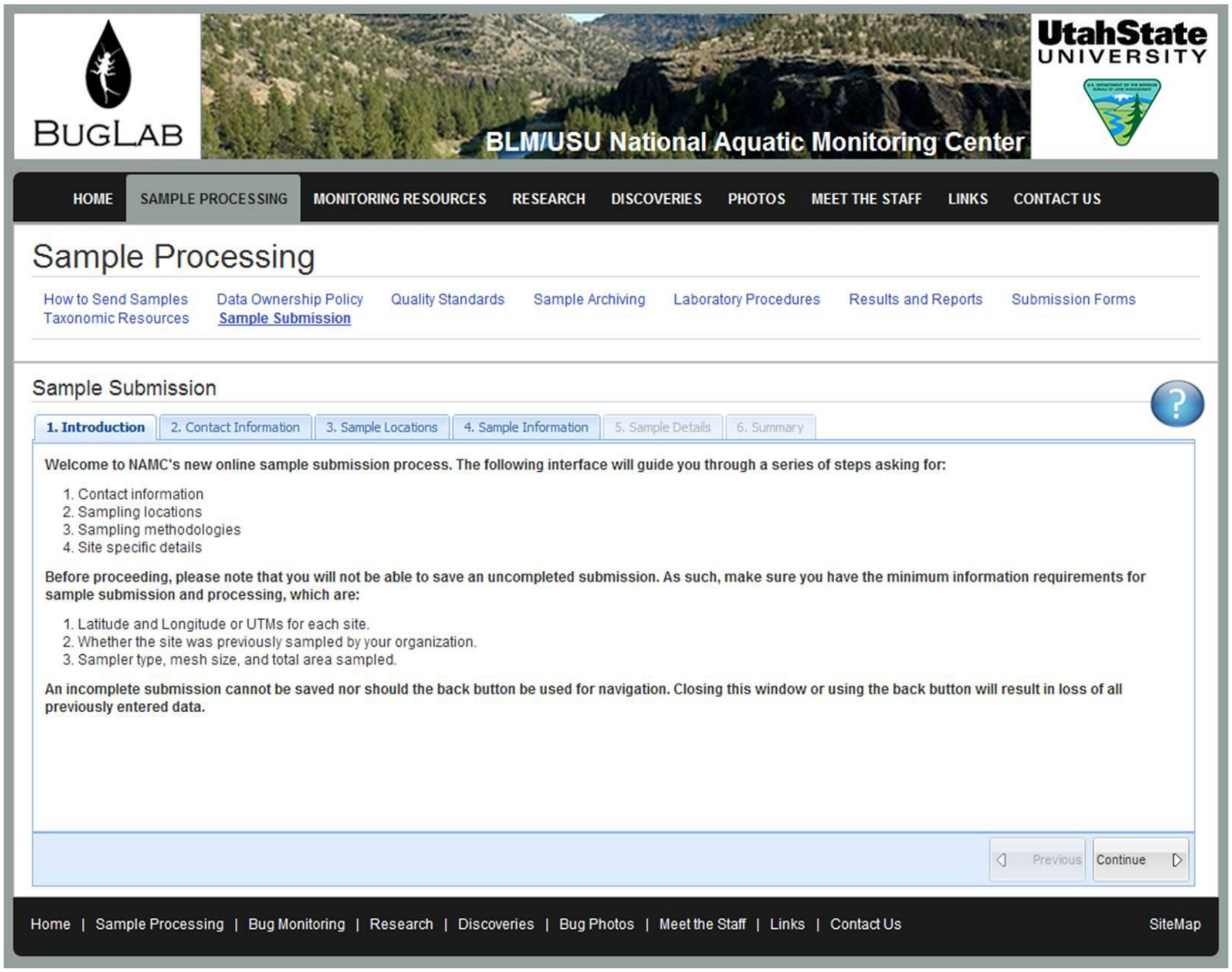
Sample Submission Tutorial

Prior to beginning the Sample Login, the following minimum information will be needed:

- Customer contact Information
    - ***Please provide contact information for the person who should receive the final results (e.g., project PI).***
        - Name
        - Phone number
        - E-mail address
        - Agency
        - Address (if new customer)
- Site Information Sheet
    - Sample coordinates (Lat/Long or UTM)
    - Sample type
    - Sampling method
    - Area

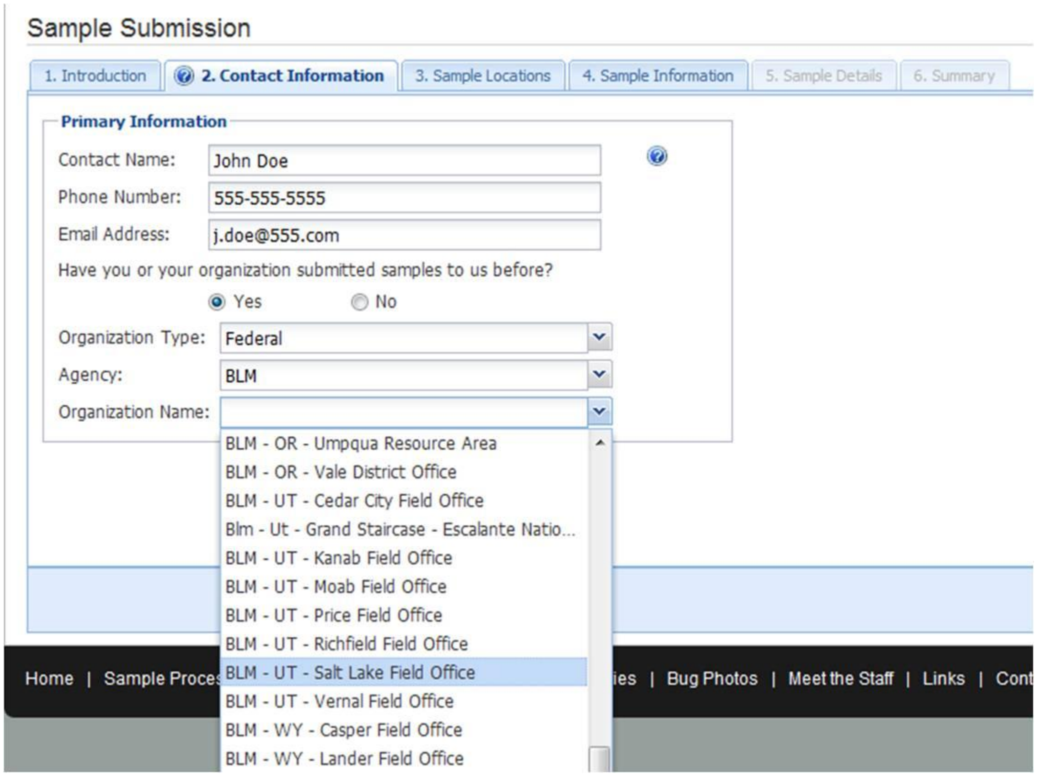
Sample Login:

1) Go to Sample Submission website.
    a) http://usu.edu/buglab/sampleProcessing/sampleSubmission/
    b) The website works best in Google Chrome browsers.
    c) At any point in the process, hover over the Help Buttons for tips on completing data entry or the Contact Us Button to leave us a comment via email or speak with a lab member.
        i) If your are unsure about certain fields, please contact us. In the event that you are unable to contact us, fill in the information to the best of your ability and submit. We are able to edit the data afterwards and will contact you with specific questions about the submitted data.
    d) ***Using the Back button or clicking on other hyperlinks will cause your entered data to be lost.***
        i) You will be prompted with a pop-up window before this occurs.
        ii) We do not recommend leaving partially completed data in the interface to complete at a later time. However, we do advise you to keep the window open should you experience problems or have questions so we can assist you without your previously entered data being lost.



2) Select “Contact Info” from the tabs or by clicking “Continue” from the “Introduction” tab.
   a) Enter Contact Information as prompted
      i) Enter the contact or customer who should receive the data ***(e.g., project PI)***, which is not always the same as the person who collected it. If you are submitting samples on behalf of another individual, please fill in his/her contact information here.
         (1) For example, a team of field technicians may be responsible for collecting and submitting the samples. However, these technicians may be temporary or may not oversee data analysis, thus the results should be reported to a supervisor.

b) Selecting "Yes" or "No" will make a different list of customers available in the dropdown menus "Organization Type" and "Organization Name".



i) Select "Yes" under "Have you or your organization submitted samples to use before?" to view a list of available customers.

ii) You may select "No" if you are unsure. This will give a more complete list of available offices and more flexibility in selecting your institutions proper name. For some types, this selection will also provide you with the option to enter a custom name in a text box.

(1) For BLM customers:

(a) Please select the most relevant Field Office. District and State offices are also listed (if applicable). National Monuments are also included, but other specialty offices may not be listed. Offices are organized by State.

(2) For USFS customers:

(a) Please select the most relevant Ranger District. Forest and Regional offices are also listed (if applicable). Please DO NOT select your forest or regional office if you are more directly affiliated with a specific Ranger District. Offices are organized by Region.

(3) For NPS customers:

(a) Please select the most relevant Park. Network offices are also listed (if applicable). Please DO NOT select your network office if you are more directly affiliated with a specific Park, Monument, or other land. Offices are organized by Network.

(4) For other agencies or private institutions:

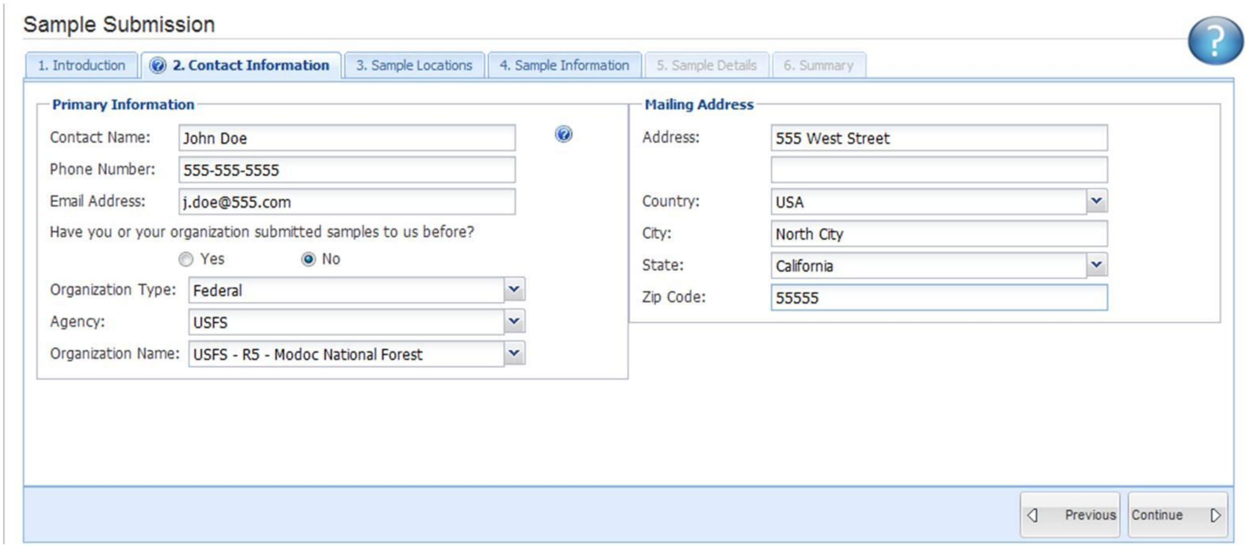
(a) Since we deal with a large variety of institutions, we do not provide complete lists for remaining types. If you are an existing customer, you will find your institution listed, often with the City and State provided for detail. The recommended format for submitting a custom name is:

AGENCY* – Name – City, State

*or Institution, abbreviated

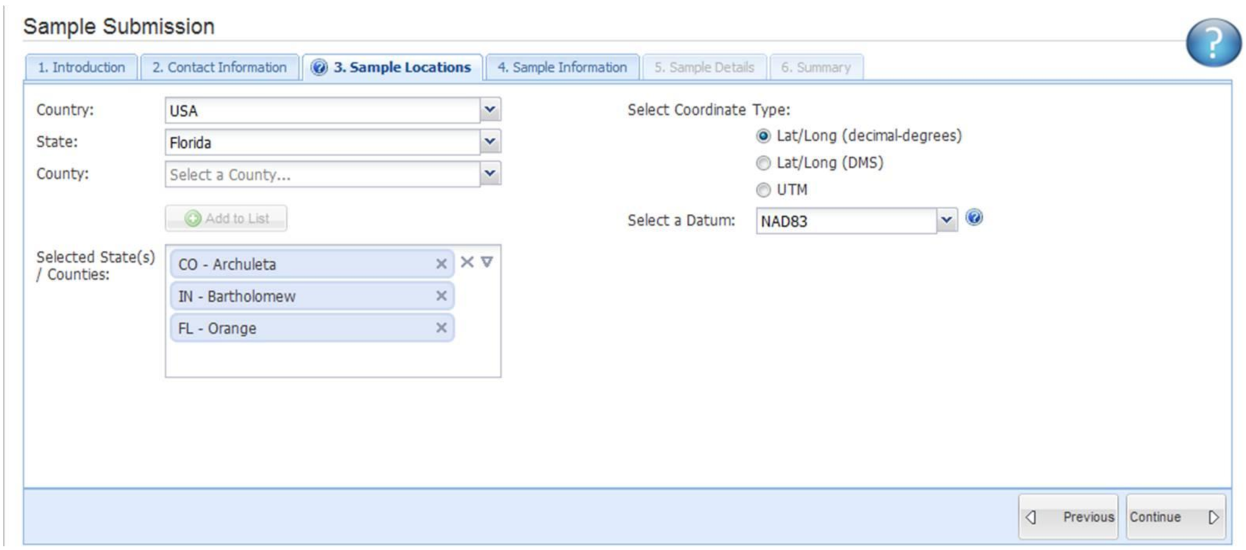
Example: USU – National Aquatic Monitoring Center – Logan, UT

c) If you are a new customer, additional address information is required.



d) Click "Continue" at the bottom of the page or "Sample Location" tab to go to the next page

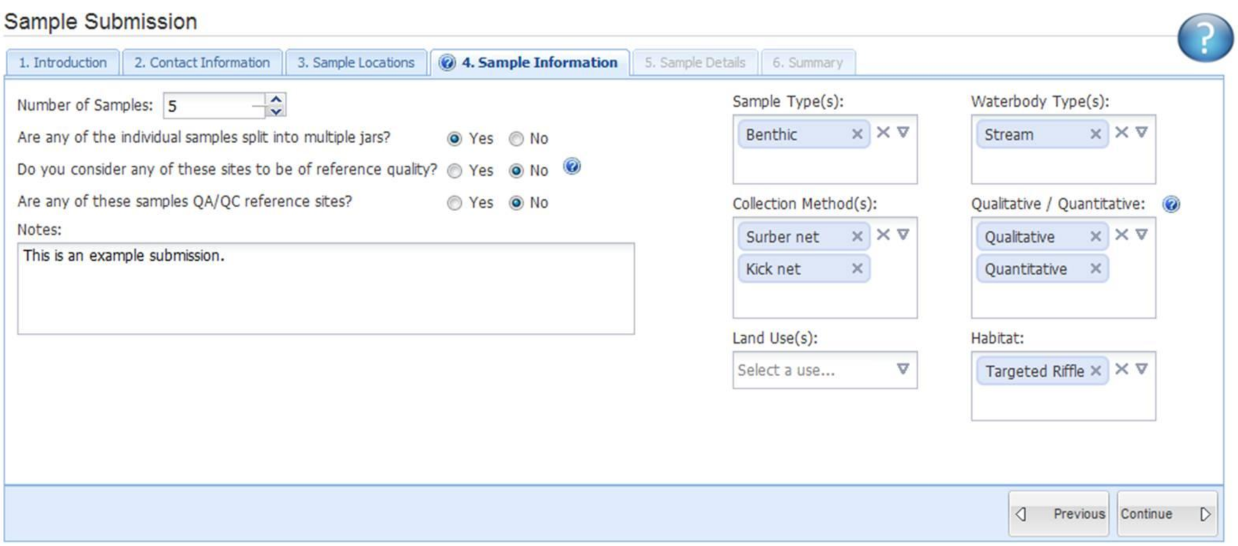
3) Enter "Sample Locations"
   a) Fill in all fields.
      i) In adding counties, be careful to click "Add to List" after selecting the county from the dropdown. If this is not done, you may get to the final submission step and not have the correct counties available.
         (1) Fill in all possible counties at this time. You will not be required to assign them to individual samples until the "Sample Details" tab. If only one State/County combination is selected, you will not be required to enter this information again.
      ii) For coordinates, both Lat/Long or UTM are acceptable but you cannot submit a mix of the two. Select the coordinate type that the majority of the sites have and only convert the remaining sites if needed via GIS, Google Earth, or an external website.
         (1) At a later step in Sample Details, Latitude and Longitude coordinates can be provided in a variety of formats. Acceptable formats include:
            (a) Decimal Degrees (ex: 39.3399°)
            (b) Degrees Minutes Seconds (ex: 39° 39' 39")
            (c) Degrees Decimal Minutes (ex: 39° 39.39')



            (d) Each format can be entered without symbols, but with spaces or colons between degrees, minutes, and seconds. Once entered, all formats will convert to decimal degrees instantly.

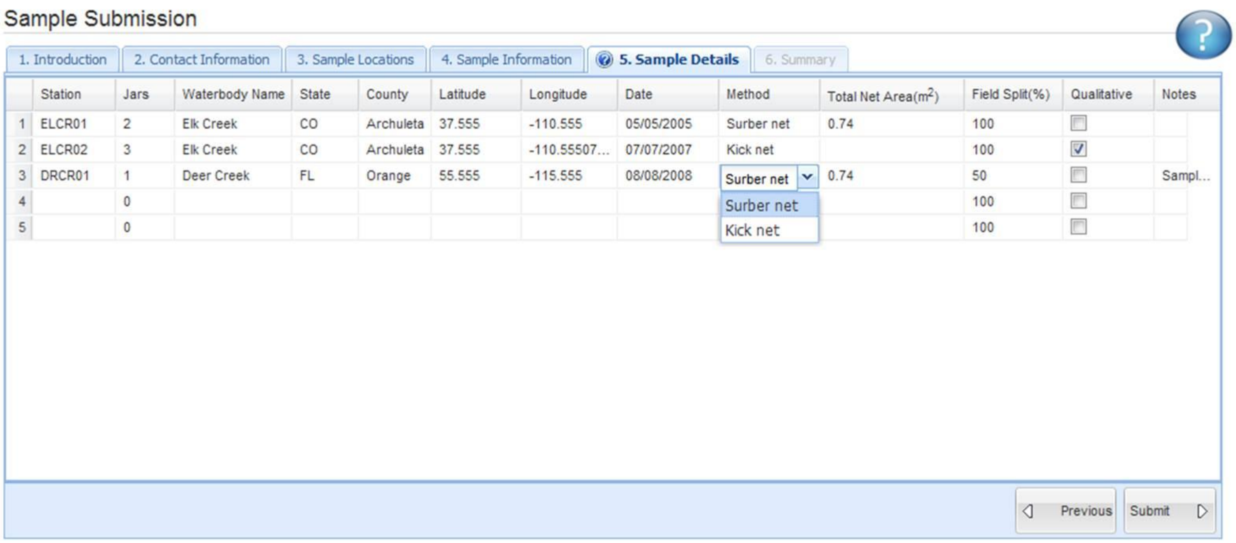
   b) Click "Continue" at the bottom of the page or the "Sample Information" tab to go to the next page

4) Enter the "Sample Information"
   a) Fill in all fields.
      i) Fill in all possible types, methods, habitats, etc at this time. You will not be required to assign them to individual samples until the "Sample Details" tab.
         (1) Land Use is optional and is the dominant land uses for each site. If you desire to indicate more specific land uses or site information, please utilize the Notes field in Sample Details.
      ii) Help buttons (question marks) are given next to frequently confusing fields.
      iii) Depending on the sample type, additional fields may appear on this tab or in "Sample Details"
   b) The most common type of sample submitted to NAMC is a quantitative benthic sample collected using a Surber net with 0.74 sq m (8 square feet area which is 8 composited samples) collected in a Stream at a Targeted Riffle.



      i) Other samples frequently collected are:
         (1) Hess net (Benthic, Quantitative, Riffle)
         (2) Drift (Quantitative, Water Column, Net deployment (optional in "Sample Information", required in "Sample Details"). Only fill in deployment duration if it is the same for all samples.)
         (3) Fish guts (Qualitative, Reachwide, Stomach. Additional Species, length and weight information will be required in "Sample Details".)
         (4) Qualitative ("Reachwide" which indicates that is was taken in unique habitats in addition to riffles such as pools, vegetation, etc)
         (5) Zooplankton (Plankton net, Quantitative, Littoral (shallow water, typical of Wetlands) or Pelagic (deep water, typical of Lakes), Tow Direction and Net Diameter (both are optional in "Sample Information", required in "Sample Details"). Only fill in if it is the same for all samples. Additional tow length and net size will be required in "Sample Details".)
   c) Click "Continue" at the bottom of the page or the "Sample Details" tab to go to the next page. If sample information is incomplete, the page will not advance.

5) Enter the "Sample Details"



i) Note, fields that were the same for all samples are not shown as columns in the "Sample Details".

ii) For sample sets over 20 where data entry is tedious, you can "drag and drop" from a spreadsheet into the interactive table. The table allows transfer of information from a spreadsheet either by copy/paste or drag/drop. This is especially recommended for large datasets (>25 samples) or data which you have already compiled electronically. To do so, format a spreadsheet (or rearrange an existing spreadsheet) in the exact column order shown in the interactive table. For columns that are checkboxes, code your data in 0 and 1 format (0="No", 1 ="Yes"). If you do not want to edit default values already present in the grid (such as Field Split =100), but want to transfer data to the Notes column, you must create a column replicating the values in the grid. Alternatively, if you only want to transfer information for the first three columns, only create three columns in your spreadsheet and manually enter the remainder of the data after completing the copy/paste or drag/drop operation. Once the data is prepared in your spreadsheet, select your entire spreadsheet (excluding column headers). Either copy, click on the grid, and paste OR select the upper left hand corner of the spreadsheet selection and drag into the grid. Finally, review the information and make any changes. If a cell is blank, select from options in the dropdown menu. Blank cells result from spelling errors and other values that do not match the options selected in previous tabs.

b) "Station" should be entered in CAPS and should be a short abbreviation of the water body name (Example: Elk Creek 01 = ELCR01)

i) This name should be unique for that sample if possible. For example, if you collected at Elk Creek 2 times, call them "ELCR01" & "ELCR02". The station information will be combined into one site during data validation based on coordinates. Keeping the names different helps the sorters to not mix up the samples (they verify Sample#, Station, and Sample Date, but if too many samples have the same station name they tend to enter the information incorrectly).

c) Jars

- i) If the sample was split between multiple jars, indicate how many. A sample in multiple jars does NOT get multiple sample #s (rows). Often samples do not fit in a single jar in the field, but they are processed as one unit. Only make separate rows for samples sharing the same station, date, and other information if the samples are true separate replicates.

d) Enter water body name with proper capitalization (Example: “Elk Creek” not “elk creek” or “ELK CREEK”)

e) Use drop down menus to select previously selected States, Counties, Methods, and other fields.
- i) Only previously selected options will appear.

f) Total Area
- i) This is required for quantitative samples.
- ii) Again, the most common submitted sample type is a quantitative benthic samples collected using Surber net with 0.74 sq m (8 square feet area) collected in a Stream at a Targeted Riffle.
- iii) If you are unsure about the area, please contact us now or after submission. This value is important because it is used to calculate total density.

g) Field Split
- i) Typically 100% meaning that the entire sample was preserved. If a portion of the sample was discarded in the field, indicate the percent that was retained and brought back to the lab. This is NOT for indicating what percentage of the sample was put in each jar. If you are unsure, leave this value at 100%.

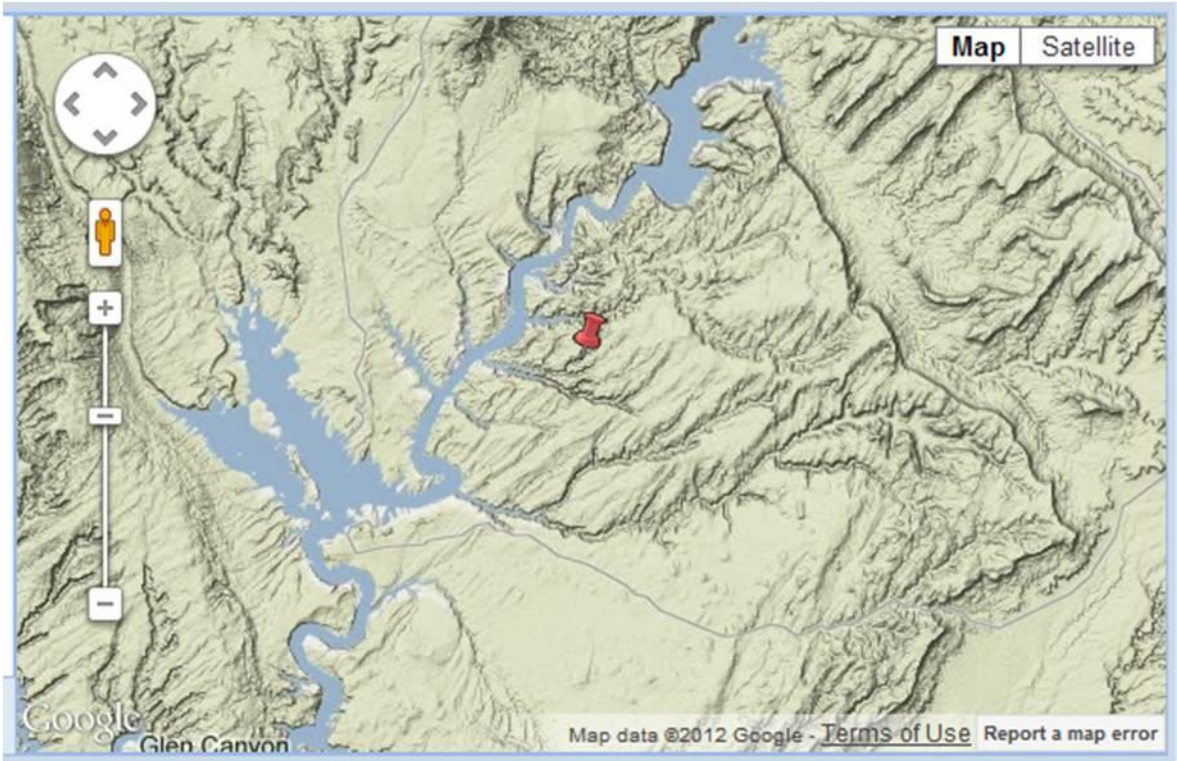
h) Qualitative
- i) A check mark in this box indicates that it is Qualitative. No check mark means Quantitative.

i) Notes
- i) Any field, lab, or other notes.

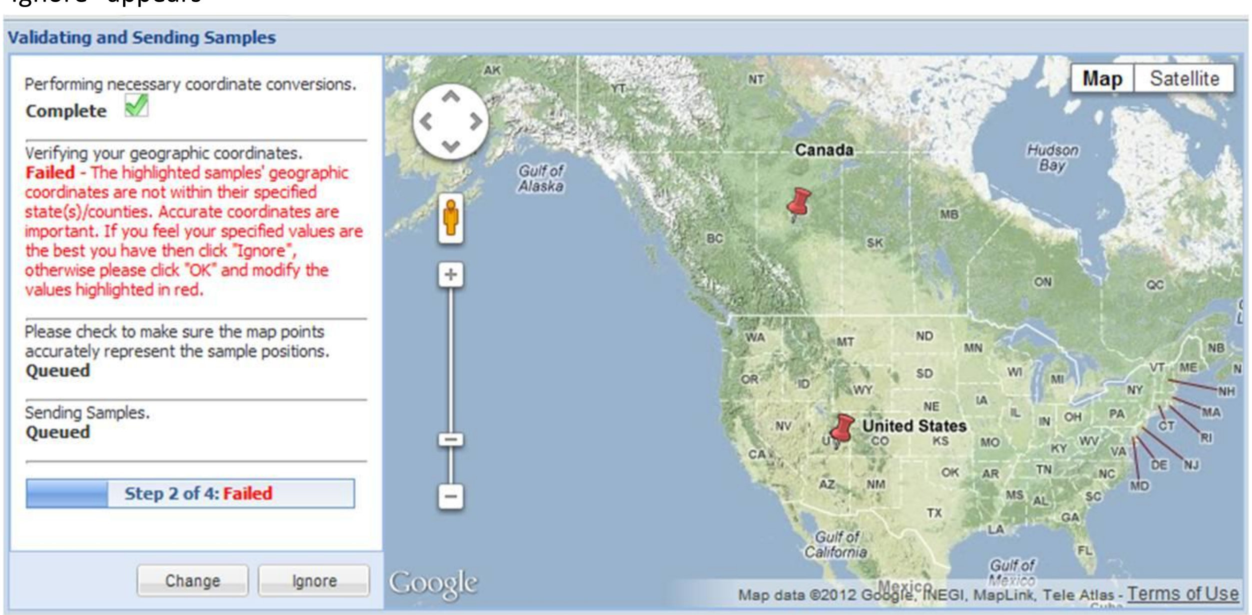
j) Review entries to verify all information has been entered correctly
- i) CAUTION: If data was entered incorrectly or incompletely but found after continuing to the “Sample Details” screen, returning to any previous tab will clear data entered and require new entries to be made.
- ii) The only exception to this is when the site validation fails, there is an option to go back using the “Change” button in “Visual Validation” (see next section).

k) Click “Submit”

6) Complete “Visual Validation”
   a) A map of the sample sites will open
      i) Check sites to verify that all appear to be located on a stream, lake, wetland, etc.



   b) Program will verify the coordinates match the County and State entered in the “Sample Information” screen
      i) If the coordinates don’t match, a red “Failed” flag will appear and a prompt to “Change” or “Ignore” appears



         (1) Click “Change”

(a) Incorrect data will be highlighted in red.

	Station	Jars	Waterbody Name	State	County	Latitude	Longitude
1	ELCR01	2	Elk Creek	CO	Archuleta	37.555	-110.555
2	ELCR02	3	Elk Creek	CO	Archuleta	37.555	-110.55507...

(b) Verify data entered matches data submitted.

(c) Correct any errors found

(i) State, County, Lat, and/or Long can be corrected to fix this error.

1. Do not assume state/county is the error. Instead, check your data entry (including conversion) of the coordinates and make sure the stream is falling on a stream with the same name.

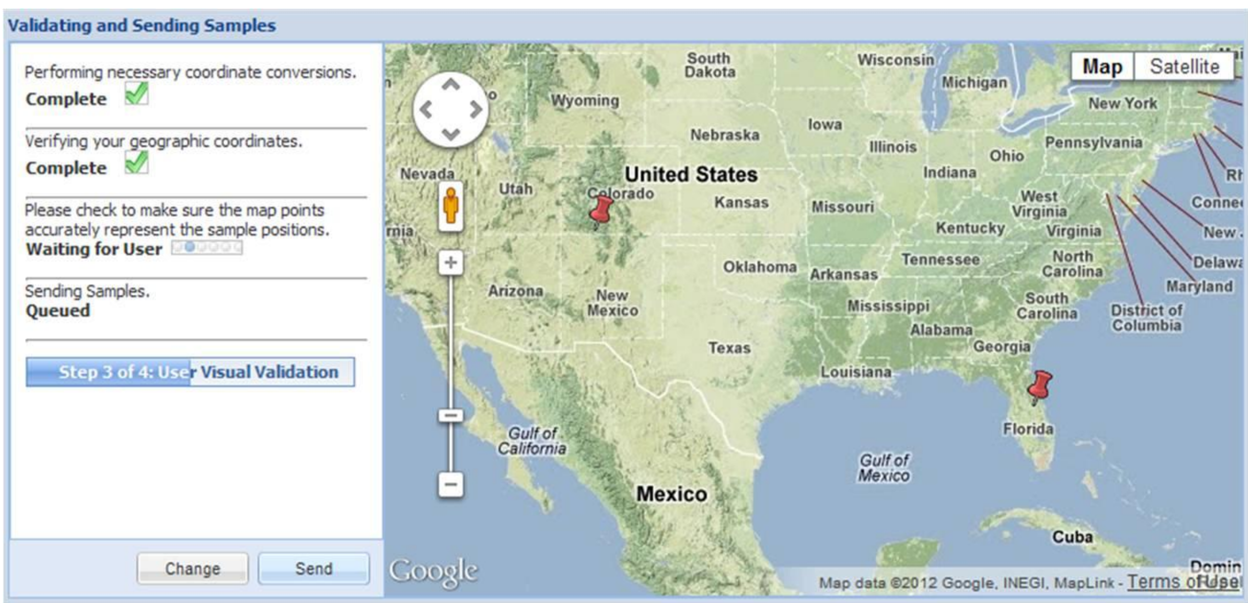
(ii) If data entered was correctly, make a note in the "Notes" column to indicate the potential problem. This will help us in verifying the site at subsequent station matching and GIS analysis steps.

(d) If verified click "Submit".

(i) You can toggle back and forth between "Submit" and "Change" as many times as desired.

(ii) If the data is still failing, click "Ignore" after appropriate Notes were made for affected samples.

ii) If the visual validation is correct, click "Send"



iii) If you get an additional pop-up error window during submission, do NOT close the browser or all data will be lost. Contact us immediately to see if your data was submitted or to help identify errors.

7) “Chain of Custody” (COC) or “Sample Log” document
    a) Document opens after completing the visual validation
    b) Print the document
        i) Right click and print
    c) Consult the document and our website for additional shipping directions.
    d) Place the printed COC document with your submitted samples. If your institution requires additional documents, please include them. If you have additional sample processing requests, please specify in detail on a cover letter.
    e) You will receive notifications when your electronic data has been approved and when we have received your sample shipment.