Water Quality Field Report Template

This field report template serves as a guided example of the desired format to strive for when aiming to automate the creation of reports to be used internally by the Water Resources Program. Each single file will be a summary report of various sites from a specific run sampled on a specific date.These reports are intended to be used for assessment of accuracy and completeness in field results, and should therefore highlight missing, repetitive or inaccurate data based on the conditions provided in the document of control flags.

Report Header

Each report should be created for a single run sampled on a specific date. These reports should then be subdivided by site to display the data. The first header should therefore be grouped by RunCode, RunDate and Collector.

RunCode	RunDate	Collector
LakesEBSS	1537761600	JRP;TJM
LakesEBSS	1537761600	JRP

Table of Contents

The following sections (site information, sample table, result table, filter table) should be differentiated by site for the specific run, date and collector for which this report is being created. The report should have a table of content allowing to quickly jump to the tables for a specific site. All sites should be displayed one after the other to allow to scroll trough all the information for this specific run sampled on a specific date.

Site Visit Information

Site information

SiteVisitID	WaterBody	SiteCode	SiteVisitStartTime	SiteDepth	SamplingAirTemp
JasonS7-2018924111226	Lakes	EBL1	1537801946	5	10.4

Weather	RivCond	WaterLevel	FoamRank	FoamSource	SiteVisitComment
Sunny	Choppy	Low	Few Bubbles Present	Wave Action	NA

Sample Table

This sample table includes an example of a way to flag data by coloring cells in a table. Here, the green was used for a condition that was respected. You should aim to color any violations or erroneous data based on the quality control flag document and requests of the Penobscot Nation Water Resources Planners.

Table 1: Sample Table

SampleName	ProjectCode	CntrType	QCType	CollMethod	SampleDepth
PIN					
EBL1-9244	Baseline	Plastic Bottle	Regular	CO-E	4
EBL1-9238	Baseline	Plastic Bottle	Regular	GS	0
EBL1-9241	Baseline	Plastic Bottle	Regular	GS	0
HETL					
EBL1-9251	Baseline	Plastic Bottle	Regular	CO-E	4
EBL1-9247	Baseline	Plastic Bottle	Regular	CO-E	4
Msmt					
EBL1-	Baseline	Msmt	Regular	Msmt	NA

Result Table

The result table should allow an easy comparison on the regular and duplicate samples (QC-Types) for both water temperature and dissolved oxygen (Const) as a profile. Both pH and secchi cannot be represented as profiles, but should still be included in this result section. This specific example does not include duplicates, which is something that should be flagged. The secchi and pH measurements should also include duplicates.

Table 2: Results Table

(a)

ProfileDepth	water temperature_Regular	Dissolved Oxygen_Regular
0	17.0	9.13
1	17.0	9.11
2	17.0	9.10
3	17.0	9.08
4	16.9	9.06
5	16.7	9.20

(b)

pH_Regular	Secchi_Regular
6.78	5

Filter Table

Table 3: Filter Table

SampleName	SampleFilterMethod
EBL1-9244	None
EBL1-9251	None
EBL1-9247	Vacuum pump
EBL1-	Msmt
EBL1-9238	None
EBL1-9241	None

Controls Summary

A section at the beginning or at the end of each file summary report for a run sampled on a specific day could also summarize all the flags detected.