Lab Data Submittal 2.0 (+ CMDP)



Web Application

User Manual

NC DEQ Division of Water Resources Public Water Supply Section

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Glossary

- Analysis For the purposes of this manual, analytical information added to the sample (see "Sample" definition below); corresponds to the fields encountered on state laboratory forms below the "double line". Note that Sample (see Sample below) and Analysis are split into different screens in the Bacti/GWR module and are on the same screen for chemicals.
- Batch A set of sampling results that can be processed by the software at the same time.
- **CMDP** Compliance Monitoring Data Portal. An application created by the federal Environmental Protection Agency (EPA) to facilitate electronic reporting to the State.
- CROMERR Cross-Media Electronic Reporting Rule Drinking Water Watch A website, available to the public, for viewing drinking water information; obtains data directly from the State database, SDWIS. URL: <u>https://www.pwss.enr.state.nc.us/NCDWW2/</u>
- **EPA** Environmental Protection Agency.
- HPC Heterotrophic Plate Count (HPC) submission capabilities are included in the software for labs certified for HPC. HPC analysis can <u>only</u> be submitted as part of a Total Coliform (TC) sample and will be listed in SDWIS as a separate result under the TC sample's lab log ID.
- Lab ID A five-digit identification code issued by the State to each certified laboratory.
- Lab Log ID A unique sample identification number; cannot be replicated by the same laboratory.
- LDS Lab Data Submittal Web-based software provided by the PWS Section to certified laboratories to submit drinking water data to the State. URL: <u>https://pws.ncwater.org/LDS</u>
- **LDS Database** A database (separate from **SDWIS** see below) that is hosted by the State to store data that has been entered and saved by laboratories using the LDS application.
- NCID North Carolina Identification System (NCID) State service that handles login credentials to access State-run websites. Every laboratory must obtain a NCID business user ID and password and supply the user ID to the PWS Section in order to use LDS. URL: <u>https://ncid.nc.gov</u>
- **PWS Section** Public Water Supply Section.
- Sample For the purposes of this manual, information about the water system, sample type, facility type, and sample collection details; corresponds to the information fields on the State laboratory analysis form above the "double line." Note that Sample and Analysis (see Analysis above) are split into different screens in the Bacti/GWR module and are on the same screen for chemicals.
- Sampling Result All information about the sample (see Sample) and analysis (see Analysis) required for submittal of a bacteriological result to the State. In the manual, this definition will be mainly used in reference to submissions using the Bacti/GWR module; for chemicals, Sample and Analysis are used throughout the text interchangeably. Note that Sample and Analysis are split into different screens in the Bacti/GWR module and are on the same screen for chemicals.
- Sampling Status Report A website that presents sampling information for the water system, including monitoring requirements and most recent sampling results. Obtains data directly from the State database, SDWIS. URL: <u>https://pws.ncwater.org/WSReports</u>
- **SCS** Shared CROMERR Services, EPA's service that handles login credentials to access the federally run website CMDP for sample upload and certification. URL: <u>https://encromerr.epa.gov/</u>
- **SDWIS** Safe Drinking Water Information System, state database of drinking water inventory, compliance, and enforcement data directly accessible to state personnel only.
- **XML Reporting** Extensible Markup Language (XML) format for electronic reporting of compliance data to the State. The key element of this process is encoding compliance data in a machine-readable format.

1. Introduction

1.1. Overview

The Lab Data Submittal (LDS) web application was made available to laboratories to submit drinking water analyses to the State in August 2013. Initially, the software only provided the capability to report bacteriological and HPC analyses. The second edition of LDS extended the capability to report all the other required drinking water contaminant analyses to the State and was released in December 2014. The most recent edition of LDS was updated to upload sample data to EPA's CMDP application and was released in January 2018.

The purpose of this manual is to describe the main features of the LDS software, its interaction with CMDP and the State database (SDWIS), as well as, data entry and submission details.

1.2. Software Capabilities

The LDS software is designed to allow State-certified laboratories to enter, store, and submit their compliance and non-compliance analyses of drinking water samples, both individually and in batches, to the State. It also allows review of submissions, correction of rejected records, and generation of laboratory reports.

LDS accepts analytical data for compliance with the North Carolina Safe Drinking Water Act. The web interface is connected to <u>SDWIS</u>, which makes it possible to either select or automatically populate water system (WS)-specific choices, such as WS No., WS name, facility ID, sample point, and previous sample information with real time data from the State database. Note that LDS will only display the water systems, facilities, sample points, etc. that are currently active in SDWIS.

Contact the PWS Section for any updates to the SDWIS inventory that need to take place in order for data to be entered or submitted.

1.3. Work Flow

Below are the steps required to successfully enter and submit sampling data to the State. Each step mentioned here will be described in more detail in subsequent sections.

- Entering batch information (if applicable);
- Entering sample and analysis information (on separate screens for Bacti/GWR);
- Uploading sample information to CMDP;
- Submitting and certifying sample file in CMDP;
- Correcting submission errors (if applicable).

2. Using LDS

2.1. Logging In

- C C C	2 U
- And and	
	NC LAB DATA SUBMITTAL +CMDP
	NCID:
	Deseword
	Password:
State of North Carolina	Ok

Figure 1. Login Screen

You can connect to the LDS website by using the following address: https://pws.ncwater.org/LDS/pages/samples.aspx

Once connected to this URL, you will be presented with a screen as shown in Figure 1, where you must use your user ID and password (obtained from <u>NCID</u> and registered with the PWS Section) in order to login.

Before connecting to LDS, please make sure that pop-ups in your browser are unblocked for the LDS page (https://pws.ncwater.org/LDS/pages/samples.aspx). See Appendix 3 "<u>To enable pop-ups</u>."

After logging in, the next screen will display modules for each of the contaminant groups for which your laboratory is currently certified by the State Laboratory of Public Health. To proceed to your intended contaminant group, select the corresponding group module:



Figure 2. Certified Contaminant Groups

The box at the bottom left corner of the screen is "checked" by default. If your lab's certification for a particular contaminant method has expired since the time of analysis, you will need to "uncheck" the box to be able to enter that data.

2.2. Entering Bacteriological (Bacti) Data

2.2.1. Main View - Bacti

Add Samp			W Edit atch	BULK Print All	Print Selected		elete lected		Jpload Upload Upload	ad Go To 🕑 Hide	accepted San	Group:	Data Submittal 2. BACTI/GWR <u>My.Reports</u> Download State Form		
Sar	npl	es se	arch B	Water System	nNo. ▼	Search	For:	0,		<u>Clear</u> 🥥 🕚	D 🖢 Pag	e 1	of 2 Go 🔶		<u>Help</u> Logof
<u>Sel</u>	Edit	Analysis	Rep	Lab Log ID		<u>Status</u>	<u>Rule</u>	<u>Type</u>	<u>Water Sys</u> <u>Number</u>	<u>Water Sys Name</u>	Loc	Free <u>Cl</u>	Tot CI Collected On	TColi	EColi
	\geq	٨	4	TEST_TC_POSITI	VE_M_1	RDY	TCR	RT	NC2049015	CHESAPEAKE POINTE MA	ASTER 155	1	10/29/18 08:00 AM	0	٩
	\geq	٨	4	TEST_TC_REPEA	T_M_3	RDY	TCR	RP	NC0332010	DURHAM, CITY OF	115	1.2	10/24/18 08:00 AM	٩	٩
	\geq	٨	4	TEST_TC_REPEA	T_M_2	RDY	TCR	RP	NC0332010	DURHAM, CITY OF	122	0.4	10/24/18 08:00 AM	0	٩
	2	<u>_</u>	4	TEST_TC_REPEA	T_M_1	SUB	TCR	RP	NC0332010	DURHAM, CITY OF	120	1	10/24/18 08:00 AM	0	0
	2	<u>ی</u>	8	ERIC_102318_TC	R	RDY	TCR	RT	NC0392010	RALEIGH, CITY OF	123		10/01/18 12:00 PM	0	٩
	\geq	2	4	ERIC_TEST_02		RDY	TCR	RT	NC0392010	RALEIGH, CITY OF	123	1	10/01/18 12:00 PM	0	0
	2	2	8	TEST_TC_POSITI	VE	RDY	TCR	RT	NC0332010	DURHAM, CITY OF	120	1	10/15/18 08:00 AM	0	٩
	2	4	8	15651+185		PST	TCR	RT	NC0144015	CANTON, TOWN OF	120	1	08/30/18 08:00 AM	N/A	N/A
	2	<u>_</u>	4	37724_091918_00	103	SUB	TCR	RP	NC0392020	CARY, TOWN OF	123	1	09/06/18 12:00 PM	٩	٩
	2	2	8	37724_091918_00	102	RDY	TCR	RP	NC0392020	CARY, TOWN OF	123	1	09/04/18 12:00 PM	٩	٩
	2	٨	8	123		RDY	TCR	RT	NC1058015	SCENIC WOLF LAUREL #	5 123		08/02/18 11:10 AM	٩	N/A
	2	4	8			ANL	TCR	RT	NC1058012	SCENIC WOLF LAUREL #4	4	0.5	07/10/18 09:00 AM	N/A	N/A
	\geq		8	37724_052318_00	02	RDY	TCR	RT	NC0392010	RALEIGH, CITY OF	123	1	05/01/18 12:00 PM	0	٩
Total	Sample	es: 25	User	NCIDusername					Sort: Date	Updated - Descending	Selected: 0		Clear Selected		

Figure 3. Main View – Bacti

Once logged in, you will see the Main View Screen, as shown in Figure 3 above.

Main View displays all <u>samples</u>, <u>analyses</u>, and complete <u>sampling results</u> that are currently in the queue. It also contains search boxes and various action buttons to accomplish all of the data entry, retrieval, submission, review and printing tasks that are explained in detail throughout this manual.

The top row of buttons, see picture below, from left to right, contains the following:



- "Add Sample" opens Bacti Sample Detail Screen, see Figure 4.
- "Add Batch" opens Add New Bacti Batch Screen, see Figure 10.
- "Edit Batch" to begin entering sample information, followed by analysis information for batches, see Select/Edit Bacti Batch Screen, Figure 11.
- "BULK Print All" allows the user to print all entries in Ready ("RDY") or Submitted ("SUB") status displayed on the Main View Screen.
- "Print Selected" prints all checked entries on the Main View Screen.
- "Delete Selected" deletes all checked entries (does not apply to entries in "Accepted" status).

- "Upload Selected" converts only selected samples into XML format and uploads file to CMDP (for expedited submission of positive, repeat, and triggered samples and uploading composite samples).
- "Upload All RDY" converts all samples in RDY status into XML format and uploads the files to CMDP.
- "Go To CMDP" opens a new tab in the browser with the CMDP login screen.
- "Contaminant Group" clicking on the magnifying glass returns to the screen in Figure 2 to select a different contaminant group.
- "Hide samples already accepted to SDWIS" checkbox when checked, displays all entries in statuses (see <u>Appendix 1</u>) other than "ACC", for "accepted", in Main View. Sampling results that have been accepted into SDWIS can be viewed by unchecking this box.
- "Auto Refresh" when checked, updates status of records relative to their acceptance into SDWIS.
- "My Reports" generates a report of historical data in Excel format.
- "Download State Form" prints a blank State Bacteriological Analysis Form.

The next row, as seen below, contains search boxes ["Search By" (shown above with the available search categories) and "Search For" textbox], a "Clear" hyperlink (to clear "Search For" textbox), a "Refresh" button (to update status of a submitted sample result), "Help" to bring up this manual and "Logoff" button. The box between the "Refresh" button and "Logoff" will display page navigation buttons when more than one page of samples exists.

Page 1 of 7 Go	

To use this sample search function, select the dropdown category you wish to "Search By", then enter the applicable information/code in the "Search For" textbox and press your keyboard's "Enter" key. For example, if you select Search By "Water System No." you must enter the water system number into the "Search For" textbox. If you want to Search By "Status", use one of the codes listed in Appendix 1 for Sample Status. If you want to Search By "Rule", you must enter "TCR" for Total Coliform Rule or "GWR" for Ground Water Rule. Your sample search results will be displayed on the Main View Screen.

Next row, immediately below the sample search criteria bar, contains action buttons and display fields (below the underlined column headings) for entries in the queue. Underlined column headings, when clicked, will sort the entries under the column (or select all rows in the case of the first button, "Selected"). For example, to sort entries by their status, click "Status" column heading. Sorting toggles between ascending and descending order upon each click of a selected heading.

<u>Sel</u> Edit Analysis Rep <u>Lab Log ID</u>	Status Rule Type Water Sys Water Sys Name	Loc Free Tot Cl Collected On TColi EColi
--	---	--

The purpose of each action button is explained below:

- "Select" use to select all rows for printing or deleting.
- "Edit" enables editing of the selected sample information.
- "Analysis" use to enter or edit analysis information for the selected sample.

• "Rep" – use to view and edit system contact information; contents of this field automatically populate "Mail Results to" area on the State Bacteriological Analysis Form.

At the bottom of the screen is the information bar, as seen below:

Total Samples: 25 User: NCIDusername Sort: Date Updated - Descending Selected: 0 Clear Selected

It displays, from left to right, the number of entries in Main View, your name or organization, the field that Main View is currently sorted by and the sort type, number of entries selected, and an option to clear selected entries.

2.2.2. Entering Individual Bacti Sample Details

To begin entering a new sample, press "Add Sample" button in Main View, in the upper left corner. This will bring up the Sample Detail Screen, in Figure 4.

mple Detail - Google Chrome		
ttps://pwstest.ncwater.org/	LDS/pages/EditSample.aspx	
	General Information	omittal
	Water System No: Source: Source:	
Sample Details	Facility Type: Distribution System System Type: County:	
	Lab ID#: 37701 Sample Site: Owned By System Daycare or K-12 s	chool 🗆
i Step 1 New Sample	Sample Type: Routine Lab Log ID:	
Search or Enter a Water	Facility ID: D01 Loc Code: Tap Location:	
System Number to Begin	Sample Point: Routine Original	
	Collection Information	
* Collection information is not	Collected by: Disinfectant Used: -Please Se	
required to save, but must be entered to begin analysis	Collection Date: Collect Time: Collect Time: Collect Time	ACCE -
	Collection City:	- 11
-		
Go to Sample Analysis		

Figure 4. Bacti Sample Detail Screen

Begin by either entering or selecting a water system (WS) number into the "Water System No:" box. Note: By clicking on the magnifying glass, you can search by WS number or WS name.

🧐 Sample Detail - Google Chrome			
🗋 www.pws2.denr.nc.gov/pag	es/EditSample.aspx		
Sample Details	General Information Water System No: NC0187593 (Formst: NC1234567) Facility Type: Distribution System	GREAT SMOKIES BAIT AND TACKLE System Type: NC	b Data Submittal Source: GW County: SWAIN

Once the WS number is entered, "WS name", "Source", "System Type", and "County" fields are populated with information from SDWIS. The "Facility Type" field is defaulted to Distribution System, but the user can select Ground Water by clicking on the down arrow to the right:

Facility Type:	Ground Water	•
	Distribution System	
Lab ID#:	Ground Water	

"Distribution System" must be selected for all samples reported for the Total Coliform Rule (routine and repeat sample types), and "Ground Water" must be selected for all sample types reported for the Ground Water Rule (triggered, additional/confirmation, assessment, triggered/distribution repeat).

Remember: For samples that need to be associated with a previous positive (repeat, triggered, triggered/distribution repeat, confirmation), the previous positive sample must be submitted into SDWIS before it can be referenced on the Sample Detail Screen. This does not apply to samples collected the month following a routine positive (additional five) because they are submitted as "routine" samples.

Once facility type is selected, "Sample Type", "Facility ID", "Sample Point", "Lab Log ID", "Location Code", "Tap Location", and "Street Address" fields are displayed in addition to boxes for denoting whether or not the sample site is "owned or controlled by the water system", or whether or not the sample site is "a daycare or K-12 school". "Collection City" is located under Collection Information. See below for distribution system samples:

🗋 Sample Detail - Google Chrome
https://pwstest.ncwater.org/LDS/pages/EditSample.aspx
Lab Data Submittal
Water System No: NC0161101 ALTAPASS WATER ASSOCIATION Source: GW
Sample Details Facility Type: Distribution System v System Type: C County: MITCHELL
Lab ID#: 37701 Sample Site: Owned By System Daycare or K-12 school
Sample Type: Routine Lab Log ID:
Facility ID: D01 Loc Code: Tap Location:
Sample Point Routine Original Street Address:
* Collection information * Collected by: Disinfectant Used: -Please Select- • Collected by: Disinfectant Used: -Please Select- •
Go to Sample Analysis
Cancel Save and Close

Figure 5. Bacti Distribution System Sample Detail Fields

For ground water samples, when "Ground Water" is selected under "Facility Type":

🕤 Sample Detail - Google Chrome
www.pws2.denr.nc.gov/pages/EditSample.aspx
Lab Data Submittal
Water System No: NC0161101 (ALTAPASS WATER ASSOCIATION) Source: GW
Sample Details Facility Type: Ground Water System Type: C County: MITCHELL Lab ID#: 18700
Sample Type: Triggered/Distribution Repeat Lab Log ID: Facility ID: 001 WELL
Sample Point 001
* Collection Information is not required to save, but must be entered to begin analysis Collected By: Collection Date: Collection Date: Collection Time: Col
Go to Sample Analysis Previous Positive Laboratory Log ID Number: Previous Positive Laboratory ID Number: Previous Positive Collection Date:
Cancel Save and Close

Figure 6. Ground Water Sample Detail Fields

Fields that have a drop down arrow next to them must be populated with a choice from the dropdown menu, which is activated when the down arrow button is pressed, as in a "Sample Type" example below:

Sample Type:	Triggered/Distribution Repeat 💌
Facility ID:	Assessment Triggered
Sample Point:	Additional/Confirmation Triggered/Distribution Repeat
	Special/Non-Compliance

For both Facility Types (Distribution System and Ground Water), the blank fields such as "Lab Log ID", "Location Code", "Location", and all collection fields must be populated manually. However, after a location code/location pair is entered and saved, it will be saved for each water system; from then on, the "Location" field will populate automatically when the corresponding "Location Code" is entered. Every field on the Sample Detail Screen must be completed before a sampling result can be submitted. Note that a sample can be saved in "PRE" status without completing the collection information ("Collected By", "Collection Date", and "Collection Time") fields. This is intended for pre-printing of sample forms to be sent with empty bottles for collection at a client's location.

When all of the sample information is entered, and the lab user is ready to proceed to entering analytical results, she/he can get to the Sample Analysis Screen either by clicking "Go to Sample Analysis" button



by clicking "Save and Close" button and then accessing the Sample Analysis Screen by pressing "Analysis"



button in Main View - Bacti.

2.2.3. Entering Individual Bacti Analysis

Both the Sample Detail Screen and the Sample Analysis Screen are designed to closely mimic the State lab form. While the Sample Detail Screen includes information from the top part of the State lab form, above the double line, the Sample Analysis Screen contains the required information on the State lab form below the double line.

9	Sample Analysis	s - Google Chroi	me							- O X	
ß	www.pws2.denr.nc.gov/pages/Analysis.aspx										
	Sample	Analysis	Water Syste Location Coo Collection D	em Name de/Name ate/Time	06/20/2013 08:00 AM	FION	Lab Data Submittal				
	Contaminant Code	Contaminant	Method Code	e Cou	nt Results/Measurement	Units	Start Date	Start Time	End Date	End Time	
	3100	Total Coliform	9223B	💌 n/a	•	n/a					
	3014	E. coli	9223B-MW	💌 n/a	-	n/a					
	3001	Heterotrophic P.C.	SIMPLATE		n/a	•					
						Hit F3 in sta	art date field to	o copy pr	evious date/t	ime values	
		on for Invalidati		licable —	•			E	Analysis Co	omplete	
	Sample Comments: 001~123 ELM STREET										
	Laboratory Log Number: TEST1 Certified By: Cancel Save										

Figure 7. Bacti Analysis Screen

Figure 7 above depicts an initial analysis entry screen with sample-related fields on top of the screen already populated. Values for these fields have been transferred from Sample Detail.

At this point, analysis-related fields, such as "Results/Measurement", "Start Date", "Start Time", "End Date" and "End Time" for each contaminant code, "Analysis Complete" checkbox, and "Certified By" fields need to be filled in by laboratory staff authorized to certify analyses. When these fields are completed, click "Save" in the lower right corner of the screen.

Once this information is entered, as in Figure 8, and saved, the sampling result will show up in Main View under "RDY" (for "ready to submit") <u>status</u>. See Figure 9 below.

Sample Analysis - Google Chrome											
ß	www.pws2.denr.nc.gov/pages/Analysis.aspx										
	Sample	Analysis	Water System Location Code/ Collection Date	Name: (/Name: (e/Time: (0	06/20/2013 08:00 AM	Lab Data Submittal					
	Contaminant Code	Contaminant	Method Code	Count	Results/Measurement	Units	Start Date	Start Time	End Date	End Time	
	3100	Total Coliform	9223B 💌	n/a	Absent 💌	n/a	06/21/2013	08:00 AM	06/22/2013	08:00 AM	
	3014	E. coli	9223B-MW 💌	n/a		n/a					
	3001	Heterotrophic P.C.	SIMPLATE 💌		n/a		•				
						Hit F3 in	start date field t	o copy pre	evious date/I	time values	
	Reas	on for Invalidati	on: – Not Applica	able —	•			5	Analysis Co	omplete	
		ole Comments: 123 ELM STRE									
		Laboratory I	Log Number: 👖	EST1	Cert	ified By: Lab /	_	ancel		Save	

Figure 8. Completed Bacti Analysis Screen

Sel	Edit	Analysis	Rep	Lab Log ID	<u>Status</u>	<u>Rule</u>	<u>Type</u>	<u>Water Sys</u> <u>Number</u>	<u>Water Sys Name</u>	Loc	Free <u>Cl</u>	Tot CI Collected On	TColi	EColi
	\geq	2	4	TEST_TC_POSITIVE_M_1	RDY	TCR	RT	NC2049015	CHESAPEAKE POINTE MASTER SYSTEM	155	1	10/29/18 08:00 AM	0	•

Figure 9. Completed Bacti Sampling Result in Main View

2.2.4. Entering Bacti Batch

Batch functionality is an enhancement built in to save lab users keystrokes when entering information for multiple samples from the same analysis run. Information that is known to be common among all samples in the batch (i.e., the analysis start dates/times are all the same, or all the samples are from the same water system) can be entered just once, and the software will later apply it to each sampling result automatically.

2.2.4.1. Adding Bacti Batch

To begin a new batch, click the "Add Batch" button on the top row in Main View. The following screen opens up:

🦻 Batch Samples - Google Chrome
www.pws2.denr.nc.gov/pages/Batch.aspx
Add New Batch Add New Batch Lab Data Submittal Image: Start Samples Image: Start Information Batch Samples Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: Image: Start Value System No: <t< td=""></t<>
 Default "Certified By" Name: Select Lab Log ID format: MMYR - SEQ No Loc Code/Fac ID Default Disinfectant Used: -Select- Cancel Save

Figure 10. Add New Bacti Batch Screen

Each field marked with a red dot must be populated. Fields that do not have a red dot can be optionally populated. If those optional fields (Water System No., Collected by, Collection Date, Default Disinfectant Used) are not populated in Add New Batch Samples Screen, they will need to be filled in on the Sample Detail Screen for each sample.

Below, each field is explained in detail.

Please enter a unique batch name: Each batch, once created, must be saved until all sample and analysis information is entered. In order for the user to have access to this batch in progress, the batch must have a unique name. Once a batch is complete, the batch as an object is automatically deleted, and all of the sampling results are moved into the Main View queue and can only be accessed individually. The name for that batch can then be reused.

How many samples in this batch? The maximum number of samples allowed for one batch is 99. The number of samples entered here may be changed at a later point on Select/Edit Batch Screen. More details are included below, under "Editing Batch Samples."

P Default Water System No:

Similar to an individual sample, Water System No. can be entered here. You can also search for a water system by number or name by pressing on the "magnifying glass" icon to the left. If all samples in a batch are from the same water system, the water system number should be entered here - if not, "Water System No." field will need to populated on the Sample Detail Screen.

	Collected by	Date
Sample Collection Information:		/ 03/29/2013

If all samples in a batch are collected by the same person and/or on the same date, these fields should be populated. "Collection Date" is set to the day before today's date by default.

In the sub-screens, the user can enter information that is shared among samples in the batch. Values for all fields starting with the second field from top, "Analysis start date", will be transferred into every sampling result when the batch is completed.

For the Total Coliform/*E.coli* Information and Heterotrophic Plate Count (HPC) Info sub-screens, select a method from the dropdown box, which will contain all methods for which your laboratory is certified, and enter analysis start and end dates and times. On the Total Coliform/*E.coli* Information sub-screen, "Analysis start date" is set by default to yesterday, and "Analysis end date" to today. The HPC sub-screen does not have any date or time fields populated by default; they are all optional. If no information is entered by the user here, the HPC result will not be reported when the Total Coliform sample is submitted. Note that the HPC sub-screen is only displayed to laboratories certified for HPC methods.

Default "Certified By" Name:

This field should contain the first and last name of the person certifying the analysis.

Select Lab Log ID format:	No specified format	•
	No specified format MMYR – SEQ No. YR-MM- SEQ No.	
	MMYR – SYS ID (1234567) – SEQ No. MMYR – SEQ No. – Loc Code/Fac ID MMYR - SYS ID – Loc Code/Fac ID MM-DD-YR - SYS ID – Loc Code/Fac ID MM-DD-YR – SEQ No. – Loc Code/Fac ID	

To save lab users time creating unique Lab Log IDs, a feature was added to the LDS software to automate this process. Lab Log ID Generator creates a unique Lab Log ID for each sample entered in "Edit Batch" mode. Here, the user only needs to choose a Lab Log ID format from the dropdown box presented. This format will also appear as the default on subsequent batches. In selecting a Lab Log ID format, a laboratory must consider its customer base (one, several water systems, or many), the overall monthly sample volume, and the type of samples it analyzes most often. For example, if a laboratory reports close to five hundred samples each month from many systems, then it may want to choose a more descriptive format, such as "MM-DD-YR-SYS ID – Loc Code/Fac ID", to ensure uniqueness and, as an added benefit, this format would help identify the sample's origin. On the other hand, a municipal laboratory reporting only 20-30 samples a month may decide on a basic format, such as "YR-MM-SEQ No.". The formats offered will accommodate a variety of needs. It is recommended that the laboratory carefully examine the available choices and use the one(s) that suit its business needs.

Default Disinfectant Used:	-Select-
	-Select- NONE Chlorine Chloramines

"Default Disinfectant Used" is located on the Add New Batch Samples Screen. If the user leaves "Select" as the default value, the user will have to indicate the type of disinfectant for each individual sample. If one of the

dropdown choices ("None", "Chlorine", or "Chloramines") is selected, that chosen disinfectant will be applied to all samples in the batch.

Once all of the information on the Add New Batch Samples Screen has been completed, click "Save." You will now be able to proceed to entering individual sample details and analysis information.

2.2.4.2. Editing Bacti Batch

Entering individual sample details and analysis information can be accomplished through "Edit Batch" mode. To begin entering this information, click on the "Edit Batch" button in Main View.



	í _				Selec	t/Edit B	atch Sc	amples
Complete	Samples	Analyses	Delete	Batch Name	Sample Count	Created Samples	Created Analyses	Created
	ś		×	Batch1	10 🞽	0	0	01/18/2013
	ś		×	Batch2	5	0	0	01/18/2013
	<u>/s</u>		×	Dave new test	4	2	0	01/18/2013
								0
								Close

Figure 11. Select/Edit Bacti Batch Screen

This is also where the number of samples in the batch can be changed. To change the number, enter the new number under "Sample Count", and click the button to its immediate right.

2.2.4.3. Entering Bacti Sample Details in Batch Mode

Next, proceed to completing samples in the batch by populating fields for sample type, location, collection time, disinfectant residual. Also complete the system and collector/collection date information, if it was not entered when the batch was created.

Click the Samples icon in the corresponding row on the above screen.



The following screen will appear:

es/BatchSample.aspx
Check Vater System No: Notres: Pacifity Type: Distribution System Istribution System System Type: County: Mitter Here: Ab Log ID: 213-001: Sample Type: Routine Lab Log ID: 213-001: Sample Point: Routine Original Location: Collected by: Collector N Collection Time: Called Time: Free Chlorine Residual (chlorine): mgL
* New Sample *

Figure 12. Bacti Batch Sample Detail Entry

Entering information for each sample here is very similar to individual sample entry. The differences are that when using Edit Batch, you don't have to manually populate the Lab Log ID, and you can navigate between samples using the "Back" and "Save and Next" buttons on the bottom of the screen. (Refer also to the previous Section <u>Entering Individual Bacti Sample Details</u> for more information.)

When entering information in batch mode, the Batch Name and Sample Number are displayed at the bottom left corner of the screen. Upon completion of the information for the last sample in the batch, click the "Save & Exit" button located at the bottom right corner of the screen. You will then be prompted to the Batch Sample Analysis Entry Screen.

2.2.4.4. Entering Bacti Analyses in Batch Mode

You may choose to go directly to the Batch Sample Analysis Entry Screen when prompted or access that

screen at a later time. To enter a sample analytical result at a later time, press "Analyses" dutton under "Edit Batch."

The following screen appears:

		v/pages/Batch		NC0161101		Lab	Data	Subm	ittal	
accri samp	ble Analysis	Water Syste		ALTAPASS WATER ASSOCIA	ATION	Lab Data Submittal				
200	5	Location Cod		002 SECOND HOUSE		Repeat Samples Required from Client				
-		Laboratory ID				Resamp	le Required f	rom Client		
Contaminant Code	Contaminant	Method Code	Count	Results/Measurement	Units	Start Date	Start Time	End Date	End Time	
3100	Total Coliform	COLISURE -	n/a	•	n/a	12/04/2013	08:00 AM	12/05/2013	08:00 AM	
3014	E. coli	COLISURE -	n/a	•	n/a	12/04/2013	08:00 AM	12/05/2013	08:00 AM	
3001	Heterotrophic P.C.	9215B		n/a	CFU/mL 👻					
					Hit F3 in sta	art date field	to copy pre	evious date/1	time values	
					Hit F3 in sta	art date field	to copy pre	evious date/1	lime values	
Reas	son for Invalida	tion: - Not Appli	cable	.	Hit F3 in sta	art date field	to copy pre	evious date/1	time values	
Sam	ple Comments		cable	.	Hit F3 in sta	art date field	to copy pre	evious date/t	lime values	
Sam			cable	.	Hit F3 in sta	art date field	to copy pre	vious date/1	time values	
Sam	ple Comments		cable	.	Hit F3 in sta	art date field	to copy pre	evious date/t	time values	
Sam	ple Comments ~SECOND HO				Hit F3 in sta rtified By: Lab Su		to copy pre	evious date/1	time values	
Sam	ple Comments ~SECOND HO	use					to copy pre	evious date/t	time values	
Sam 002	ple Comments ~SECOND HO Laboratory	use					to copy pre	evious date/t	time values	
Sam	ple Comments ~SECOND HO Laboratory Batch1	use		-002 Ce			to copy pre	evious date/t	time values	

Figure 13. Bacti Batch Analysis Entry

On this screen, lab user can enter analytical results and any comments.

Once the last analysis is entered and saved, the only remaining pre-submittal step is to complete the batch. This is a necessary step because it certifies the analysis and moves the batch from "Edit Batch" mode into Main View. After this step, the batch can no longer be edited via "Edit Batch" as it is split up into individual sampling results instead. For this reason, before completing a batch, the user needs to verify that all of the information entered is correct, as the convenience of batch editing will be gone and any changes will have to

be made to each result individually. To complete the batch, click *Section*. Note that when individual batch samples are transferred to Main View, the Select/Edit Batch Screen will indicate "No matching records found......". Each individual sample and their associated lab results should now be displayed as "RDY" on the Main View.

2.3. Entering Chemicals

2.3.1. Main View - Chemicals

After selecting a contaminant group from the screen depicted in Figure 2, the user is presented with the Main View screen, as seen in Figure 14 below.

Add		Add Batch	Edit P	ULK Tint All S	Print Selected	Delete Selected	Upload Selected	Upload All RDY	Go To CMDP	Contaminant Group: ✓ Hide accepted Samples ✓ Auto Refresh	Data Submitta NITRATE/NITRITE <u>My Repor</u> Download State For	
Sar	mp	les	Search By: Water	System N	No. 🔻 Se	arch For:	۹		<u>Clear</u>	2 📢 🕞 Page 1	of 2 Go	Book Providence P
Sel	Edit	Rep	Lab Log ID	Status	<u>Facility</u>	Samp Pt.	<u>Samp Pt.</u> <u>Type</u>	Sample Type	<u>Water Sys</u> Number	<u>Water Sys Name</u>	Loc	Collected On
	2	4	NITRATE/NITRITE_EX	SUB	W01	KSI	EP	RT	NC0285525	FOOT HILLS MARKET & GRILL INC	KITCHEN SINK	10/09/17 08:00 AM
	2	4	CMDP_TEST_NITRITE	SUB	P1D	E06	EP	RT	NC0392373	BAYLEAF MASTER	CARLYLE MANOR #7	09/20/17 10:00 AM
	2	4	37724_170922_02074	SUB	P16	016	EP	RT	NC0392373	BAYLEAF MASTER	SWANS MILL #1 (SM1)	09/18/17 10:00 AM
	\mathbf{Z}	4	37724_170922_02073	SUB	P15	015	EP	RT	NC0392373	BAYLEAF MASTER	SUTTON ESTATES (SE1)	09/18/17 09:45 AM
	2	4	37724_170922_02072	SUB	P13	013	EP	RT	NC0392373	BAYLEAF MASTER	RAVENS CRK 1	09/18/17 09:30 AM
	2	4	37724_170922_02071	SUB	P10	010	EP	RT	NC0392373	BAYLEAF MASTER	FORESTBROOK 1	09/18/17 09:00 AM
	2	4	37724_170922_02070	SUB	P06	006	EP	RT	NC0392373	BAYLEAF MASTER	COACHMAN TR 1	09/18/17 08:45 AM
	2	4	37724_170922_02069	SUB	P05	005	EP	RT	NC0392373	BAYLEAF MASTER	CG1 WELL HOUSE	09/18/17 08:30 AM
	2	4	37724_170922_02068	SUB	P04	004	EP	RT	NC0392373	BAYLEAF MASTER	CARMEL FOREST 1	09/18/17 08:00 AM
	2	4	37724_170922_02067	SUB	P03	003	EP	RT	NC0392373	BAYLEAF MASTER	BAYTREE #1	09/18/17 07:45 AM
	2	4	37724_170922_02066	SUB	P02	002	EP	RT	NC0392373	BAYLEAF MASTER	ADAMS MTN 2	09/18/17 07:30 AM
	2	4	37724_170922_02065	SUB	P01	001	EP	RT	NC0392373	BAYLEAF MASTER	ADAMS MTN 1 (AM1)	09/18/17 07:00 AM
	2	4	007-3	SUB	WP1	123	EP	RT	NC0201010	BURLINGTON, CITY OF	ED THOMAS PLANT	08/15/17 11:00 AM
Total	Same	lor: 10						Data J	Indated Dec	conding Colorted 0	Clear Selected	
Iotal	samp	les: 19	User: NCIDuserna	mé			So	ne Date U	pdated - Des	cending Selected: 0	Clear Selected	



By default, Main View displays all of the samples in the working queue. Note that - unlike Bacti – sample and analysis are entered on the same screen for chemicals, which affects the layout of Main View.

Main View also contains search boxes and various action buttons to accomplish all of the data entry, retrieval, submission, review and printing tasks that are explained in detail throughout this manual.

The top row of buttons, see picture below, from left to right, contains the following:



- "Add Sample" opens Sample Detail Screen, of which there are three types, depending on a chemical, see Figures <u>15</u>, <u>16</u>, and <u>17</u>.
- "Add Batch" opens Add New Chemical Batch Screen, see Figure 21.
- "Edit Batch" to begin entering sample information, followed by analysis information for batches, see Select/Edit Chemical Batch Screen, <u>Figure 22</u>.
- "BULK Print All" allows the user to print all entries in Ready ("RDY") or Submitted ("SUB") status displayed on the Main View Screen.
- "Print Selected" prints all checked entries on the Main View Screen.
- "Delete Selected" deletes all checked entries (does not apply to entries in "Accepted" status).
- "Upload Selected" converts only selected samples into XML format and uploads file to CMDP (for expedited submission of positive, repeat, and triggered samples and uploading composite samples).
- "Upload All RDY" converts all samples in RDY status into XML format and uploads the files to CMDP.
- "Go To CMDP" opens a new tab in the browser with the CMDP login screen.
- "Contaminant Group" clicking on the magnifying glass returns to the screen in Figure 2 to select a different contaminant group.
- "Hide samples already accepted to SDWIS" checkbox when checked, displays all entries in statuses (see <u>Appendix 1</u>) other than "ACC", for "accepted", in Main View. Sampling results that have been accepted into SDWIS can be viewed by unchecking this box.
- "Auto Refresh" when checked, updates status of records relative to their acceptance into SDWIS.
- "My Reports" generates a report of historical data in Excel format.
- "Download State Form" prints a blank state form for your contaminant.

The next row, as seen below, contains search boxes ["Search By" (shown above with the available search categories) and "Search For" textbox], a "Clear" hyperlink (to clear "Search For" textbox), a "Refresh" button (to update status of a submitted sample result), "Help" to bring up this manual and "Logoff" button. The box between the "Refresh" button and "Logoff" will display page navigation buttons when more than one page of samples exists.

Samples search	By: Water System No. V Search For:	Cloar 🕥 📢 🕞 Page 1 of 2 Go) () () () () () () () () () (
	Water System No.		
	Lab Log ID	Refresh button	
	Status		
	Rule		
Dropdown menu -	Lab ID		

To use this sample search function, select the dropdown category you wish to "Search By", then enter the applicable information/code in the "Search For" textbox and press your keyboard's "Enter" key. For example, if you select Search By "Water System No." you must enter the water system number into the "Search For"

textbox. If you want to Search By "Status", use one of the codes listed in Appendix 1 for Sample Status. To search by Facility, enter a Facility ID into the box. Your sample search results will be displayed on the Main View Screen.

Next row, immediately below the sample search criteria bar, contains action buttons and display fields (below the underlined column headings) for entries in the queue. Underlined column headings, when clicked, will sort the entries under the column (or select all rows in the case of the first button, "Selected"). For example, to sort entries by their status, click "Status" column heading. Sorting toggles between ascending and descending order upon each click of a selected heading.

Sel Edit Rep Lab Log ID	Status Facility Samp Pt.	Samp Pt. Type	<u>Sample Water Sys</u> <u>Type Number</u>	Water Sys Name	Loc	Collected On
a between the second		Type	Type Number			

The purpose of each action button is explained below:

- "Select" use to select all rows for printing or deleting.
- "Edit" enables editing of the selected sample information.
- "Rep" use to view and edit system contact information; contents of this field automatically populate "Mail Results to" area on the State Laboratory Analysis Form.

At the bottom of the screen is the information bar, as seen below:

Total Samples: 19 User: NCIDusername	Sort: Date Updated - Descending	Selected: 0	Clear Selected
--------------------------------------	---------------------------------	-------------	----------------

It displays, from left to right, the number of entries in Main View, your name or organization, the field that Main View is currently sorted by and the sort type (Date updated, descending is the default), number of entries selected, and an option to clear selected entries.

2.3.2. Entering Individual Chemical Result

To begin entering a new sample, press "Add Sample" button in Main View, in the upper left corner. This will bring up the Sample Detail Screen, as shown below.

For all Chemicals, i.e. chemical groups of Inorganics, Lead and Copper, Nitrate/Nitrite, SOCs, THMs/HAA5s, TOC, VOCs, WQPs, Radionuclides, the general layout of the data entry screen is the same except that screens for chemicals that are or can be collected in the distribution system, such as Asbestos, Chlorine Dioxide/Chlorite, Lead and Copper, and THHM/HAA5 have additional fields. These additional fields are ""Location Code", "Tap Location", "Street Address", and "City". Check boxes are also included on distribution system sample lab forms for denoting whether or not the sample site is "owned or controlled by the water system", or the sample site is "a daycare or K-12 school". Inorganics, SOCs, THMs and HAA5s, and Radionuclides also have a button for entering different analysis dates and times for each laboratory method, see Figures 15 and 16 for entry point and distribution entry screens.

🕒 Sample Details - Goog	le Chrome
https://pwstest.r	ncwater.org/LDS/pages/Chemical.aspx
LEAD/COPPER	
Save and Close	Mail Results To Skip these when tabbing Image: Second state stat
Status: New	Analysis Analysis Analysis Complete Start Date: Time: End Date: Time: Certified By: Parcet Contam Contam Certified Mothod Reg Report Analysis Started Analysis Ended Not Quantified Action Lowel
Sample	Report Contaminant Method Code Reg Report Limit Analysis Started Analysis Ended Not Detected Quantified Results Action Level Image: Imag
* = Required to Save	Analysis available after entering water system number, collection date and time.

Figure 15. Chemical Entry Point Screen (Asbestos, Bromate/Bromide, ClO2/Chlorite, Dioxin, Lead and Copper, Nitrate/Nitrite, TOC, VOCs, WQPs)

Begin by either entering or selecting a water system (WS) number into the "Water System No:" box. Note: By clicking on the magnifying glass, you can search by WS number or WS name

Once the WS number is entered, "County" and "Name" fields are populated with information from SDWIS. The "Sample Type" field is defaulted to Routine, but if the water system wishes to submit a non-compliance sample, Non-compliance type is also available.

"Sample Point" and "Facility ID" fields will be populated with information from SDWIS for single-facility water systems. For water systems with multiple facilities, the "Sample Point" field will display –Select offering a dropdown menu with all current sample point choices. Once a sample point is selected, the "Facility ID" field will get populated automatically with the corresponding Facility ID and the "Location" field – with the corresponding location.

Sample Point:	-Select-	
Facility ID No:		

"Collected By", "Date" and "Time" fields are to be manually populated with sample collection information.

🗋 Sample Details - Goog	jle Chrome
Attps://pwstest.	ncwater.org/LDS/pages/Chemical.aspx
	Water System Number: NC0392010 County: WAKE Name: RALEIGH, CITY OF
Cancel	* Sample Type: Routine (Compliance) Collected By: *Date: *Time:
	Sample Point: LCR - LEAD AND COPPER DISTRIBUTION Location Code: Tap Location: Owned/Controlled By System Facility ID No: Doi Site Type: -Select- Street Address: EM JOHNSON CLEARWELL City: RALEIGH Daycare or K-12 school
Save and Close	Mail Results To ✓ Skip these when tabbing ID/Comments Phone # / (ext): [/x Lab ID#: 37701 Log ID: Comments: Fax #: [Comments:
	Analysis Analysis Complete
	Start Date: Time: End Date: Time: Certified By:
Status: New Sample	Report Contam Contaminant Method Code Req Report Limit Analysis Started Analysis Ended Not Detected Quantified Results Action Level
	Image: Weight of the second
* = Required to Save	Analysis available after entering water system number, collection date and time.

Figure 16. Chemical Distribution Screen (Asbestos, CIO2/Chlorite, Lead and Copper, TTHM/HAA5)

Distribution entry screen will appear when a distribution-type sample point is selected under "Sample Point". This screen has additional fields, "Location Code", "Tap Location", "Street Address", "City", "Owned/Controlled by System", and "Daycare or K-12 school". The meaning of these fields is described in Appendix 6.

"Mail Results to" area displays contact information for the water system and is obtained from SDWIS by default. The lab, however, can update this information either on the Main Screen or on the sample detail screen.

"ID/Comments" box contains the following fields:

"Lab ID" - for the five-digit state-assigned laboratory ID;

"Log ID" – to hold a unique ID for each sample entered. This ID will be automatically created and supplied to this field when the sample is saved; during data entry, however, the field will display "*-Pending-*".

"Comments" – a free-text field to enter any related comments.

Once collection date and analysis end dates are populated, the user is ready to proceed to entering analysis information.

For each contaminant group, the list of contaminant codes is displayed in the lower part of the screen.

INORGANICS Cancel	Sam	21			a.pws2.denr.nc.g(h No. is invalid, enter			D	ate: Time:	
ve and Close	Name & Address	rsis	[Fax	one # / (ext): ()	Skp trese w	x	ab ID#: 377 omments:	ID/Comments 01 Log ID:	
			Click here t	o enter Analysis Dat	es per Method Code	1	Certif	ied By:	Analysis C	omplete
tatus: New Sample	Report	Contam Code	Contaminant	Method Code	Reg Report Limit	Analysis Started	Analysis Ended	Not Detected	Quantified Results	Allowable
		1005	ARSENIC	200.9	0.005 mg/L			6	ngt.	0.010 mg
				200.7						
				200.7						
						after e	nterin			
			Analys	is ava	ilable a			g w	ater syste	em
			Analys		ilable a			g w	ater syste time.	em
			Analys	is avai numbe	ilable a			g w	ater syste time.	em
			Analys	is ava	ilable a			g w	ater syste time.	0.1 mg 0.2 mg 0.3 mg 0.35 mg 0.05 mg
			Analys	is avai numbe	ilable a			g wa and	ater syste time.	8.1 mg 0.2 mg 0.3 mg 0.35 mg 0.05 mg
			Analys	is avai numbe	ilable a			g wa and	ater syste time.	8.1 mg 0.2 mg 0.3 mg 0.002 mg 0.002 mg 0.002 mg
			Analys	is avai numbe	ilable a			g wa and	ater syste time.	8.1 mg 8.2 mg 8.2 mg 8.35 mg 8.35 mg 8.302 mg 8.302 mg 8.302 mg
			CYANETE Analys Marcus Mericulary Mericulary Mericulary Social Social Social	is avai	ilable a			g wa and	ater syste time.	8.1 mg 0.2 mg 0.1 mg 0.105 mg 0.002 mg 0.05 mg 250 mg 0.006 mg
			CHARGENE AND	is avai	ilable a			g wa and	ater syste time.	

Figure 17. Inorganics, SOCs, THMs/HAA5s, and Radionuclides Entry Screen

The screen for these chemicals has an extra button (Figure 17 above) – to enable entering different analysis begin/end dates and times – see below for more details.

By depressing the "Click here to enter Analysis Dates per Method Code", the user can enter methodappropriate dates and times for each analysis on the following screen.

Analysis Dates	per Method Code	•••/			×
	Method Code	Start Date	Start Time	End Date	End Time
	200.7				
	200.9				
	245.1				
ASSE	4500CN-E				
	4500F-C				
	4500H-B				
Enter analysis start and end date/times for all	4500SO4-E				
relevant method codes.					·i
	(
Hit F3 in Start Date colu	mn to copy previous entries.				Save

Figure 18. Analysis Dates and Times for Different Methods

When analysis date and time information is entered, the user can proceed entering the analytical measurements. Check the "Report" row, in order to be able to enter the measured (or non-detect) result for each contaminant, see below for Nitrate/Nitrite example.

ITRATE/NITRITE					Demogra	aphics				1
\odot	Wate	er Systen	NC0392010	County	Y:WAKE	Name: RALEIG	H, CITY OF			
Close	Sam	ple Type ple Point ity ID No		O Non-Complian	Collecte			Date	06/01/2014 Time	08:00 AM
Save and Close	2	IGH, CIT	Y OF	Mail Results	_	Skip these with 96-3070	Lat	_	ID/Comments	
	v emen Rale	IGH, CITT IGH	Y OF	Fax #: Contact	Email:			nments.		11
		IGH, CIT IGH SIS	THE N	Contact	Email:	Time: (07:00 AM	Certifier			// Complete
Status: New Sample	analys	IGH, CIT IGH SIS	NC 27602	Contact		Time: (07:00 AM Analysis Started			Analysis (Quantified Results	Complete Allowable Limits
Status: New Sample	a RALE RALE Analys Start	IGH, CIT IGH SiS Date: (Contam	NC 27602	Contact	(06/03/2014 Required Reporting Limit 1.00 mg/L		Certifie	d By:	Quantified	Allowabl

Figure 19. Entering Analytical Measurement

"Certified By" and "Analysis Complete" fields must be completed before an analysis can be saved.

Once the analysis is completed and saved, it will appear in "RDY" (for "ready to submit") status in Main View. A unique Lab Log ID will be created by the software and displayed with each analysis, see screen below.



Figure 20. Chemical Analysis in Ready Status in Main View

2.3.3. Entering Chemical Batch

Batch functionality is an enhancement built in to save lab users keystrokes when entering information for multiple samples from the same analysis run. Information that is known to be common among all samples in the batch (i.e., the analysis start dates/times are all the same, or all the samples are from the same water system) can be entered just once, and the software will later apply it to each sampling result automatically.

2.3.3.1. Adding Chemical Batch

To begin a new batch, click the "Add Batch" button on the top row in Main View. The following screen opens:

Add New Batch		*
Batch Samples	Enter Batch Information Unique batch name: How many samples in this batch? Default Water System No: Collected By / Date: Analysis start date/time: Analysis end date/time: Image: Image: Imag	
	Cancel Ok	5

Figure 21. Add New Chemical Batch Screen

Each field marked with a red dot must be populated. Fields that do not have a red dot can be optionally populated. If those optional fields (Default Water System No, Collected by, Collection Date, Analysis Start/End date and time, Certified by) are not populated in the Add New Batch Screen, they will need to be filled in on the Data Entry Screen for each sample/analysis. Note that "Analysis start date/time" and "Analysis end date/time" fields would not be populated on the batch screen for Inorganics, SOC and THM/HAA5 as dates and times are populated for each method on the analysis screen, as explained <u>above</u>.

Below, each field is explained in detail.

Unique batch name:

Each batch, once created, must be saved until all sample and analysis information is entered. In order for the user to have access to this batch in progress, the batch must have a unique name. Once a batch is complete, the batch as an object is automatically deleted, and all of the results are moved into the Main View queue and can only be accessed individually. The name for that batch can then be reused.

• How many samples in this batch? The maximum number of samples allowed for one batch is 99. The number of samples entered here may be changed at a later point on Select/Edit Batch Screen. More details are included below, under "b. Editing Batch Samples".

Default Water System No:

Similar to individual sample, Water System No. can be entered here. You can also search for a water system by number or name by pressing on the "magnifying glass" icon to the left. If all samples in a batch are from the same water system, the water system number should be entered here - if not, "Water System No." field will need to populated on the Chemical Entry Screen.

Collected By / Date:

these fields should be populated.

Analysis start date/time:

Analysis end date/time:

If all analyses in the batch share the start and end date/time information, it should be populated here.

Default "Certified By" Name:

This field should contain the first and last name of the person certifying the analysis.

Once all of the information on the Add New Batch Screen has been completed, click "Save." You will now be able to proceed to entering individual sample details and analysis information.

2.3.3.2. Editing Chemical Batch

Entering individual sample details and analysis information can be accomplished through "Edit Batch" mode. To begin entering this information, click on the "Edit Batch" button in Main View.



			Select/Ed	it Batch Sc	amples
Complete Samples Delete	Batch Name	Sample Count	Created Samples	Finalized Analyses	Created
👻 🙆 💥	Batch1	5	0	0	06/25/2014
1. Use 🔏 to enter Sampl	e and Analysis data. 🛛 2. Use 🐋 to comp	lete batch entr	у.		Close

Figure 22. Select/Edit Chemical Batch Screen

This is also where the number of samples in the batch can be changed. To change the number, enter the new number under "Sample Count", and click the button to its immediate right.

2.3.3.3. **Entering Sample/Analysis in Batch Mode**

Next, proceed to completing data entry in the batch by populating fields for sample type, facility, location, collection time. Also complete the system and collector/collection date information, if it was not entered when the batch was created, as well as analytical information.

Click the Samples icon in the corresponding row on the above screen.



The chemical entry screen will appear as depicted in Figures 15, 16, and 17. Proceed to enter the rest of the information as explained in the accompanying instructions.

Once the last analysis is entered and saved, the only remaining pre-submittal step is to complete the batch. This step moves the batch from "Edit Batch" mode into Main View. After this step, the batch can no longer be edited via "Edit Batch" as it is split up into individual sampling results instead. For this reason, before completing a batch, the user needs to verify that all of the information entered is correct, as the convenience of batch editing will be gone and any changes will have to be made to each result individually. To complete the batch, click star icon.

-

Note that when individual batch samples are transferred to Main View, the Select/Edit Batch Screen will indicate "No matching records found". Each individual sample and its associated lab results should now be displayed as "RDY" on the Main View.

3. Submitting Sampling Results

To better serve your customers and manage your laboratory data more efficiently, it is strongly recommended that you submit sampling results to CMDP within 24 hours of completion of the analyses. This expedited submittal of sampling results will enable your customers to view their monitoring results under "Sampling Status" and "Drinking Water Watch" on the PWS Section's website immediately. If data cannot be submitted in this timeframe, submittal of data on a weekly basis, at a minimum, is recommended.

3.1. Uploading Sample Files to CMDP

Once your samples have been created in LDS and have a "RDY" status, they may be uploaded to CMDP directly from the LDS dashboard. There are two options: "CMDP ALL RDY", which uploads all the samples with "RDY" status, and "CMDP Selected", which uploads only the samples that have their checkbox selected. Click the icon you would like to use to upload the samples.



Figure 23. Upload Icons in LDS - Upload Selected or Upload All RDY

Note: Composite samples must be uploaded individually using the 'Upload Selected' icon.

Once you have chosen either option, a pop-up window will prompt you to enter your CMDP username and password. Enter your SCS credentials to create and send an XML file to CMDP.



Figure 24. Create and Upload XML File to CMDP

Read the prompted agreement and click "OK" to continue, or "Cancel" to make changes. Once you click "OK", you will need to continue to the CMDP website to complete the submission to the State.

🕹 LDS: Report Export - Mo	zilla Firefox	
🕂 🔒 https://pwstest.nc	water.org/LDS/pages/CSVExport.aspx	
Create an	d submit sample XML file to CM	IDP
1 Samples	their status to 'SUB'. This does not in itself constitute a complete submission to state. You still need to logon to CMDP to review and certify the xml file. If the download fails or you cannot find your CSV file, click 'RESET' (on the yellow window) BEFORE closing the yellow window to reset your entries to 'RDY'.	THE BROTHER
	OK Cancel	
	is or you experience an error: w BEFORE CLOSING THIS WINDOW to tatus to RDY.	win to me here instead
	RESET	Ok Close

Figure 25. Agree to Upload File to CMDP and to Login to CMDP to Review and Certify the File

A pop-up window will confirm that the file was sucessfully sent to CMDP. Click "OK".



Figure 26. Pop-up Notification of File Successfully Submitted to CMDP

Close out of the upload file window and use the "Go To CMDP" Icon at the top of the page to open a new window to the CMDP login screen.



Figure 27. Use "Go To CMDP" Icon to open the CMDP login screen

3.2. Reviewing, Certifying, and Submitting Samples in CMDP

To verify that the sample(s) uploaded or transferred to CMDP successfully, log on to the CMDP web application (<u>https://cmdp.epa.gov</u>) using your SCS login credentials.



Figure 28. Login to CMDP using your SCS Username and Password

Select the "Drinking Water Sample Jobs" tab near the top of the page to view a list of submitted files in "Job Maintenance View".

lome	e VPWS Profiles V	Laboratory Profiles	Drinking	Water Sample J	obs Sea	rch Individual Samp	les Syst	em Administration	
ob N	Maintenance View								
ear	rch Jobs								
ob ID)	Created By	Stat	us	From	n	То		File Name
					▼)				
rin	king Water Samp	la loha							
-		New Job Send to R	eviewer Se	end to Certifier	Certify and	d Submit to State	💥 Reject	X Remove	Download Samples
-	Job ID	Sample Catego	ry	Description		File Name		Primacy Agency	Status
	6321	Microbial		TEST_Bacti_1		10.00		NC	Accepted by Sta
	6324	Microbial		TEST_BACTI_r	epeats			NC	Draft with Prepa
	6325	Microbial		TEST_Bacti_Po	sitive			NC	Accepted by St
	6326	Chem/Radionuc	lides	TEST_Nitrate_1	l .			NC	Draft with Prepa
	6341			New Job using	files	CMDP TEST FILE.	cml	NC	Draft with Prepa
	6342	Chem/Radionuc	lides	DBPs				NC	Accepted by Sta
	6418			Contaminant Co	ode Test			NC	Draft with Prepa
	6419	Chem/Radionuc	lides	Cont. Code Tes	;t			NC	Draft with Prepa
	6459	Chem/Radionuc	lides	wqp 06202017				NC	Accepted by Sta
	6553			New Job using	files	TCRSample_EDIT	.xml	NC	Draft with Prepa
				New Job using	El.	ChemSamples3 x	and loss	NC	Draft with Prepa
	6624			New Job using	Tiles	Unempannues.5 x		NL.	Drait with Preba

Figure 29. View Drinking Water Sample Jobs

User will then double-click the sample job they just created to open the "Job Summary View".

In the "Job Summary View", click on the "Validation" tab to check the XML file for errors. "XML Submittal Validation Summary" will show how many samples of each type were uploaded, how many were without errors, and how many had errors. Click on the row to view error descriptions.

deral Reporting Validation Results		
ategory	Sample Identifier	Validation Category
		No items to show.
L Submittal Validation Summary		
-	Total	Without Errors
egory	Total 0	Without Errors 0
egory obial		
ML Submittal Validation Summary ategory icrobial hem/Radionuclides yptosporidium	0	0

Figure 30. Checking the Validation Tab for XML File Errors

After clicking on the row of the samples you wish to see, the "XML Submittal Validation Error Details" section will show error messages detailing where and what type of error occurred.



Figure 31. Reviewing Error Descriptions

If critical errors are found, close out of the "Job Summary View" and return to the "Job Maintenance View". Select the job and click "Remove" to delete. Make corrections to the samples and re-upload the sample file following the steps outlined in Section 3.1 above, **Uploading Sample Files to CMDP**.

ome PW	S Profiles Laboratory Profiles	Drinking Water Sam	ple Jobs Search Inc	dividual Samples Syste	em Administration	
ob Maintena	nce View					
earch Jol	05					
ob ID	Created By	Status	From	То		File Name
			▼		14	
rinking W	ater Sample Jobs					
Refresh	Create New Job Send to Re	eviewer Send to Cert	ifier Certify and Subr	mit to State 🔀 Reject	💢 Remove 🗔 🛙	Download Samples
Job ID	Sample Catego	y Descrip	otion 🔺 Fi	le Name	Primacy Agency	Status
6419	Chem/Radionuc	lides Cont. Co	de Test		NC	Draft with Preparer
6418		Contamir	ant Code Test		NC	Draft with Preparer
6342	Chem/Radionuc	lides DBPs			NC	Accepted by State
6786		MyTestG	roup		NC	Draft with Preparer
6341		New Job	using files CN	IDP TEST FILE.xml	NC	Draft with Preparer
6553		New Job	using files TC	RSample_EDIT .xml	NC	Accepted by State
6624		New Job	using files Ch	nemSamples3.xml	NC	Draft with Reviewe
6626		New Job	using files Ch	nemSamples4.xml	NC	Draft with Preparer
6813		New Job	using files Ch	nemSamples4.xml	NC	Draft with Preparer
6321	Microbial	TEST_B	icti_1		NC	Accepted by State
6325	Microbial	TEST_B	cti_Positive		NC	Accepted by State
6324	Microbial	TEST_B/	ACTI_repeats		NC	Draft with Preparer
6326	Chem/Radionuc	ides TEST_Ni	rate_1		NC	Draft with Preparer
6459	Chem/Radionuc	lides wap 062	02017		NC	Accepted by State

Figure 32. Removing Job Files from CMDP

Once all errors have been corrected, transfer the job to the reviewer. Click the box next to the job to select it, then click 'Send to Reviewer'.

ome VPWS Profile	s Laboratory Profiles	Drinking Water Sample	Jobs Search Indiv	idual Samples System	n Administration	
b Maintenance View	1					
earch Jobs						
b ID	Created By	Status	From	То	F	ile Name
			▼)			
rinking Water Sa	mple lobs					
	eate New Job Send to Rev	iewer Send to Certifie	r Certify and Submit	to State 💥 Reject	C Remove C D	ownload Samples
Job ID	Sample Category	Description	File 1	lame	Primacy Agency	Status
6321	Microbial	TEST_Bacti	1	Ì	NC	Accepted by State
6324	Microbial	TEST_BACT	I_repeats	1	NC	Draft with Preparer
6325	Microbial	TEST_Bacti	Positive	1	NC	Accepted by State
6326	Chem/Radionuclid	es TEST_Nitrate	e_1	1	NC	Draft with Preparer
6341		New Job us	ing files CMDI	TEST FILE.xml	NC	Draft with Preparer
6342	Chem/Radionuclid	es DBPs		1	NC	Accepted by State
6418		Contaminant	Code Test		NC	Draft with Preparer
6419	Chem/Radionuclid	es Cont. Code 7	Test	1	NC	Draft with Preparer
6459	Chem/Radionuclid	es wqp 062020)17		NC	Accepted by State
6553		New Job us	ing files TCRS	ample_EDIT .xml	NC	Draft with Preparer
6624		New Job us	ing files Chen	Samples3.xml	NC	Draft with Preparer
6626		New Job us	ing files Chen	Samples4.xml	NC	Draft with Preparer
6786		MyTestGrou	8		NC	Draft with Preparer

Figure 33. Certifying and Submitting Step 1: Send File to Reviewer

A prompt will ask you to select an individual from the dropdown menu. Once the reviewer has been selected, click "Submit". For this step, users with Certifier or Administrator roles will be selecting themselves.
Send Data to Reviewer	
Select Individual	

Figure 34. Submitting the File to Reviewer

A notification will indicate if a sample was sent successfully.



Figure 35. Notification of Job Successfully Submitted for Review

Once the sample has been submitted for review, the Reviewer, if a separate entity than the Preparer, must log on to access the job. From the same "Job Maintenance View" window under "Drinking Water Sample Jobs", the Reviewer's name should appear under "Reviewer".

ome PWS	Profiles Laborator	y Profiles Drinking Water S	ample Jobs Search In	dividual Samp	les 💙 System Admini	stration			
ob Maintenar	ice View								
earch Job	S								
ob ID	Created By	Status	From		То	File Name			
			▼					Search	leset
rinking Wa	ater Sample Jobs								
Refresh		Send to Reviewer Send to C	artifier Cartify and Sub	mit to State	Y Reject Y Rome	ve C Download S	amples		
Job ID	Sample Category		File Name	Primacy	Status	Preparer	Created On	Reviewer	Review
6321	Microbial	TEST Bacti 1		Agency	Accepted by State	Miranda Harper	06/02/2017	Miranda Harper	06/02/2
6324	Microbial	TEST BACTI repeats		NC	Draft with Preparer	Miranda Harper	06/02/2017	initiation that por	0010212
6325	Microbial	TEST Bacti Positive		NC	Accepted by State	Miranda Harper	06/02/2017	Miranda Harper	06/02/2
6326	Chem/Radionucli	des TEST_Nitrate_1		NC	Draft with Preparer	Miranda Harper	06/02/2017		
6341		New Job using files	CMDP TEST FILE.xml	NC	Draft with Preparer	Turner Morrison	06/05/2017		
6342	Chem/Radionucli	des DBPs		NC	Accepted by State	Turner Morrison	06/05/2017	Turner Morrison	06/05/2
6418		Contaminant Code Tes	t	NC	Draft with Preparer	Turner Morrison	06/15/2017		
6419	Chem/Radionucli	des Cont. Code Test		NC	Draft with Preparer	Turner Morrison	06/15/2017		
6459	Chem/Radionucli	des wqp 06202017		NC	Accepted by State	Miranda Harper	06/20/2017	Miranda Harper	07/28/2
6553		New Job using files	TCRSample_EDIT .xml	NC	Draft with Reviewer	Miranda Harper	06/29/2017	Miranda Harper	
6624		New Job using files	ChemSamples3.xml	NC	Draft with Preparer	Miranda Harper	07/12/2017		
					States and the second states and the				
6626		New Job using files	ChemSamples4.xml	NC	Draft with Preparer	Miranda Harper	07/12/2017		

Figure 36. How to Verify that the Job has been sent to the Reviewer

To review a sample job, double click the job you want to view. A window titled "Job Summary View" will open. The Reviewer then clicks on the "Sample Result" tab to view the sample information. The viewer will see a summary of the sample information for all the samples in the file.

Home PWS Profiles Laboratory Profiles Drinking Water Sample Jobs Search Individual Samples System Administration Job Maintenance View Job Summary View - 10619 💥										
Sample Result Operation		tions Attachments Composite Sa	Imples							
Category	WSID	WS Name	Facility Name	Sampling Point	Sample ID	Sample Type	Collection Dat			
Microbial	NC0241010	GREENSBORO, CITY OF	DISTRIBUTION SYSTEM	RTOR	123117-0001	Routine	12/04/2017			
Microbial	NC0241010	GREENSBORO, CITY OF	DISTRIBUTION SYSTEM	RTOR	123117-0002	Routine	12/04/2017			

Figure 37. How to Review Sample Results

For a more detailed view of the sample information, double click on the sample row that you would like to view. A new window will open displaying the analysis information. When you have finished reviewing the sample information for the selected row, click the "Close" icon. You will return to the "Sample Result" view and can select another sample to review.

Microbial												=
🗐 Save 🗐 Save And Add Another 🙆 Close						* - Required	d + - Con	ditionally Require	ed f - Fe	derally Required	f - Federally Co	nditionally Req
Set Default Values for Sample Information												
Water System Id : Water System Name	Facility :	Sampling		Sampling Lo	ocation							
NC0241010 GREENSBORO, CITY OF	D01 - DISTRIBUTION SYSTEM	RTOR		▼ F37								
Sample ID *: 123117-0002	Collection Date *1: 12/04/2017	Collection	lime	HH:MM 12	mple Received Date							
		10.10										
Laboratory ID - Name :	Sample Type *f :	Sample Vol	lume(ML) ^f	Sample Coll								
37724 - ENCO	Routine	▼ 100		Tiffini Burling	game							
Comment												
	1											
Set Default Values for Sample Results Table												
Microbial Analytes Results												
ಿ Refresh 🌵 Add 样 Remove								Annhusia		1		
Analyte * A/P * Count	Units \	/olume(ML)		olume ssayed(ML) <mark>f</mark>	Method f	Analysis Start Date f	Analysis Start Time f	Completed (nalysis Completed	Analyzing Lab ID	Source Type	Comments
			As	ssayed(ML)	COLICUPE DA	Date	Inme	Date 1	īme			
3014 - E. Coli Absent					COLISURE-PA - COLISURE -	12/04/2017	13:00	12/05/2017 1	3:00			
					PRESENCE/AB							
3014 - E. Coli Absent					COLISURE-PA - COLISURE -	12/04/2017	13:00	12/05/2017 1	3:00			
					PRESENCE/AB	12/01/2011	10.00	1210012011	0.00			
Field Results and Measurements												

Figure 38. Sample Information View

When the review of the sample information is complete and the job is ready to send to the Certifier, return to the "Job Maintenance View" window, select the job by checking its box, and then click "Send to Certifier".

ome	PWS Profile	es Laboratory Profi	les Drinking Water Sa	mple Jobs Search Inc	lividual Samp	oles System Adminis	stration		
ob I	Maintenance View	V Job Summary Vie	ew - 6553 💥						
ea	rch Jobs								
ob ID	1	Created By	Status	From		То	File Name		
				▼)					Search
rin	king Water S	ample Jobs							
-		eate New Job Send t	to Reviewer Send to Ce	ertifier Certify and Subr	nit to State	💢 Reject 💢 Remo	ve 🗔 Download	Samples	
	Job ID 🔺	Sample Category	Description	File Name	Primacy Agency	Status	Preparer	Created On	Reviewer
	6321	Microbial	TEST_Bacti_1		NC	Accepted by State	Miranda Harper	06/02/2017	Miranda Harpe
	6324	Microbial	TEST_BACTI_repeats		NC	Draft with Preparer	Miranda Harper	06/02/2017	
	6325	Microbial	TEST_Bacti_Positive		NC	Accepted by State	Miranda Harper	06/02/2017	Miranda Harpe
	6326	Chem/Radionuclides	TEST_Nitrate_1		NC	Draft with Preparer	Miranda Harper	06/02/2017	
	6341		New Job using files	CMDP TEST FILE.xml	NC	Draft with Preparer	Turner Morrison	06/05/2017	
	6342	Chem/Radionuclides	DBPs		NC	Accepted by State	Turner Morrison	06/05/2017	Turner Morriso
	6418		Contaminant Code Test		NC	Draft with Preparer	Turner Morrison	06/15/2017	
	6419	Chem/Radionuclides	Cont. Code Test		NC	Draft with Preparer	Turner Morrison	06/15/2017	
	6459	Chem/Radionuclides	wqp 06202017		NC	Accepted by State	Miranda Harper	06/20/2017	Miranda Harpe
•	6553		New Job using files	TCRSample_EDIT .xml	NC	Draft with Reviewer	Miranda Harper	06/29/2017	Miranda Harpe
	6624		New Job using files	ChemSamples3.xml	NC	Draft with Preparer	Miranda Harper	07/12/2017	
	6626		New Job using files	ChemSamples4.xml	NC	Draft with Preparer	Miranda Harper	07/12/2017	
_									

Figure 39. Certifying and Submitting Step 2: Send File to Certifier

Select an individual from the dropdown menu and click "Submit". Remember that users with Certifier or Administrator roles will select themselves.

Send Data to Certifier	
Select Individual Are you sure you want to submit this data to the certifier?	

Figure 40. Submitting the File for Certification

A notification will indicate if a sample was sent successfully.

Send Data t	Send Data to Certifer	×	
Ar	Job successfully submitted to certifer		

Figure 41. Notification of Job Successfully Submitted to Certifier

Once the sample has been submitted for certification and submission, the Certifier, if a separate entity than the Reviewer, must log on to access the job. From the same "Job Maintenance View" window under "Drinking Water Sample Jobs", the Certifier's name should appear under "Certifier".

me	PWS Profiles	Laborato	ry Profiles)rinking Wa	ater Sample Jobs	Search Ind	ividual Samples 🔪 S	ystem Administra	tion				
b Main	tenance View	Job Sumr	mary View - 655	i3 💢									
arch	Jobs												
b ID		Created E	Ву	Status		From	To		File Name		Search	Reset	
				-		▼)					Jearch		
inkin	g Water Sar	ple Jobs											
👌 Refr	resh 🜵 Crea	te New Job	Send to Revie	wer Send	to Certifier Cer	tify and Subm	nit to State 🛛 👗 Rej	ect 💢 Remove	C Downloa	d Samples			
Jot	b ID 📥 Sample	Category	Description		File Name	Primacy Agency	Status	Preparer	Created On	Reviewer	Reviewed On	Certifier	Certified
632	1 Microbia	I.	TEST_Bacti_1			NC	Accepted by State	Miranda Harper	06/02/2017	Miranda Harper	06/02/2017	Miranda Harper	06/02/201
632	4 Microbia	l.	TEST_BACTI_r	epeats		NC	Draft with Preparer	Miranda Harper	06/02/2017				
632	5 Microbia	l.	TEST_Bacti_Po	sitive		NC	Accepted by State	Miranda Harper	06/02/2017	Miranda Harper	06/02/2017	Miranda Harper	06/02/201
632	6 Chem/R	adionuclides	TEST_Nitrate_1			NC	Draft with Preparer	Miranda Harper	06/02/2017				
634	1		New Job using	files	CMDP TEST FILE.xn	nl NC	Draft with Preparer	Turner Morrison	06/05/2017				
634	2 Chem/R	adionuclides	DBPs			NC	Accepted by State	Turner Morrison	06/05/2017	Turner Morrison	06/05/2017	Turner Morrison	06/05/201
641	8		Contaminant Co	ode Test		NC	Draft with Preparer	Turner Morrison	06/15/2017				
641	9 Chem/R	adionuclides	Cont. Code Tes	ŧt		NC	Draft with Preparer	Turner Morrison	06/15/2017				
645	9 Chem/R	adionuclides	wqp 06202017	N.		NC	Accepted by State	Miranda Harper	06/20/2017	Miranda Harper	07/28/2017	Miranda Harper	07/28/201
655	3		New Job using	files	TCRSample_EDIT .>	tmi NC	Draft with Certifier	Miranda Harper	06/29/2017	Miranda Harper	07/31/2017	Miranda Harper	
662	4		New Job using	files	ChemSamples3.xm	NC	Draft with Preparer	Miranda Harper	07/12/2017				
662	6		New Job using	files	ChemSamples4.xm	NC	Draft with Preparer	Miranda Harper	07/12/2017				
	6		MyTestGroup			NC	Draft with Preparer	Miranda Harper	07/31/2017				

Figure 42. How to Verify that the Job has been sent to the Certifier

To certify and submit to the State, select the sample and click "Certify and Submit to State".

lom	e PWS	Profiles Laborato	ry Profiles Drink	ing Wa	iter Sample J	obs	Search Indi	vidual Sam	oles Sys	tem Administra	tion	
obl	Maintenanc	e View										
Sea	rch Jobs											
Job II	C	Created E	By	Status			From		То		File Name	,
1						-						
Drin	king Wat	ter Sample Jobs										
-	Refresh	🕂 Create New Job		Send	to Certifier	Certify	and Subm	it to State	样 Reject	: 样 Remove	C Download	d Samples
	Job ID 🛎	Sample Category	Description		File Name		Primacy Agency	Status		Preparer	Created On	Reviewer
	6321	Microbial	TEST_Bacti_1				NC	Accepted b	y State	Miranda Harper	06/02/2017	Miranda Harpe
	6324	Microbial	TEST_BACTI_repea	ts			NC	Draft with P	reparer	Miranda Harper	06/02/2017	
	6325	Microbial	TEST_Bacti_Positive	9			NC	Accepted b	y State	Miranda Harper	06/02/2017	Miranda Harpe
	6326	Chem/Radionuclides	TEST_Nitrate_1				NC	Draft with P	reparer	Miranda Harper	06/02/2017	
	6341		New Job using files		CMDP TEST FI	LE.xml	NC	Draft with P	reparer	Turner Morrison	06/05/2017	
	6342	Chem/Radionuclides	DBPs				NC	Accepted b	y State	Turner Morrison	06/05/2017	Turner Morriso
	6418		Contaminant Code T	est			NC	Draft with P	reparer	Turner Morrison	06/15/2017	
	6419	Chem/Radionuclides	Cont. Code Test				NC	Draft with P	reparer	Turner Morrison	06/15/2017	
	6459	Chem/Radionuclides	wqp 06202017				NC	Accepted b	y State	Miranda Harper	06/20/2017	Miranda Harpe
	6553		New Job using files		TCRSample_El	Imx. TIC	NC	Draft with C	ertifier	Miranda Harper	06/29/2017	Miranda Harpe
	6624		New Job using files		ChemSamples	3.xml	NC	Draft with P	reparer	Miranda Harper	07/12/2017	
	6626		New Job using files		ChemSamples	4.xml	NC	Draft with P	reparer	Miranda Harper	07/12/2017	
	6786		MyTestGroup				NC	Draft with P	reparer	Miranda Harper	07/31/2017	

Figure 43. Certifying and Submitting Step 3: Certify and Submit to the State

Answer the security question, check the certification box, and click "Submit". If the Certifier would like to have a file submission confirmation, click "Download Sample XML" before clicking "Submit".

Question		
Job ld: 6553		
Submission Context: Download Sample X	ML	
Attachments		
File Name	Description	Date Added
		No items to show.
Question: What is the first and middle n	ame of your oldest sibling?	
	mation provided in this document is, to the best of my knowle for submitting false information, including the possibility of fine	
	or submitting raise information, including the possibility of him	es and imprisonment for knowing volations.
Submit		

Figure 44. Certifying and Submitting to the State by Answering Security Questions

Clicking "Download Sample XML" will produce a table with the following example information:

Job Id: 6624	
Prepared By: Miranda Harper	Created On: 07/12/2017
Reviewed By: Miranda Harper	Reviewed On: 08/03/2017
Certified By: Miranda Harper	Certified On:

Figure 45. Download Sample XML Table

A notification will verify that the job was successfully submitted to the State.

0010012		000012011
06/15/2	017	
06/15/2	Submitted to State	×
06/20/2		<u> </u>
06/29/2		
07/12/2	job successfully submitted to State	
07/12/2	7	
07/31/2	ОК	

Figure 46. Notification of Job Successfully Submitted to the State

The status of the sample will change to "Submitted". This indicates that the file has been marked for submission to the State and is waiting to be accepted into the State's database.

Job Maintenance View Search Jobs Job D Create By Status From To Drinking Water Sample Jobs Image: Status From To Image: Status Reject Image: Status Reject Image: Status Preparer G321 Microbial TEST_Bacti_1 NC Accepted by State Miranda Har G324 Microbial TEST_BACtT_repeats NC Draft with Preparer Miranda Har G326 Chem/Radionuclides TEST_Bacti_Positive NC Accepted by State Miranda Har G341 New Job using files CMDP TEST FILE.xml NC Draft with Preparer Turner Morr G342 Chem/Radionuclides DBPs NC Accepted by State Turner Morr G418 Contaminant Code Test NC Draft with Preparer Turner Morr G459 Chem/Radionuclides cont. Code Test NC Accepted by State Miranda Har G456 New Job using files TCRSample_EDIT .xml NC Submitted Miranda Har	2)	Compli	ance Monitorin	ig Data Portal								
Search Jobs Created By Status From To Iob D Created By Status From To Orinking Water Sample Jobs Image: Comparison of the status of	om	e PWS	Profiles Laborato	ry Profiles Drink	king W	ater Sample J	obs	Search Indi	vidual Samp	oles Sys	tem Administra	tion
Interview Created By Status From To Image: Status	ob I	Maintenanc	e View									
Prinking Water Sample Jobs Refresh Create New Job Send to Reviewer Send to Certifier Certify and Submit to State Reject Reme Job ID Sample Category Description File Name Primacy Agency Status Preparer 6321 Microbial TEST_Bacti_1 NC Accepted by State Miranda Har 6324 Microbial TEST_BACTI_repeats NC Draft with Preparer Miranda Har 6325 Microbial TEST_Bacti_Positive NC Accepted by State Miranda Har 6326 Chem/Radionuclides TEST_Nitrate_1 NC Draft with Preparer Miranda Har 6341 New Job using files CMDP TEST FILE.xml NC Draft with Preparer Turner Morr 6342 Chem/Radionuclides DBPs NC Accepted by State Turner Morr 6418 Contaminant Code Test NC Draft with Preparer Turner Morr 6419 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6553 New Job using files TCRSample_EDIT .xml NC Draft with Preparer <th>iea</th> <th>rch Jobs</th> <th></th>	iea	rch Jobs										
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Refresh Create New Job Send to Reviewer Send to Certifier Certify and Submit to State Reject Rem Job ID Sample Category Description File Name Primacy Agency Status Preparer 6321 Microbial TEST_Bacti_1 NC Accepted by State Miranda Har 6324 Microbial TEST_BACTI_repeats NC Draft with Preparer Miranda Har 6325 Microbial TEST_Bacti_Positive NC Accepted by State Miranda Har 6326 Chem/Radionuclides TEST_Nitrate_1 NC Draft with Preparer Miranda Har 6341 New Job using files CMDP TEST FILE.xml NC Draft with Preparer Turner Morr 6342 Chem/Radionuclides DBPs NC Draft with Preparer Turner Morr 6342 Chem/Radionuclides Cont. Code Test NC Draft with Preparer Turner Morr 6418 Cont. Code Test NC Draft with Preparer Turner Morr 6459 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6624							-			.		**
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Job ID Sample Category Description rile Name Agency Status Preparer 6321 Microbial TEST_Bacti_1 NC Accepted by State Miranda Har 6324 Microbial TEST_BACTI_repeats NC Draft with Preparer Miranda Har 6325 Microbial TEST_Bacti_Positive NC Accepted by State Miranda Har 6326 Chem/Radionuclides TEST_Nitrate_1 NC Draft with Preparer Miranda Har 6341 New Job using files CMDP TEST FILE.xml NC Draft with Preparer Turner Morr 6342 Chem/Radionuclides DBPs NC Accepted by State Turner Morr 6418 Contaminant Code Test NC Draft with Preparer Turner Morr 6419 Chem/Radionuclides wqp 06202017 NC Draft with Preparer Turner Morr 6459 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files <td< td=""><td>æ</td><td>Refresh (</td><td>Create New Job</td><td>Send to Reviewer</td><td>Sen</td><td>d to Certifier</td><td>Certify</td><td>and Subm</td><td>it to State</td><td>💥 Reject</td><td>t 样 Remove</td><td>J. D</td></td<>	æ	Refresh (Create New Job	Send to Reviewer	Sen	d to Certifier	Certify	and Subm	it to State	💥 Reject	t 样 Remove	J. D
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6326 Chem/Radionuclides TEST_Nitrate_1 NC Draft with Preparer Miranda Har 6341 New Job using files CMDP TEST FILE.xml NC Draft with Preparer Turner Morr 6342 Chem/Radionuclides DBPs NC Accepted by State Turner Morr 6418 Contaminant Code Test NC Draft with Preparer Turner Morr 6419 Chem/Radionuclides Cont. Code Test NC Draft with Preparer Turner Morr 6459 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6553 New Job using files TCRSample_EDIT .xml NC Submitted Miranda Har 6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har		6324	Microbial	TEST_BACTI_repea	its			NC	Draft with P	reparer	Miranda Harper	06/02
6341 New Job using files CMDP TEST FILE.xml NC Draft with Preparer Turner Morr 6342 Chem/Radionuclides DBPs NC Accepted by State Turner Morr 6418 Contaminant Code Test NC Draft with Preparer Turner Morr 6419 Chem/Radionuclides Cont. Code Test NC Draft with Preparer Turner Morr 6459 Chem/Radionuclides cont. Code Test NC Draft with Preparer Turner Morr 6459 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6553 New Job using files TCRSample_EDIT .xml NC Submitted Miranda Har 6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har		6325	Microbial	TEST_Bacti_Positive	e			NC	Accepted by	y State	Miranda Harper	06/02
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6418 Contaminant Code Test NC Draft with Preparer Turner Morr 6419 Chem/Radionuclides Cont. Code Test NC Draft with Preparer Turner Morr 6459 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6553 New Job using files TCRSample_EDIT.xml NC Submitted Miranda Har 6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har		6341		New Job using files		CMDP TEST FIL	.E.xml	NC	Draft with P	reparer	Turner Morrison	06/05
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6459 Chem/Radionuclides wqp 06202017 NC Accepted by State Miranda Har 6553 New Job using files TCRSample_EDIT.xml NC Submitted Miranda Har 6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har		6418		Contaminant Code T	fest			NC	Draft with P	reparer	Turner Morrison	06/15
✓ 6553 New Job using files TCRSample_EDIT.xml NC Submitted Miranda Har 6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har		6419	Chem/Radionuclides	Cont. Code Test				NC	Draft with P	reparer	Turner Morrison	06/15
6624 New Job using files ChemSamples3.xml NC Draft with Preparer Miranda Har 6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har		6459	Chem/Radionuclides	wqp 06202017				NC	Accepted by	y State	Miranda Harper	06/20
6626 New Job using files ChemSamples4.xml NC Draft with Preparer Miranda Har	•	6553		New Job using files		TCRSample_EI	Imx. TIC	NC	Submitted		Miranda Harper	06/29
		6624		New Job using files		ChemSamples	3.xml	NC	Draft with P	reparer	Miranda Harper	07/12/
6786 MyTestGroup NC Draft with Preparer Miranda Har		6626		New Job using files		ChemSamples	4.xml	NC	Draft with P	reparer	Miranda Harper	07/12/
		6786		MyTestGroup				NC	Draft with P	reparer	Miranda Harper	07/31

Figure 47. Verifying Status of the Sample Changed to Submitted

The State database (SDWIS) will refresh every 30 minutes and accept samples that have been marked for submission. Once the sample is accepted, the status of the job will change to "Accepted by State". At this point, no further action is required. If an error is found after the file has been accepted, contact the appropriate Rule Manager for the sample contaminant to request that the sample be deleted.

	e VWS Profile	s Laboratory Profiles Dr	inking Water Sample	Jobs Searc	h Individual Samp	les Syst	em Administration		
ob I	Maintenance Viev	v							
ea	rch Jobs								
ob IC	D	Created By	Status	From	1	То		File Name	
				▼					Search
rin	king Water Sa	mple Jobs							
		eate New Job Send to Review	ver Send to Certifie	Certify and	Submit to State	X Reject	💥 Remove 🗔 🛙	Download Samples	
~	Job ID	Sample Category	Description	<u> </u>	File Name		Primacy Agency	Status	Preparer
	6321	Microbial	TEST_Bacti	1			NC	Accepted by State	Miranda H
	6324	Microbial	TEST_BACT	I_repeats			NC	Draft with Preparer	Miranda H
	6325	Microbial	TEST_Bacti_	Positive			NC	Accepted by State	Miranda H
	6326	Chem/Radionuclides	TEST_Nitrate	e_1			NC	Draft with Preparer	Miranda H
	6341		New Job us	ing files	CMDP TEST FILE.	xml	NC	Draft with Preparer	Turner M
	6342	Chem/Radionuclides	DBPs				NC	Accepted by State	Turner Mo
	6418		Contaminant	Code Test			NC	Draft with Preparer	Turner Mo
	6419	Chem/Radionuclides	Cont. Code 1	Test			NC	Draft with Preparer	Turner Mo
	6459	Chem/Radionuclides	wqp 062020	117			NC	Accepted by State	Miranda H
	6553		New Job us	ing files	TCRSample_EDIT .xml		NC	Submitted	Miranda H
	6624		New Job us	ing files	ChemSamples3.x	ml	NC	Draft with Reviewer	Miranda H
	6626		New Job us	ing files	ChemSamples4.x	ml	NC	Draft with Preparer	Miranda H
	6786		MyTestGrou	D			NC	Draft with Preparer	Miranda H

Figure 48. Verifying Status of the Sample Changed to Accepted by State

If an error in the sample information is found before the sample has been certified and submitted to the State, you may delete the entire job ID as you would if you had a critical error (page 5) or delete the individual sample that needs to be corrected. To delete an individual sample from a job, open the Job Summary View by double clicking on the job in the 'Job Maintenance View', select the checkbox next to the sample that needs to be removed, and click 'Remove'. Contact the appropriate rule manager for the sample contaminant to have the sample reset in LDS so that corrections can be made. Resubmit the sample following the same CMDP upload and certification procedure.

Job Maintenance View 🛛 Job Summary View - 16572 💢 🔪							
Sample Result Operational Data Job History Validations Attachments Composite Samples							
ಿ Refresh 🛛 Add 🔻 样 Rem	ove						
Category	WS ID	WS Name	Facility Name	Sampling Point			
Chem/Radionuclides	NC0160147	HUNTWOOD MHP	TREATMENT_PLT_WELL #2	E02			
Chem/Radionuclides	NC0392111	CAMELOT S/D	TREATMENT_PLT_WELL #1	001			
Chem/Radionuclides	NC0392111	CAMELOT S/D	TREATMENT_PLT_WELL #1	001			
Chem/Radionuclides	NC0392263	LEGEND HILLS S/D	TREATMENT_PLT_WELL #1	001			
Chem/Radionuclides	NC0392388	WOODS OF ASHBURY S\D	TREATMENT_PLT_PLANT #1	001			

Figure 49. Removing a Sample from a Job File

If an error in the sample information is found after the file has been certified and submitted, contact the appropriate rule manager for the sample contaminant to have the sample deleted from the State database and reset in LDS. Please be aware that once the sample job has been certified, the samples cannot be modified or deleted in CMDP. Therefore, the user must use an amended sample ID number when resubmitting modified sample data to prevent a duplicate sample ID error in CMDP. We recommend adding an _A to the end of the end of the sample ID to denote that it has been amended (i.e. 20190101_W01_A). The rule manager can still reset the sample in LDS back to RDY status so that the sample data and sample ID can be updated for resubmission. Remember to uncheck the analysis complete box to unlock the sample data for editing. For total coliform samples this requires opening the analysis screen first (the microscope icon), unchecking the complete box, and saving before you can modify the sample in the edit/review screen (paper and pencil icon). The analysis complete box must re-checked to advance the sample from ANL status back to RDY status.

4. Generating Reports

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An ability to export your data into an Excel file was added based on users' requests. Please note that this option exists for your own informational needs, be it bookkeeping or reporting to clients, and has nothing to do with reporting to the State. To export data into Excel, press "My Reports" in the top right-hand corner of Main View Screen.

Do <u>not</u> submit the Excel file generated through "My Reports" to the State in place of uploading the sample files through CMDP.

Add Samp			Edit atch	BULK Print All	Print Selected		k lete ected		Upload Selected	Upload All RDY	Go To CMDP	•	Cont Hide acco Auto Refi	epted		oup: B	ACTI/C	Submitt SWR My Rep Dad State F	orts		
Sar	npl	es s	arch B	y: Water System	n No. 🔻 S	Search	For:	Q,			Clear	0	۲	٠	Page	1	of 2	Go	•		<u>Help</u> Logof
Sel	Edit	Analysis	Rep	Lab Log ID	ş	Status	Rule	Туре	Water S Number		Vater Sys N	ame			Loc	Free CI	Tot CI	Collected	On	TColi	EColi
	2	1	4	TEST_TC_POSIT	IVE_M_1	RDY	TCR	RT	NC20490		HESAPEAKE	POIN	TE MASTE	R	155	1		10/29/18 08 AM	:00	0	٩
	2	4	4	TEST_TC_REPEA	AT_M_3	RDY	TCR	RP	NC03320	010 0	URHAM, CIT	Y OF			115	1.2		10/24/18 08 AM	:00	٩	٩

Figure 50. My Reports Option

The Report Screen will open as shown below.

Download S	Sample Data to Excel File	
	Step 1: Input start date and/or end date to limit results. Start date: End date:	
	Step 2: Input water system number (or blank for all) to limit by water system. Water System Number (starts with): NC	
	Step 3: Click Search to search for the data results. Search	
	Step 4: Click Export to export the results to file.	e

Figure 51. Reports Screen

To obtain a specific record(s), fill in the sample collection start and/or end date and the water system number (leaving a field blank will bring all records, e.g. to see all water systems for a selected date range, leave the water system number field blank). Then click "Search" to view the number of matching records. To generate the Excel file, click "Export." The file will contain all of the data that you requested, at which point you can use the additional sorting, filtering, and calculating options available in Excel.

Appendices

Appendix 1 - Sample Status

Each sample in the LDS Main View can be in one of the following statuses:

• **"PRE**" (for "pre-collection") - applies only to individually (i.e. not as a batch) entered samples. Contains only the information necessary to be on a sampling form sent out for collection with a bottle, such as Water System No., Name, Source, Facility Type, Lab ID, Sample Type, Facility ID, Sample Point. Lab Log ID, Location Code and Location can be optionally entered at this stage.

• **"PST**" (for "post-collection") - applies only to individually entered samples. All sample information is entered and disinfectant information (for TCR samples), "Collector Name", "Collection Date" and "Collection Time" fields are populated; no analysis information is entered yet.

• **"ANL**" (for "analysis started") - this status will appear after analysis information had started to be entered, but the entry was saved before completion.

• **"RDY**" (for "ready for submittal") - in addition to all required sample information, analytical result, dates, times, and Lab Log ID are entered, the "Certified By" field is populated and the "Analysis Complete" box is checked. This status will also be displayed for all sampling results entered as batches, after a batch is completed.

• "SUB" (for "submitted to SDWIS") – an XML file for the sample results has been submitted to CMDP for final certification and submission to State. The sampling results have not yet been accepted into SDWIS database.

• **"RJT**" (for "rejected by SDWIS") – an XML file with sample results had been uploaded to CMDP, but there were errors, either in the sample detail or sample analysis that prevented full acceptance of all records. Details on errors can be viewed by clicking on sample status while it is "RJT", which will also be highlighted in red in Main View.

Each sample in the CMDP Main View can be in one of the following statuses:

• **"Draft with Preparer**" – Job is currently maintained by a Preparer (Reviewer and Certifier roles also have edit rights). Modifications to the Job can still occur (add/edit/remove), and validations will be executed when Job is saved.

• **"Draft with Reviewer**" – Job is currently under review (only Reviewer and Certifier roles have edit rights). Modifications can still occur (add/edit/remove), and validations will be executed when Job is saved.

• **"Submitted**" – Job has been submitted by reporting organization to primacy agency. No modifications are possible.

• "Accepted by State" – Job data has been migrated to primacy agency compliance system. No modifications are possible.

Appendix 2 – Contaminant Groups

The table below lists all of the potential contaminant groups for which a laboratory may be certified to perform the analyses. Each contaminant group is represented as a separate module (see Figure 2). Contaminant codes represent analytes that fall under each group, representing analyte codes in SDWIS. These codes are displayed on the state laboratory forms and are preserved in LDS.

Asbestos

<u>Code</u>	<u>Name</u>
1094	Asbestos

Bacti/GWR

<u>Code</u>	<u>Name</u>
3100	Coliform
3014	E. Coli
3001	Heterotrophic Plate Count
3002	Enterococci
3028	Coliphage

Bromate/Bromide

<u>Code</u>	<u>Name</u>
1011	Bromate
1004	Bromide

CIO2/Chlorite

<u>Code</u>	<u>Name</u>
1008	Chlorine Dioxide
1009	Chlorite

Dioxin

 Code
 Name

 2063
 2,3,7,8-TCDD

Inorganics

<u>Code</u> 1005	<u>Name</u> Arsenic, Total
1010	Barium, Total
1015	Cadmium, Total
1020	Chromium
1024	Cyanide
1025	Fluoride
1028	Iron
1032	Manganese
1035	Mercury
1036	Nickel
1045	Selenium
1052	Sodium
1055	Sulfate
1074	Antimony
1075	Beryllium
1085	Thallium
1925	рН

Lead/Copper

<u>Code</u>	<u>Name</u>
1022	Copper, Free
1030	Lead

Nitrate/Nitrite

<u>Code</u>	<u>Name</u>				
1040	Nitrate				
1041	Nitrite				

Radionuclides

<u>Code</u>	<u>Name</u>
4000	Gross Alpha, Excl. Radon & U
4002	Gross Alpha, Incl. Radon & U
4006	Combined Uranium
4010	Combined Radium (-226 & -228)
4020	Radium -226
4030	Radium -228
4100	Gross Beta Particle Activity

SOCs

<u>Code</u>	<u>Name</u>
2005	Endrin
2010	BHC-Gamma
2015	Methoxychlor
2020	Toxapene
2031	Dalapon
2035	Di(2-Ethylenexyl) Adipate
2036	Oxamyl
2037	Simazine
2039	Di(2-Ethylhexyl) Phthalate
2040	Picloram
2041	Dinoseb
2042	Hexachlorocyclopentadiene
2046	Atrazine
2051	Lasso
2065	Heptachlor
2067	Heptachlor Epoxide
2105	2,4,-D
2110	2,4,5-TP
2274	Hexachlorobenzene
2306	Benzo(a)pyrene
2326	Penthachlorophenol
2383	Total Ploychlorinated Piphenyls (PCB)
2931	1,2,-Dibromo-3-Chloropropane
2946	Ethylene Dibromide
2959	Chlordane

THMs/HAA5s

<u>Code</u>	<u>Name</u>
2450	Monochloroacetic Acid
2451	Dichloroacetic Acid
2452	Trichloroacetic Acid
2453	Monobromoacetic Acid
2454	Dibromoacetic Acid

2456	Total Haloacetic Acids (HAA5)
2944	Dibromochloromethane
2941	Cholorform
2942	Bromoform
2943	Bromodichloromethane
2950	Total Trihalomethanes

тос

<u>Code</u>	<u>Name</u>
1927	Alkalinity, Total
2919	Carbon, Dissolved Organic (DOC)
2920	Carbon, Total
2922	UV Absorbance @254 NM

VOCs

<u>Code</u>	<u>Name</u>
2378	1,2,4-trichlorobenzene
2380	Cis-1,2,-dichloroethylene
2955	Xylenes, Total
2964	Dichloromethane
2968	O-dichlorobenzene
2969	P-dichlorobenzene
2976	Vinyl Chloride
2977	1,1-dichloroethylene
2979	Trans-1,2-dichloroethylene
2980	1,2-dichloroethane
2981	1,1,1-trichloroethane
2982	Carbon Tetrachloride
2983	1,2-dichloropropane
2984	Trichloroethylene
2985	1,1,2-trichloroethane
2987	Tetrachloroethylene
2989	Chlorobenzene
2990	Benzene
2991	Toluene
2992	Ethylbenzene
2996	Styrene

WQPs

<u>Code</u>	<u>Name</u>
1016	Calcium
1044	Orthophosphate
1049	Silica
1064	Conductivity @ 25 C Umhos/cm
1925	pH
1927	Alkalinity, Total
1996	Temperature (Centigrade)

Appendix 3 - Miscellaneous Tips and Getting Help

In general, using search and help functions in your browser are fairy reliable ways of getting the answers for browser-related questions. That said, we expect that most users will need at least some information on how to enable pop-ups or to find or select the download folder on your computer. Below are detailed instructions on those two topics for different browsers. In addition, we include instructions on printing, deleting samples, and some troubleshooting tips. The guidance provided in this section is fairly comprehensive and should help overcome most issues you may experience. However, if you have any questions, call support using contact information under "Getting Help."

To enable pop-ups:

Internet Explorer (IE):

- Click the **Tools** button, then click **Pop-up Blocker**, and then click **Pop-up Blocker Settings**.
- In the Address of website to allow box, type (or copy and paste) the address of LDS, https://pws.ncwater.org/LDS/pages/samples.aspx, then click Add, then close the box.

If your IE browser is equipped with Google Toolbar, it will take additional steps to enable pop-ups as Google Toolbar has its own pop-up blocker, see below.



Push the "crossed out monitor" button on the Google Toolbar and this will allow pop-ups from the site.



Google Chrome:

- To see blocked pop-ups for a site, follow the steps listed below:
- If pop-ups have been blocked, you'll see the kicon in the address bar. Click the icon to see a list of the blocked pop-ups.
- To always see pop-ups for the site, select "Always show pop-ups from [site]." The site will be added to the exceptions list, which you can manage in the Content Settings dialog.
- To manually allow pop-ups from a site, follow the steps below:

Click the Chrome menu

- on the browser toolbar.
- Select **Settings**.
- Click Show advanced settings.
- In the "Privacy" section, click the **Content settings** button.
- In the "Pop-ups" section, click **Manage exceptions**.

Mozilla Firefox:

0

- At the top of the Firefox window, click on the **Firefox** button and then select **Options**.
- Select the **Content** Panel.
- **Block pop-up windows:** Uncheck this to disable the pop-up blocker altogether.
- Exceptions: This is a list of sites that you want to allow to display pop-ups.

Allowed Sites - Pop-ups	- 0
You can specify which web sites ar pop-up windows. Type the exact a you want to allow and then click A	ddress of the site
Address of web site:	
	Allow
Site	Status
popuptest.com	Allow
Remove Site Remove All Sites	<u>C</u> lose

The dialog box has the following choices:

- **Allow**: Click this to add a website to the exceptions list.
- **Remove Site**: Click this to remove a website from the exceptions list.
- **Remove All Sites**: Click this to remove all of the websites in the exceptions list.

Printing:

Imples Search By: Water System No Search For: Clear Clear Color Color <t< th=""><th>Add</th><th></th><th></th><th>Edit Ratch</th><th>Download CSV File</th><th>Lab State Lab to State State</th><th>b</th><th>Print All</th><th>Print</th><th>Delete Download</th><th></th><th>ples alrea</th><th>dy accep</th><th>omittal oted to SDWIS ad State Form</th><th>NCD</th><th>ENR</th></t<>	Add			Edit Ratch	Download CSV File	Lab State Lab to State State	b	Print All	Print	Delete Download		ples alrea	dy accep	omittal oted to SDWIS ad State Form	NCD	ENR
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		2	٥	4	0913-002	SUB	TCR	RP	NC0161101	ALTAPASS WATER ASSOCIATION	001			09/17/13 06:00 AM	•	•

For printing, check each box under the "Select" column heading for the rows you would like to print. Then, click the "Print Selected" button. Alternatively, you can use the "BULK Print All" button, which will print all samples in "RDY" and "SUB" statuses; no selection is needed.

Deleting Samples:

Similar to printing, check each box under the "Select" column heading for the rows to be deleted. Then, click the "Delete Selected" button. Any entry can be deleted from Main View prior to being submitted (prior to "SUB" status). When the XML sample file is uploaded to CMDP, all entries in "RDY" status get converted to "SUB" status and the Delete option is disabled at that point. The status will change to "ACC", for "accepted", when the sampling result gets accepted into SDWIS. The sample will then become hidden, but can be viewed by unchecking the following box:

Hide samples already accepted to SDWIS

Samples in "ACC" status cannot be deleted.

Once the sample file is uploaded to CMDP and the status has changed to "SUB", you may call a representative from PWS Section to have this sample reset back to "RDY status if necessary.

Frequently Asked Questions:

Registration/ Login:

1. Where do I get my PIN number?

You should create a four-digit PIN number yourself and e-mail it with the rest of your registration information (Your Name, NCID, Lab ID, Lab Name, Your Role, e-mail address) when requesting an LDS account.

2. I cannot log on to LDS, why?

This could happen for several reasons. The most common one is that the username e-mailed to us with the request to create an LDS account is not a valid NCID: make sure that you have obtained an NCID account before opening an LDS account. Another reason for log on failure is attempting to log on to LDS before receiving a confirmation e-mail from the PWS Section informing you that the LDS account was created: wait for the confirmation e-mail before attempting to log on.

3. I cannot log on to CMDP, why?

Your SCS account password must be updated every 90 days. Go to the SCS login page to reset your password (<u>https://encromerr.epa.gov</u>).

CMDP File Upload/Submission:

1. Where do I find my downloaded file?

With the most recent update to LDS, it is no longer necessary to download your sample file for submission. The XML sample file will be uploaded to CMDP after selecting either the "Upload Selected" or "Upload All RDY" options and entering your SCS username password. You can review, certify and submit the samples by logging into CMDP (<u>https://cmdpapp1.epa.gov</u>)

2. How do I know if the XML file uploaded to CMDP?

Login to CMDP and navigate to the "Drinking Water Sample Jobs" tab. Double click on the link for the job you would like to review. The sample information will open in a new tab that can be reviewed.

3. How do I know if results are uploaded successfully?

In LDS, the sample status will change to "ACC" and the sample will disappear from Main View when they get accepted into the State database. You must uncheck "Hide accepted Samples" to view samples with an "ACC" status.

In CMDP, the sample status will change to "Accepted by State" when the State database pulls the certified sample files from CMDP.

You can also view results immediately on Drinking Water Watch

(https://www.pwss.enr.state.nc.us/NCDWW2/).

If the status in LDS and CMDP are conflicting or if you have any questions regarding upload status, contact the PWS Section for assistance.

Getting Help:

For help and support with LDS and CMDP, contact:

- Carmalin Walter Data Processing Branch Head; (919) 707-9085 or <u>carmalin.walter@ncdenr.gov</u>
- Miranda Harper Bacti, GWR, Nitrate/Nitrite; (919) 707-9092 or miranda.harper@ncdenr.gov
- Turner Morrison THMs/HAA5s and TOC; (919) 707-9071 or turner.morrison@ncdenr.gov
- Steve Proctor Asbestos, Inorganics, Radionuclides, SOCs, VOCs; (919) 707-9094 or steve.proctor@ncdenr.gov
- Dustin Rhodes Lead and Copper and WQPs; (919) 707-9082 or dustin.rhodes@ncdenr.gov

For information about transitioning to using a LIMS system to upload data, contact Eric Chai at (919) 707-9146 or <u>eric.chai@ncdenr.gov</u>

Appendix 4 - System Requirements

The demands on the user's computer system should be minimal due to the fact that the software is webbased. The majority of common computer setups will be able to handle the tasks required for running the application without any upgrades or expenditures.

- 1 GHz processor (32- or 64-bit) or better;
- 1 GB of RAM (32-bit); 2 GB of RAM (64-bit);
- Monitor capable of display resolution of minimum 1024x768 (higher is better);
- 10 GB of available disk space;
- One of the compatible browsers (Internet Explorer 9 or higher, Firefox 16 or higher, Chrome 18 or higher all available online for free download);
- Mouse or pointing device;
- Access to a printer with drivers: PCL5, PCL5 emulation, or PostScript (PS);
- Broadband internet connection capable of 1.5+ mbps of sustained transfer speeds.

Appendix 5 – New Reporting Fields on Distribution System Samples

In August 2016, several new fields, including "Tap Location", "Street Address" and "City" were added to State laboratory reporting forms for distribution system samples (Bacteriological, Asbestos, Chlorine Dioxide/Chlorite, Lead and Copper, and TTHM/HAA5). Check boxes were also included on distribution system sample lab forms for denoting whether or not the sample site is "owned or controlled by the water system", or the sample site is "a daycare or K-12 school". These new fields were added to collect more complete information about the location of a sample, to aid with compliance determinations, and to better serve information requests from the public, State and federal agencies, and the media.

"Tap Location" field is provided to capture the information on where the tap is located within the sample site. Some examples of values for this field are "indoor tap", "outside spigot", or "kitchen sink".

"City" field is added to distribution sample forms for better geographical information on collected samples. Most of the time, this field will be pre-populated with the city information from the State database, SDWIS. However, for larger water systems that serve several cities, this information must be filled out during sample collection.

Information regarding the sample site being "owned or controlled by water system" field was added to aid data tracking and compliance determinations for the requirements to provide Special Notice under the Public Notification Requirements Rule [see 15A NCAC 18C .1523(c)]. Water systems are required to provide Special Public Notice to residents of a property not owned or controlled by the water system if an individual sample exceeds an action level, MCL (Maximum Contaminant Level), or MRDL (Maximum Residual Disinfectant Level) or is positive for coliform bacteria.

Information regarding the sample site being "a daycare or K-12 school" is included on all distribution sample forms to indicate whether the sample is taken at a daycare or a primary or secondary education institution. This information is particularly important if the lead action level is exceeded.

The following link is to a video made by the Public Water Supply Section that explains the new fields: https://files.nc.gov/ncdeq/Water%20Resources/files/pws/compliance/DistributionSystemForm_Update2016.wmv

Appendix 6 – Updates

This section of the manual will be reserved to track the changes to the software since the original release. The following is the list of changes since the original August 2013 release.

Date Description

- 10/30/2013 Location Code Location association added (see Fig. 4); "Email it to me instead" file option added (see Fig. 13).
- 11/07/2013 "Default Disinfectant Used" added to "Add New Batch Samples Screen" (see Fig. 9).
- 11/15/2013 Select multiple samples for print and delete; information bar added (see Fig. 2).
- 12/17/2013 Columns for Location Code, Free and Total Chlorine added to Main View (see Fig. 2).
- 12/23/2013 "Download Selected" button added (see Fig. 2).
- 12/31/2013 Updated screen shots throughout manual, as necessary; FAQs Section added to Appendices; "Clearing Cache" Section removed from Appendices, as no longer necessary; more caution bullets added; access to User Manual placed under "Help" button (see Fig. 2).
- 01/15/2014 "My Reports" option added (see Figs. 24 and 25).
- 12/11/2014 LDS for Chemicals is released to all certified laboratories in the state.
- 08/02/2016 Bacti, Asbestos, Chlorine Dioxide/Chlorite, Lead and Copper, and TTHM/HAA5 lab forms updated to include new fields including "Location Code", "Tap Location", "Street Address", and "City". Check boxes also added to the top portion of the form for the collector to denote whether or not the sample site is "owned or controlled by the water system," or whether of not it is "a daycare or K-12 school."
- 01/01/2019 LDS has been modified to Lab Data Submittal 2.0 which uploads XML files into CMDP for sample certification and submission to the State. The Lab-to-State process is no longer used.