

Electronic Reporting/Template Instructions

The Excel templates have been created to facilitate electronic reporting by laboratories that are certified to analyze microbiological, inorganic and organic chemical, physical and radiological contaminants for public drinking systems in the Commonwealth of Virginia.

Electronic reporting consists of three basic steps:

1. Completing the Sample and Result Excel templates with the appropriate sample data and analysis result data.
2. Converting the templates from Excel format to .csv format.
3. E-mailing the final .csv files to the Lab Admin Group in the Office of Drinking Water, labadmin@vdh.virginia.gov .

Two template spreadsheets are provided, and are sufficient to transmit all bacteriological or chemical results; **template_sample.xls** and **template_result.xls**. Both templates need to be used for a result to be submitted correctly into the Office of Drinking Water database. **Template_sample.xls** provides important information that identifies the sample and lab techniques used; **template_result.xls** provides the analytical result. The spreadsheets contain hints which are visible when the cursor (pointer) is placed over the field, and additional instructions for the templates are provided below.

There are several codes and data fields that are provided from the Office of Drinking Water. Please refer to the file "**Monitoring Schedule**" posted on the Office of Drinking Water's Information for Laboratories webpage.

The template instructions below note when a required data element can be found in the **Monitoring Schedule**.

The structure of the data submitted on the spreadsheets must meet the following guidelines:

Template_sample.xls

Structure Set Name – For the file sample.xls, always enter “**sample.**” No capitalizations. The word “sample” enables Lab to State 2.0 to recognize the type of data being submitted, and process it correctly.

Certifying Agency – This identifies the entity that certifies the lab. Labs certified in the state of Virginia by the Division of Consolidated Laboratory Services (DCLS), the laboratory certifying agency, will enter “**STATE.**” STATE is entered in ALL CAPS.

Lab ID - This is the identification number issued to the laboratory by DCLS. A listing of these laboratories and their identification numbers can be found on the Division of Consolidated Laboratory Services– Approved Laboratories list.

Sample ID - Alphanumeric text that identifies the sample. The Sample ID value must be unique throughout the calendar year. Laboratories wishing to use the same Sample ID monthly should append the sample date to the Sample ID. EXAMPLE: If the preferred ID is "001", use "001_mmddyy" with "mm" being the month of the sample, "dd" being the day, and "yy" being the year.

PWSID - The valid Public Water System ID Number provided by the water system. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Sample Category – Identifies the sample as either Total Coliform “**TC**”, Lead and Copper “**PB**” or General “**GE.**” (May refer to the MonitoringSchedule tab and/or Classified Monitoring List tab of the Monitoring Schedule)

Classification Code – For a Bacteriological sample, this will be “**TC**” or “**MPN.**” If “**TC**” was entered for Sample Category, then this will be “**TC**”. (May refer to the MonitoringSchedule tab and/or Classified Monitoring List tab of the Monitoring Schedule)

Sample Type – Indicates whether sample is taken for routine purposes or repeat. For sample type; choose from CO, RT, RP, ST, TG, SP. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

CO – (confirmation) collected on a source after an E.Coli positive Triggered sample

RT-(routine) collected at distribution or entry point location; scheduled raw water sample

RP-(repeat) verification sample after positive total coliform result

ST-(split) quality assurance sample

TG – (triggered) collected on a source after a total coliform positive result on the distribution system

SP-(special) investigation sample or otherwise not categorized above

Compliance Indicator – Enter a “**Y**” or “**N**” to indicate whether the sample is for compliance or not. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Facility ID – Number that uniquely identifies a Water System Facility (Treatment facility, well, distribution center) within a Water System. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Sampling Point – Found with the Water System Facility ID, this alphanumeric number uniquely identifies a sampling point within a water system where the sample is drawn. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Sample Location - Provided by the sampler, this typically identifies an address or description of the location where sample was collected, i.e. "Kitchen Sink." (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Collect Date - The date the sample was collected in mm/dd/yyyy format.

Collect Time - The time the sample was collected in 24 hour format, with colon ":" omitted. This will be in the format hhmmss. Example, 9:35am will be entered as 093500.

Receive Date - The date the sample was received by the submitting lab in mm/dd/yyyy format.

Sampler Name - The name of the person who collected the sample.

CL2 Residual - The field chlorine residual value of the analysis in mg/l. If the waterworks analyzes the chlorine residual, the lab should enter the data from the history sheet. This chlorine residual should be the result from the field, not from the lab. Both "Free Chlorine Residual" and "Total Chlorine Residual" can be entered into this field.

Permitted values are:

- Actual Numeric Value----->between 0 and 99.99
- Not Analyzed----->Leave Blank
- Not Detected----->Enter 0.0

Rejection Reason - Valid entries are shown below. If a sample is rejected, results should not be provided on the template_result.xls. The allowed selections are as follows:

- BR** Broken
- CL** Chlorine Present
- EH** Exceeds Holding Time
- HS** Excessive Headspace
- FZ** Frozen Sample
- IN** Insufficient Information
- VO** Insufficient Volume
- BP** Invalid Sampling Point
- IP** Invalid Sampling Protocol
- LA** Lab Accident
- LT** Leaked in Transit

PB Type Code – Will always be ‘FSD’ for Lead and Copper Samples. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Original Sample Certifying Agency (Repeat, Triggered and Confirmation Samples ONLY) – Original Entity that certified the lab, “STATE” or “FEDERAL”. In most cases, “STATE.”

Original Sample Lab ID (Repeat, Triggered and Confirmation Samples ONLY) – The original, unique 5-digit certification ID number or 6-digit VELAP ID number for the lab which analyzed the original sample.

Original Sample Sample ID (Repeat, Triggered and Confirmation Samples ONLY) – The original, unique lab sample reference number of the original sample.

Sample Comments – This field is available for optional lab comments about the sample. Additionally, labs should use this field to record the water last used date and time for Lead and Copper samples. This data should be encapsulated in brackets and prefaced with the text “PB:” as shown below:

[PB: 1/2/12 13:00]

Once the sample spreadsheet has been completed, use the following procedures to name the file and convert it to .csv format:

- 1. DELETE THE FIRST ROW CONTAINING COLUMN HEADER NAMES.**
- 2. CLICK FILE, SAVE AS, AND SAVE THE FILE USING THE FOLLOWING FORMAT:**

FILE NAME:

Lab Certification ID_BeginDate(yymmdd)_EndDate(yymmdd)_sample

Example: 00900_051107_051111_sample

SAVE AS TYPE:

CSV (COMMA DELIMITED) *.csv

Template_result.xls

Structure Set Name – For the file sample.xls, always enter “**result.**” No capitalizations. The word “result” enables Lab to State 2.0 to recognize the type of data being submitted, and process it correctly.

Certifying Agency – This must be the same information as entered in the Template_sample file, and can be copied and pasted into the Template_result.

Lab ID - This must be the same information as entered in the Template_sample file, and can be copied and pasted into the Template_result.

Sample ID - This must be the same information as entered in the Template_sample file, and can be copied and pasted into the Template_result.

PWSID - This must be the same information as entered in the Template_sample file, and can be copied and pasted into the Template_result. (May refer to the MonitoringSchedule tab of the Monitoring Schedule)

Analyte Code – The Analyte code for the result to be assessed. (May refer to the Method Analytes assoc. tab or Classified Monitoring List tab of the Monitoring Schedule)

Analysis Method - The EPA approved analytical method used to analyze the sample. (May refer to Method Analytes assoc. tab of the Monitoring Schedule)

State Notification Date – The date that the state will receive the analytical result. Enter date in mm/dd/yyyy format.

Data Quality – Indicates whether the analytical result meets the established data criteria: Accepted = A, or Rejected = R. (May refer to the Permitted Values tab of the Monitoring Schedule)

Microbe Presence Indicator (TC or MPN ONLY) – Use this field ONLY for result data involving bacteriological samples. Presence / Absence Indicator: P indicates that the microbial result is positive, while A indicates a negative result. (May refer to the Permitted Values tab of the Monitoring Schedule)

Count (MPN ONLY) – Use this field ONLY for result data involving MPN samples. A value greater than 0 indicates a positive microbiological result.

Count Volume (MPN ONLY) – Use this field ONLY for result data involving MPN samples. Units of measure associated with microbiological result count. (May refer to the Permitted Values tab of the Monitoring Schedule)

Count Type (MPN ONLY) – Use this field ONLY for result data involving MPN samples. Type of Microbiological unit that is being counted (enter MPN if using this method). (May refer to the Permitted Values tab of the Monitoring Schedule)

Less Than Indicator (GE or PB ONLY) – When set to "Y" this indicates that the analytical result is less than the Lab Reporting Level (supplied by the lab) or the Federal Minimum Detection Limit. Typically set to "Y" for a non-detect result. When set to "N" this indicates that the analytical result is greater than or equal to Lab Reporting Level or the Federal Minimum Detection Limit. (May refer to the Permitted Values tab of the Monitoring Schedule)

Less Than Code (GE or PB ONLY) – Enter "MRL" if lab is using the laboratory reporting level, or "MDL" if using the Federal minimum detection limit. If reporting "MRL" then the "Detection Level" and "Detection level unit measure" fields must be entered. (May refer to the Permitted Values tab of the Monitoring Schedule)

Detection Level (GE or PB ONLY) – If the laboratory chooses to provide the detection level, and "MRL" has been entered for 'Less Than Code', then the lab's reporting level is entered here.

Detection Unit Measure (GE or PB ONLY) – If the laboratory chooses to provide the detection level, and "MRL" has been entered for 'Less Than Code', then the lab's reporting level unit of measure is entered here. (May refer to the Unit of Measure Codes tab of the Monitoring Schedule)

Concentration (GE or PB ONLY) – If detected, (and "N" was chosen for the 'Less Than Indicator' field) this is the concentration value of the result reported as a number.

Concentration Unit Measure (GE or PB ONLY) – Unit of measure associated with the concentration value. (May refer to the Unit of Measure Codes tab of the Monitoring Schedule)

Data Quality Reason (GE or PB ONLY) – A reason code must be entered if a result is rejected/Data Quality is "R". The allowed selections are as follows:

IF Instrument Failure

LE Lab Error

LC Lab Not Certified

OT Other

RC Requester Cancelled

WR Water System Rejected

Bacteriological Interference (TC ONLY) – A reason code should be entered for bacteriological samples that cannot be analyzed due to interference. The allowed selections are as follows:

TNTC Too Numerous To Count

CNFG Confluent Growth

TCNG Turbid Culture – No Gas

Result Comment – This field is available for optional lab comments about the analysis result.

Once the result spreadsheet has been completed, use the following procedures to save the file and convert it to .csv format:

1. DELETE THE FIRST ROW CONTAINING COLUMN HEADER NAMES.

2. CLICK FILE, SAVE AS, AND SAVE THE FILE USING THE FOLLOWING FORMAT:

FILE NAME:

Lab Certification ID_BeginDate(yymmdd)_EndDate(yymmdd)_result

Example: 00090_051107_051111_result

SAVE AS TYPE:

CSV (COMMA DELIMITED) *.csv

3. SEND BOTH THE SAMPLE AND RESULT .CSV FILES TO LABADMIN@VDH.VIRGINIA.GOV