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Procedure for Data Entry In the Bacteriology Laboratory

Access to this SOP shall be available within the laboratory for reference purposes; the official copy of this SOP resides on the official Georgia EPD website at https://epd.georgia.gov/about-us/epd-laboratory-operations. Printed copies of this SOP will contain a watermark indicating the copy is an uncontrolled copy.

1 Scope and Application

1.1 In the Bacteriology Laboratory, raw data is manually entered into the LIMS by laboratory staff that has been properly trained in LIMS operation and has been given specific LIMS privileges. The LIMS in operation at the EPD Laboratory is Labworks Desktop. All data stored in the LIMS is maintained in an Oracle database.

1.2 The Bacteriology Laboratory has a database separate from that of the other labs. The Bacteriology Laboratory is responsible for logging in all of its samples. Samples are thus assigned a unique lab number for identifying and tracking purposes. All samples received in the Bacteriology Lab, whether analyzed or not, must be logged in.

2 Definitions

Refer to Section 3 and Section 4 of the Georgia EPD Laboratory Quality Assurance Manual for Quality Control Definitions.

3 Quality Control

Refer to Section 13 – LIMS Operation of the Georgia EPD Laboratory Quality Assurance Manual, Rev. 10 or later (See SOP reference 5.1).

4 Procedure

4.1 Data Entry begins with the laboratory staff member logging onto the computer. For security purposes, they must use their username and unique password.

4.2 Click on the Labworks Icon.

4.3 Select BACT as the Database for Login. The Labworks user must enter their initials and their Labworks password. Click "OK."

4.4 Log In Samples

4.4.1 The Labworks Desktop screen appears. Under the Login pull-down menu, select Multi-Sample Login (alternatively, you may select the Desktop Icon for Multi-Login, if you have one).

4.4.2 The Labworks Multi-Login screen template appears. Beginning with line one, proceed to type in the requested information taken from the sample identification form.

4.4.3 Entries are made in the following order:

a. System Identification – WSID Number
b. Collection Date – Date sample collected. **Note: For invalid samples such as "Blank Forms, No Information, Future Date, No Date", use the default date of 12-30-99.**
c. Collection Time – Time sample collected. **Note: For invalid samples such as Blank Forms, No Information, and No Time" use the default time of 0:00. Note: Use military time when entering in Labworks.**
d. Sample Collector – Name of Collector
e. Sample Type – enter the number corresponding to the sample type below:
    1. 1 = Routine
    2. 2 = Repeat
    3. 3 = Replacement
    4. 4 = Source Approval
    5. 5 = Special
    6. 6 = GWS
    7. 7 = GWS Repeat
    8. 8 = GWS Special

f. OrSampNo – If Repeat, Replacement, GWS, GWS Repeat, GWS Special – enter the original routine sample number related to the sample type.
g. Location Code – From Sample Site Plan
h. Free Cl2 Residual –numeric only and cannot exceed 99
i. WSFID – WS Facility ID – If GWS, GWS Repeat, GWS Special
j. SMPPT – Sampling Point – If GWS, GWS Repeat, GWS Special
k. Repeat Type – S (Same location as positive), D (Downstream) or U (Upstream)
l. Submit Time – Time received at lab
m. Submit Date – Date received at lab

Note: Use military time when entering in Labworks.

4.4.4 The lab staff member usually enters 50 identification slips to make one run or batch (fewer can be entered if necessary, but Labworks will not accept over 55 entries in one run).

4.4.5 After logging in samples, highlight system identification numbers and scroll slowly down. Verify that all systems are assigned test codes by looking at bottom center of screen to make sure TCOL # GA-DNR1 appears for all systems. If it doesn't, add TCOL and/or # GA-DNR1 by:

a. Right clicking on the identification number of the system.
b. Single left click on Edit Analysis List.
c. Under "Select Test" and "Tests Available", double click on TCOL and/or # GA-DNR1 (whichever is missing) and this moves the test code over to the right under "Current Tests Selected".
d. Click "Save".

4.4.6 Note: Before clicking "Login" verify that all previous samples have been logged in and that your first number is the next lab number to be logged in.

4.4.7 Proceed by clicking on "Login" in the lower right corner of the screen.
4.4.7 "Sample run" appears. Assign a new Bac-T name for the run. The run is named according to date (year, month and day) and numerical order of the batch, i.e., 01082302 indicates 08/23/01, run #2. Then click "OK".
4.4.8 Wait for "Auto Sample Login" to take place.

4.5 Print Labels
4.5.1 At the Labworks Sample Container Custody Initialization screen, click on "Add Req. Containers." Place labels in printer, then click "Print Labels." Click "Print Labels" again. Labels for the run will print. If labels do not print properly, you may reprint them at this time.
4.5.2 Click on "Save Locations".
4.5.3 Check lab numbers on labels to make sure they correspond to the lab numbers that were stamped on the sample slips.
4.5.4 Click "OK". Then exit the Labworks Multi-Login screen.
4.5.5 The analyst should check system name, ID number and location code on slips with the labels and place the labels on the corresponding slips.

4.6 To Batch Samples
4.6.1 From the Labworks Desktop screen, go to the QA/QC pull-down menu and click "QA/QC Batching".
4.6.2 The Labworks QA Analysis Batching Program Screen appears. Click on the icon that says "Specify new batches by sample".
4.6.3 Select sample run and check next to batch name. Click "View Selections" then "Enter Selections".
4.6.4 Click on the icon that says "Create Batches".
4.6.5 Then click "OK".
4.6.6 Check sample lab numbers.
4.6.7 Check that the entire TCOL column has a check-mark in pending. Then click "OK".
4.6.8 Check that you have the correct number of samples and batch size. Then click "OK".
4.6.9 Enter Batch name. **(Very important at this point to change batch name to previously assigned run name.)**
4.6.10 Add Quality Control Tests to batch by:
a. Click drop box next to and click #QTCOL (QA tests added should immediately show the number "2" in the box).
b. Click on the first sample number of the batch (Sample # 1) to assign QC.
c. Then click the number "2" under QA Test Added to verify that the QA/QC samples were added. B-TCOL and LRTCOL boxes should be checked. Click "OK".

Note: For "Too Old" Batches, skip this step and do not add QC Tests.
4.6.11 Click "OK". "1 new QA/QC Batch successfully created" appears. Then click "OK" again.
4.6.12 Exit.
4.6.13 Under Lab BacT Reports click "Check Sample Info".
4.6.14 Select sample run and check next to batch name. Click "View Selections" verify that these are the correct samples and then click "Enter Selections".

4.6.15 Scan the document for any text that displays red.
4.6.16 Make the necessary modifications for any items that are marked red.
4.6.17 Repeat "Check Sample Info" until all text in document is black.

4.7 To Print Worksheet
4.7.1 Click on the "Print worksheets for QA Batch" button from the Labworks QA Analysis Batching screen.
4.7.2 Under available worksheet formats, choose Colilert or Colilert 18.
4.7.3 Click newest QA/QC Batches or enter the name of the run in the space provided at the bottom of the screen.
4.7.4 Click "Find Batches".
4.7.5 Click "OK".
4.7.6 A worksheet is then generated identifying the batch and allowing results to be properly recorded.
4.7.7 Exit.

5 References –
5.1 GA EPD Laboratory Quality Assurance Plan, online revision.

SOP Updates to Previous Version:
Updated to online revison.