Using the LIMS Scheduler

1. Scope

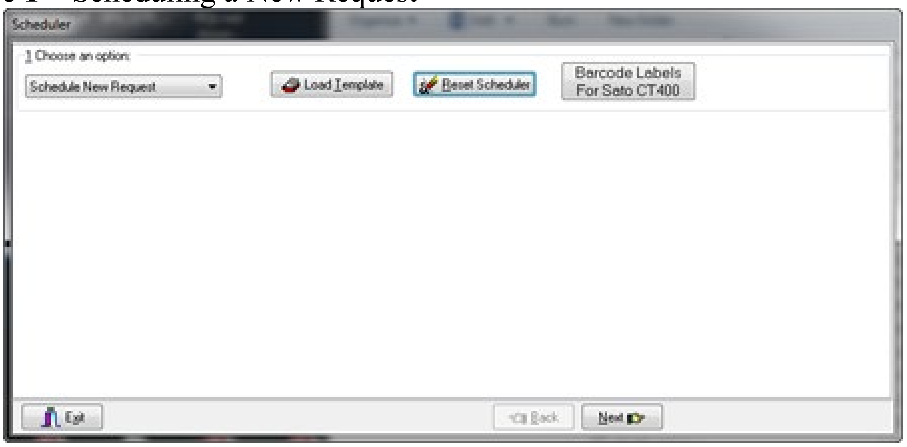
The Laboratory Information Management System (LIMS) Scheduler is used by DEP Lab clients and managers to enter sampling requests into LIMS system. DEP clients use the Scheduler to submit requests for DEP Lab services. Lab Managers use it to schedule work for outside clients and to approve requests.

2. Scheduling Analyses in LIMS

Log into the DEP LIMS and from the menu choose *Scheduler* from the *General* menu.

2.1 Select *Schedule New Request* then *Next*.

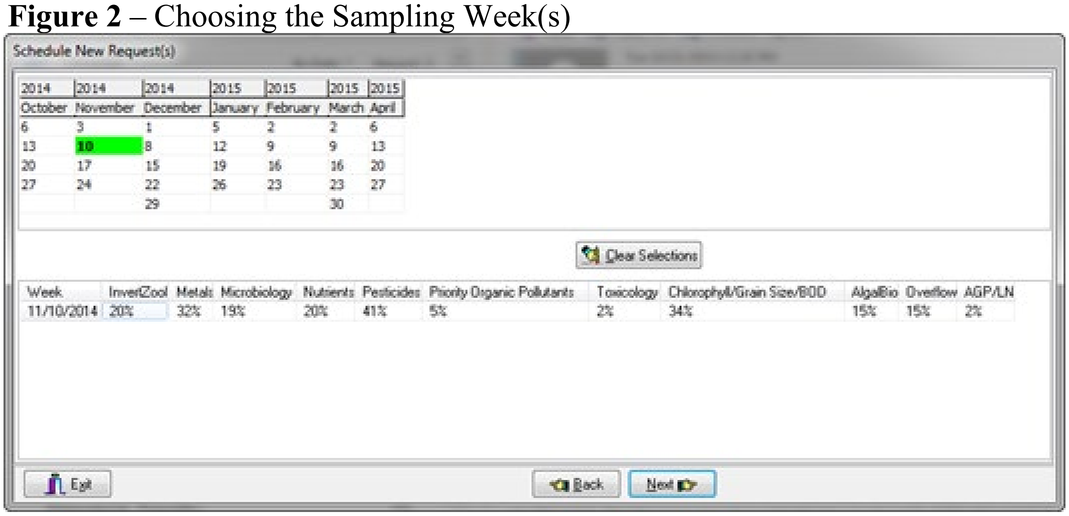
Figure 1 – Scheduling a New Request



2.2 If you have saved templates from previous scheduling events, please choose *Load Templates* and highlight the correct template

2.3 Choose the Week(s) for the Sampling Event

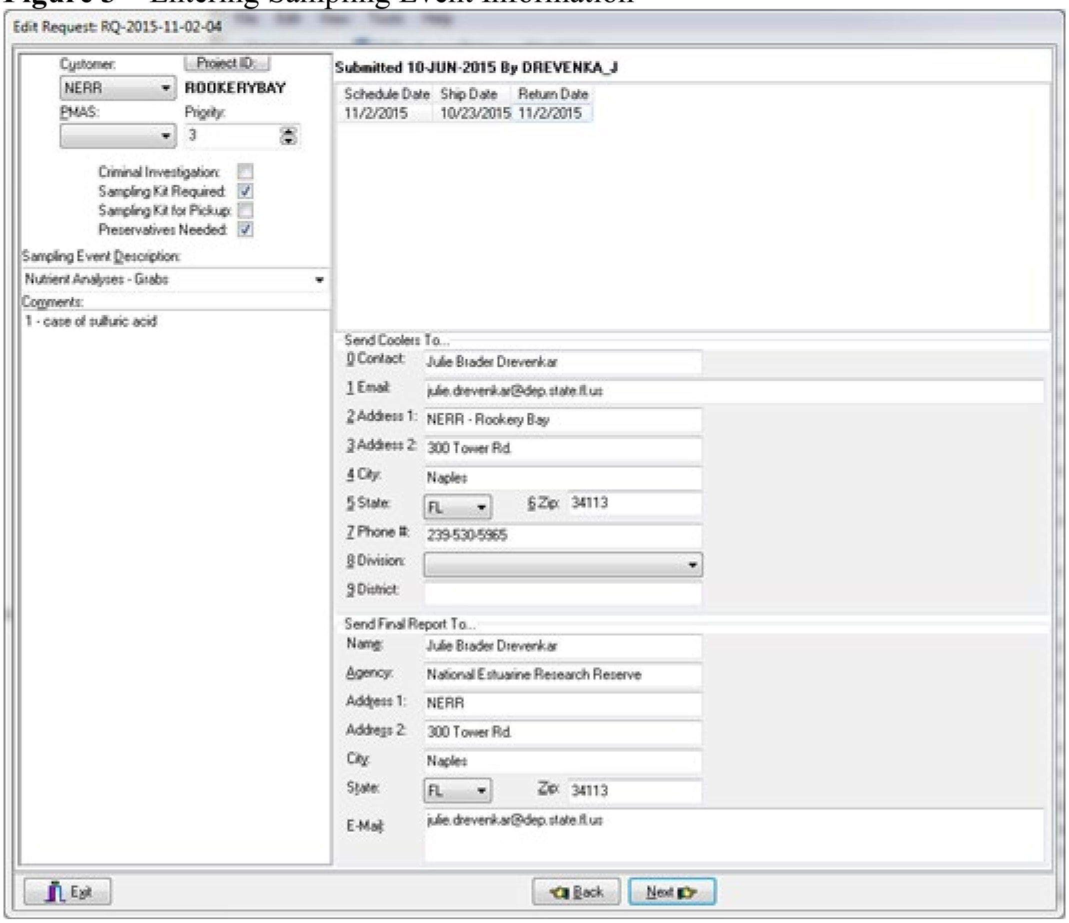
Figure 2 – Choosing the Sampling Week(s)



- Choose the week of sample collection. If the same event is going to be scheduled a number of times, then multiple weeks then can be selected for up to six months. There will be a different Request ID generated for each week selected and each RQ will have its own set of Scheduled/Shipping/Return dates.
- Laboratory capacities are displayed, by group, below the calendar. If any groups have capacities over 150% then check with the lab before scheduling the analyses.
- Choose *Next* to move to the next screen.

2.4 Entering Sampling Event Information

Figure 3 – Entering Sampling Event Information



- Select a Customer ID from the drop-down list.
- Select a Project ID from the projects displayed.
- Select a priority for the report turnaround time.
  - The Scheduler defaults to Priority 3.
  - The priority indicates how soon the data are needed. If priority 1 or 2 is selected the program will prompt the user for a comment.
  - Turnaround time = Priority# plus one week
  - Examples:

    Priority 1: Two-week turnaround

Priority 2: Three-week turnaround

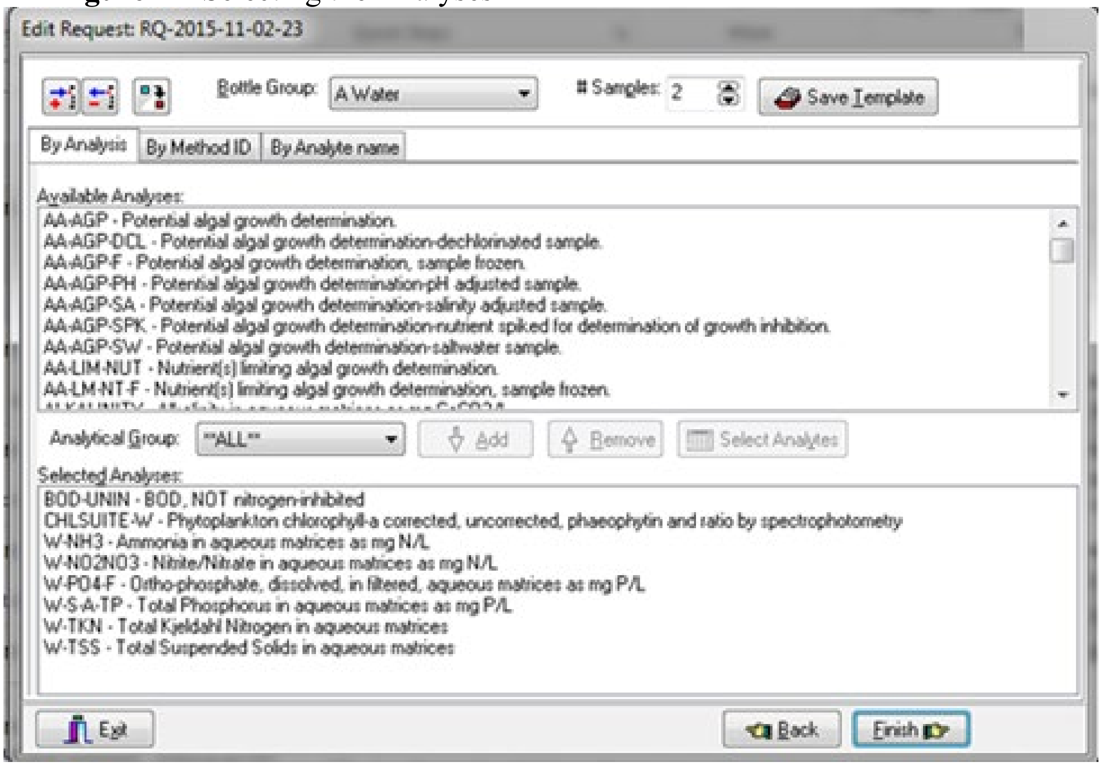
Priority 3: Four-week turnaround

- If less than a two-week turnaround time is needed, please contact the laboratory.

- Check the designated box if the event is a Criminal Investigation.
- Check the designated box if a sampling kit is required.
- Check the designated box if a sampling kit is being picked up.
- Check the designated box to indicate whether preservation is required for the sampling event. If checked, then a comment must specify what kind of preservative and how much. We are now encouraging all customers to accept sulfuric and nitric acid by the case (24 vials).
- Enter a description of the sampling event. For criminal cases, include a case number.
- Comments: Enter any special instructions for the laboratory staff. These comments could include:
  - Preservatives, cases or individual vials
  - Analyte-free water for Field Blanks
  - Paperwork and shipping bills
  - Special delivery or pickup dates
  - Number of coolers to use, if designated
  - Special containers instructions (more/fewer)
  - Login instructions (separate events)
  - Special handling or importance
- Schedule/Shipping/Return Dates: The system defaults to a kit ship date of 2 weeks prior to the sampling week. The default return date indicates the week of sampling but can be changed if a more precise date is known. The Receiving Room staff require 2 full weeks to schedule a kit for delivery. The Ship Date can no longer be modified. If a kit is needed prior to the mandatory 2-week period, please contact the lab so that we may accommodate your request.
- Under *Send Coolers To*, enter the name, email address, address and phone number of the person receiving the kit. When kit preparation is complete, this person will receive an email indicating it is ready for pickup or that is has shipped, including the common carrier tracking codes.
- Under *Send Final Report To*, enter the name and address of the person getting the data. All reports are transmitted via FTP to a password-protected directory.
- E-mail: Enter the correct e-mail address of the person(s) receiving the report. The E-mail row is a required field. All report notifications are e-mailed so an incorrect address will result in no notification when the report is issued and files transmitted.
- If the *Next* button is not highlighted, choose the *Required Customer Info* button to find out what information is missing.
- Choose *Next* to go to the analysis selection screen.

2.5 Selecting the Analyses

Figure 4 – Selecting the Analyses



There are 3 icons for working with Bottle Groups:

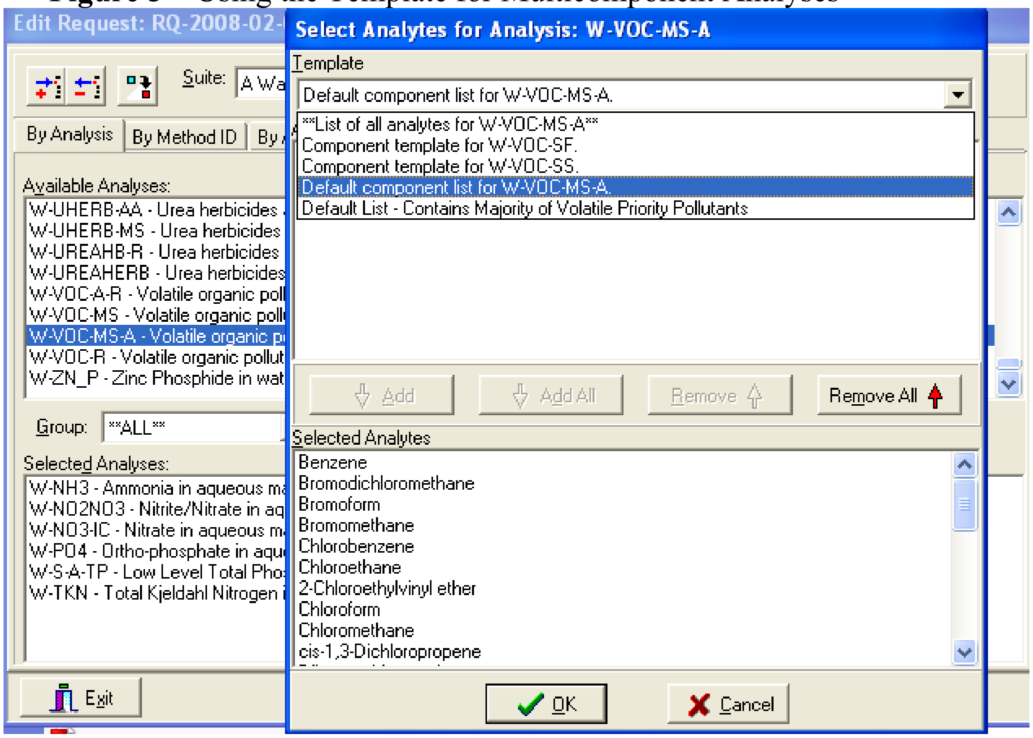
A. Add a Bottle Group
D. Delete a Bottle Group
C. Clone a Bottle Group

Choose the A icon to create a Bottle Group (A). Then select a Bottle Group from the five matrix options (water, soil/sediment/waste, tissue, air, biological).
Enter the number of sites that are being analyzed with the selected tests.
Select the Tests
Tests can be selected three ways, using the 3 tabs at the top:

- By LIMS Analysis ID (e.g. W-Cl-IC)
- By Method ID (e.g EPA Method, Standard Method or SOP)
- By Analyte Name (not recommended for analysis selection, just for analysis identification). If a component is selected under the Analyte Name option, no other components in the selected analysis will appear. Use this function to identify the LIMS analysis then choose the LIMS Analysis tab and select the analysis, then choose the component from the drop-down list.

To narrow down the selection, choose the appropriate Group (e.g. metals, pesticides). Highlight the analyses of interest and choose Add.
For multi-component analyses use the selection box. All components in the default template appear. If a different template is needed, use the drop-down selection box.

Figure 5 – Using the Template for Multicomponent Analyses



If samples of more than one matrix type will be collected, each matrix group needs a Bottle Group.
The number of Bottle Groups scheduled depends on whether different tests are being requested for various sites and if there is more than one matrix group being sampled.
If there are any questions or concerns regarding the scheduling of an event, please call the DEP Laboratory staff for assistance.

3.0. Display/Edit Options

From the drop-down menu on **Figure 1**, the requests can be displayed, edited or canceled. Requests can be displayed at any time but edits and cancellations have limited access. Once a request is approved, then only the laboratory staff can edit or cancel it.

Request status P or T: the person who created the request can edit or cancel it.
Request status A, W, S or R: contact the lab staff for edit or cancellation requests.

4.0. Time Saving Features

Cloning Bottle Groups

If additional sites have the same matrix as an existing Bottle Group but the test list is different, the Bottle Group can be cloned, and the appropriate tests added or deleted.

Creating Scheduler Templates

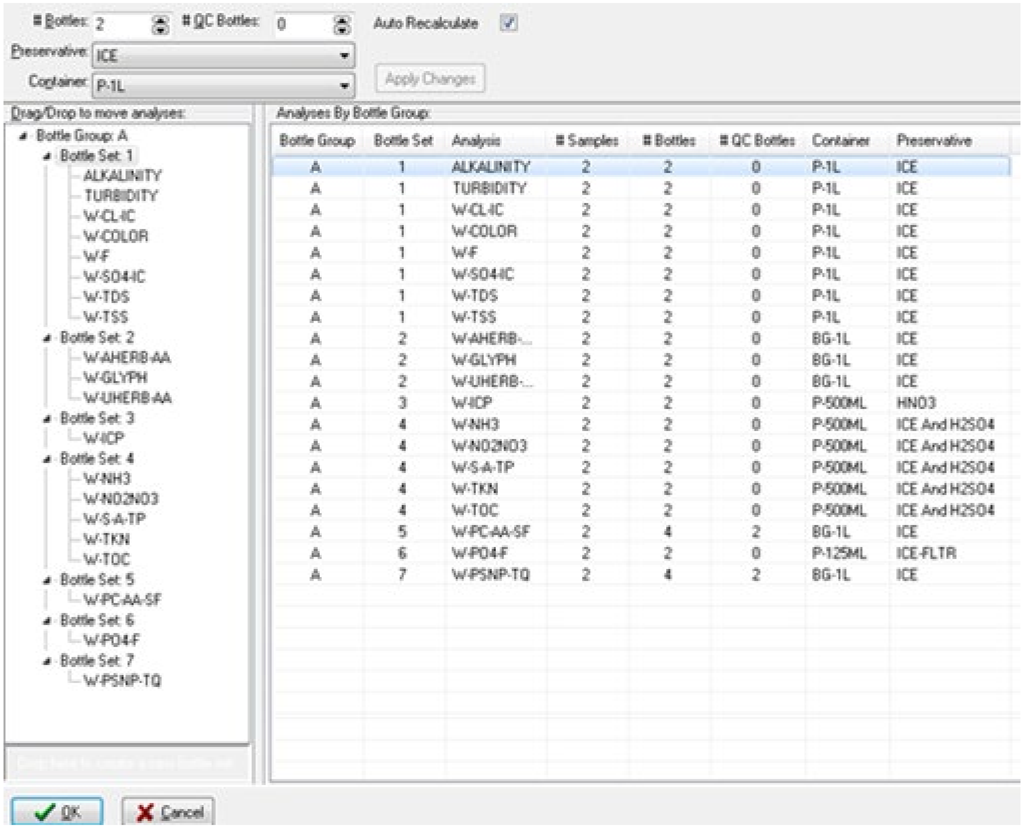
If similar requests are repeatedly scheduled, a scheduling template can be created. When additional events are scheduled the template can be used and modified if necessary. The *Save Template* button on the analysis page will create a template of what has been scheduled. Choose the button and enter a name for the template. To schedule with a template, choose the *Load Template* option on the first window of the Scheduler.

5.0. Approving Requests – for Lab Managers Only

LIMS Scheduler Requests are reviewed/approved by the Lab Managers prior to shipping. The approval process includes reviewing the request to ensure that the lab can handle the work and checking for correctness. The requests will not appear on the kit packing backlog until they are approved by chemistry and/or biology managers.

- Open the LIMS Scheduler. In the screen displayed in Figure 1, choose the drop-down box in the top left-hand corner and select *Approve Request*. Select an RQ and choose the *Next* button.
- To navigate to the previous form, choose the *Back* button.
- Review the e-mail address, event description and note any comments or add comments if needed (see Figure 3). Choose the *Next* button.
- Review the tests and sample numbers in each Bottle Group (see Figure 4). Evaluate the number of samples and tests for any workload issues. Check with supervisors before approving any large projects that may significantly impact their workload. Choose *Finish*.
- Review the bottle breakdown displayed in Figure 6. Adjust container numbers, sizes, or types if necessary. To manually adjust, uncheck the *Auto Recalculate* box. Choose *Apply Changes* after each edit. Bottle changes are not saved if the request is approved again. Be sure you are the last approver if bottle changes are needed.
- If everything looks correct -*OK*.

Figure 6 – Bottle Sets



Bottle Group	Bottle Set	Analysis	# Samples	# Bottles	# QC Bottles	Container	Preservative
A	1	ALKALINITY	2	2	0	P-1L	ICE
A	1	TURBIDITY	2	2	0	P-1L	ICE
A	1	W-CL-IC	2	2	0	P-1L	ICE
A	1	W-COLOR	2	2	0	P-1L	ICE
A	1	W-F	2	2	0	P-1L	ICE
A	1	W-SO4-IC	2	2	0	P-1L	ICE
A	1	W-TDS	2	2	0	P-1L	ICE
A	1	W-TSS	2	2	0	P-1L	ICE
A	2	W-AHERB-...	2	2	0	BG-1L	ICE
A	2	W-GLYPH	2	2	0	BG-1L	ICE
A	2	W-UHERB-...	2	2	0	BG-1L	ICE
A	3	W-ICP	2	2	0	P-500ML	HNO3
A	4	W-NH3	2	2	0	P-500ML	ICE And H2SO4
A	4	W-NO2NO3	2	2	0	P-500ML	ICE And H2SO4
A	4	W-S-A-TP	2	2	0	P-500ML	ICE And H2SO4
A	4	W-TKN	2	2	0	P-500ML	ICE And H2SO4
A	4	W-TOC	2	2	0	P-500ML	ICE And H2SO4
A	5	W-PC-AA-SF	2	4	2	BG-1L	ICE
A	6	W-PO4-F	2	2	0	P-125ML	ICE-FLTR
A	7	W-PSNP-TQ	2	4	2	BG-1L	ICE

6.0. Cancelling and UnCancelling Requests – for Lab Managers Only

LIMS Scheduler Requests (RQ) can only be cancelled by a Lab Manager if they are in status A, W, S, or R. If an RQ is no longer required, choose the *Cancel Request* option and either enter the exact RQ or narrow down the search by using the Customer, date range, or a partial entry of the RQ. Once the correct RQ is found, choose *Next* to Cancel it. The RQ is given a status of X. Status X RQs will only show up in the *Display/Print Request* and *UnCancel* options.

The Scheduler also allows the uncancelling of an RQ by choosing the *UnCancel Request* option. A cancelled RQ may need to be reinstated by the Customer or a Lab Manager. Follow the same instructions for finding an RQ (above), then choose *Next* to UnCancel it. The RQ is given a status of Pending and can then be Edited and/or Approved.

Figure 7 – Selecting Request Option