web entry form with the appropriate edits.** Before creating a new web entry form, it is recommended to rename the **Job Description** with a naming convention that indicates the sample/result is a resubmission.

**NOTE**: CMDP will not allow for the same Sample ID number to be used twice. After the validation errors are corrected within the original submitted record, please **add an "X" to the beginning of the Sample ID #** (e.g., Field name changed from 11844070 to X11844070 highlighted in screen shot below.)




**Step 3:** Once the new sample submission is created through a web entry form in CMDP, review the **Validations** tab for any inconsistencies and submit the sample/result to the State (following the process outlined on pages 1-4 of this document) .

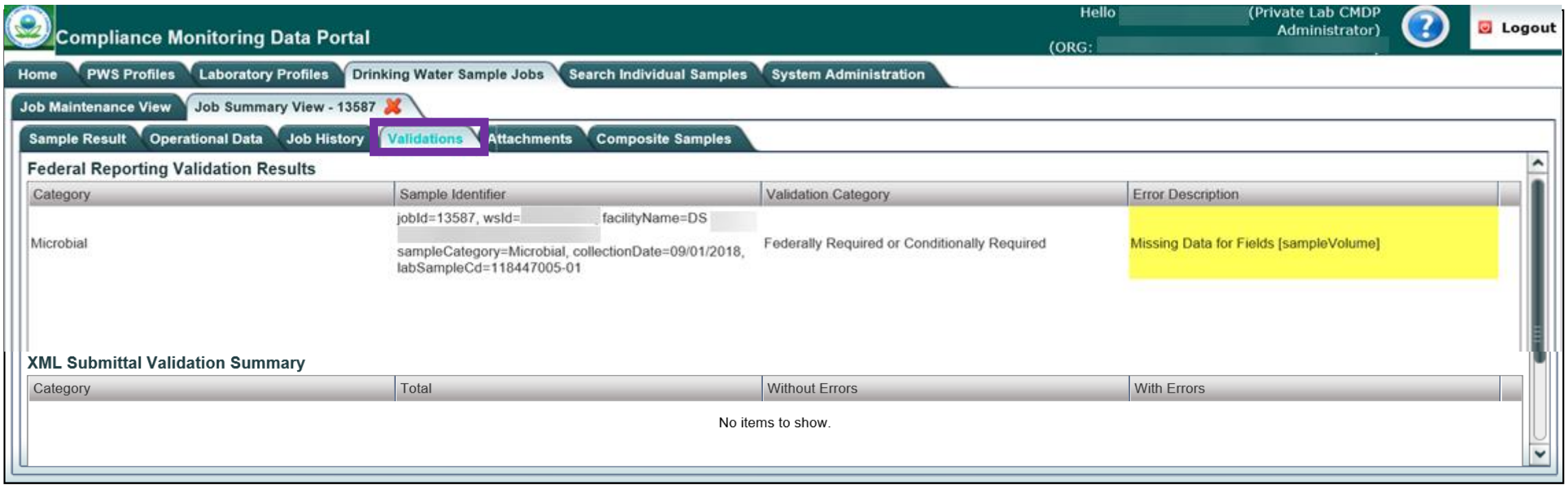
**Congratulations! This completes the process for addressing rejected sample submissions using the Web Entry form.**

## Part 5: Example Scenario of Sample Rejection

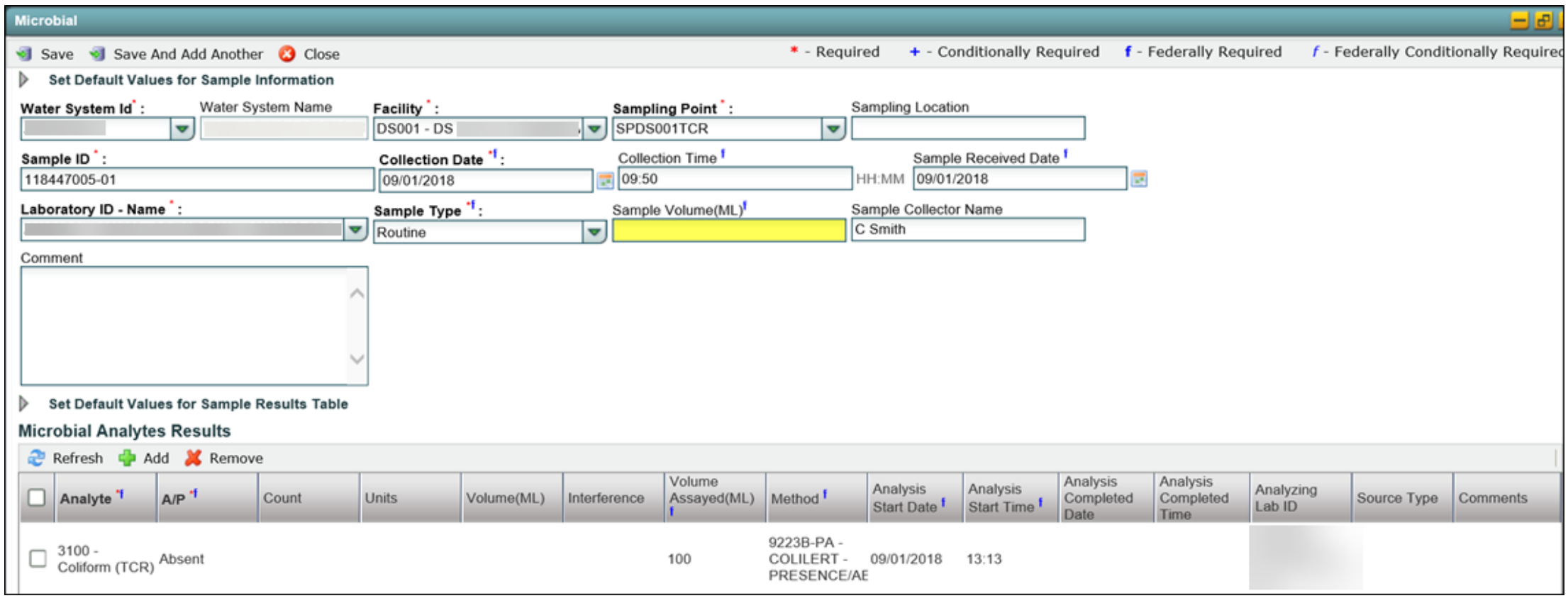
EXAMPLE: The scenario below outlines how a CMDP Lab System Administrator identifies and corrects a federal reporting error with an initial sample submission and how to address a second error identified by the State.

**Step 1:** After creating a new web entry form into CMDP, confirm that all sample submittals are listed on the **Sample Results** sub-tab (refer to page 1 for screenshot example).

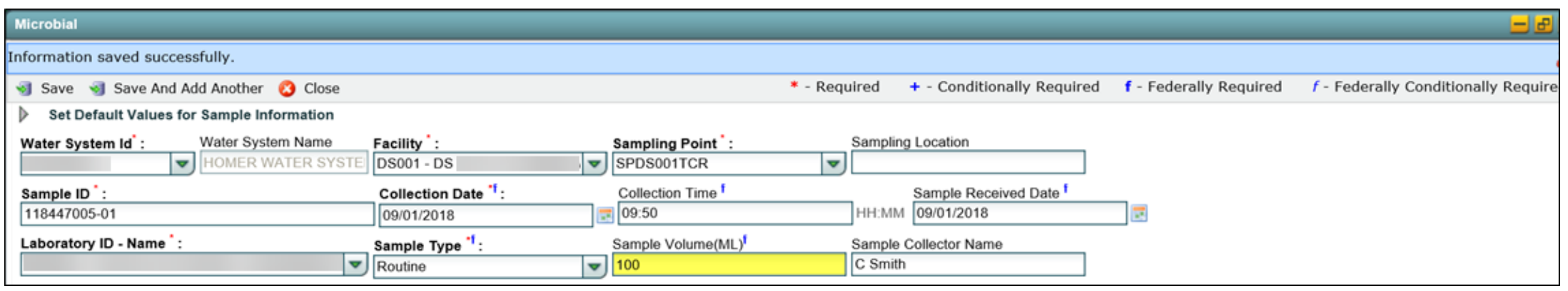
Then, review the **Validations** tab. During review, one validation error is listed under the **Federal Reporting Validations Results** table. The CMDP error message indicates the **Sample Volume (ML)** field is either blank or the information is entered incorrectly.
Before clicking on this row for additional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



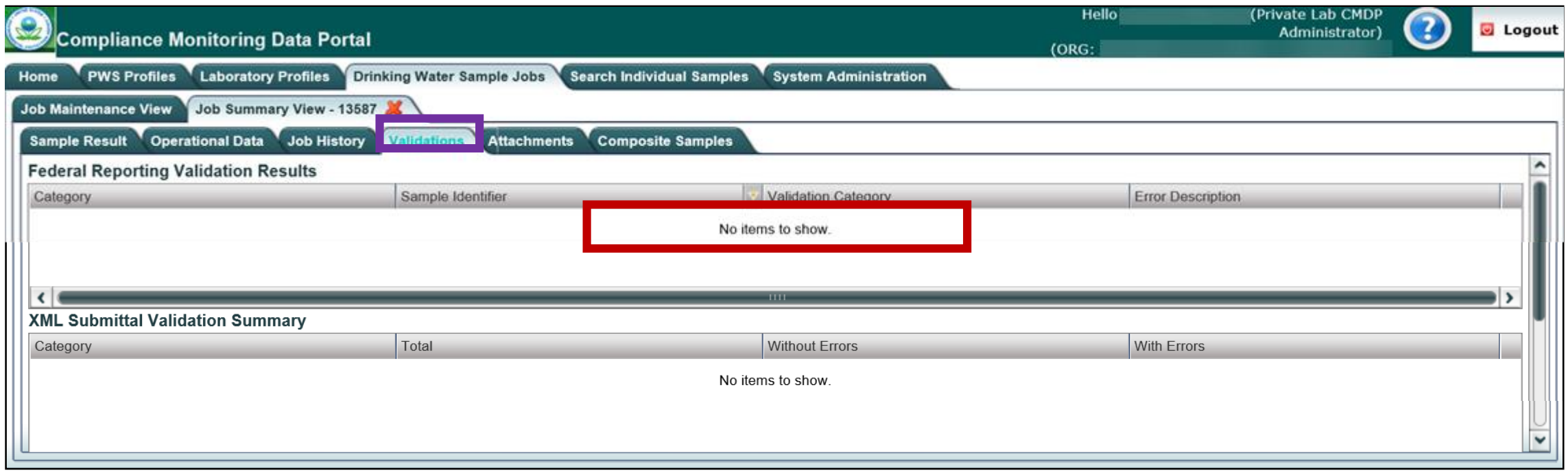

Double click on the error message located in the **Error Description** column to bring up the specific sample submission. In this case, the **Sample Volume (ML)** field was accidentally left blank.




**Step 2:** **Edit the web entry form of the sample submission that contained the error.** Add the appropriate data into the **Sample Volume (ML)** field (highlighted field in screen shot below). Once the form is updated appropriately, select the **Save** button. The "Information saved successfully" notification will appear.

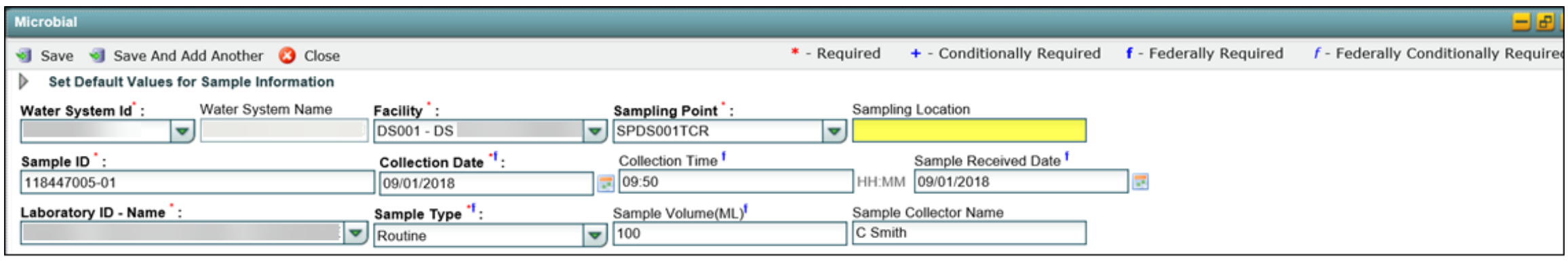


**Step 3:** View the **Validations** tab again to confirm no additional validation errors exist, then submit the sample/results to the State by following the process outlined in Part 3.




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

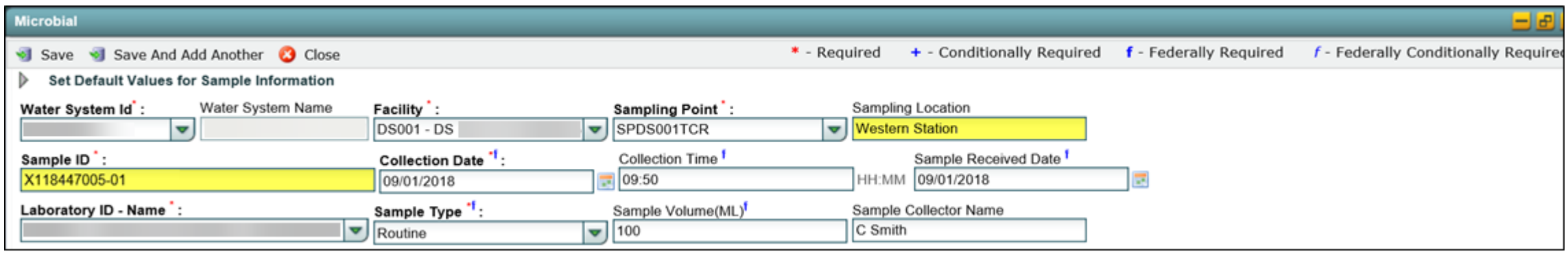
**REJECTED: Submission with missing Sampling Location**




To correct this error, **create a new web entry form** with the appropriate information entered into the **Sample Location** field AND **add an "X"** to the beginning of the **Sample ID** (highlighted fields in screen shot below). Since this error was identified AFTER the submission was sent to the State, the Sample Job will not be able to be deleted from CMDP and must be re-submitted as a new Sample Job.

Once the web entry form is updated with the appropriate information, review the **Validations** tab, and submit the Sample Job to the State (following the process outlined in Part 1- Part 3).

**CORRECTED: New submission with Sampling Location entered**




The sample was successfully submitted to the State and no further validation errors were identified.