

# Grab Water Quality Data Submission Field Definitions

Oregon Department of Environmental Quality  
 Volunteer Water Quality Monitoring Program  
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**Project information** is used to define required fields in the database and assess data quality. The header provides project information and the parameter information table provides required information about analysis. In the parameter information section each row of data must have a unique combination of parameter and method. If more than one method is used to determine a parameter then each combination must have its own row of data; for example, *E. coli* by Colilert and *E. coli* by membrane filtration would have separate rows.

**Table 1: Project information field descriptions**

Field Name	Required	Description
Sampling Organization	Yes	Name of the organization conducting the sampling
QAPP/SAP Title	Yes	Quality assurance project plan, sample analysis plan or other project documentation that can be used to reference a description of the monitoring project.
QAPP/SAP Date	Yes	Date that the project document above was completed or approved.
Parameter Information		
Parameter	Yes	List the parameter being analyzed. Most common parameters are temperature, <i>E.coli</i> , DO, turbidity, pH, specific conductance
Method Short Name	Yes	Short name used to display with the parameter results
METHOD DESCRIPTION	Yes	Complete name of method and description sufficient to associate with DEQ's method table.
UNITS	Yes	Units associated with the parameter's measurement
Method Speciation	Cond.	Example "as N" for mg/L NO3 as N, or "as NO3" for mg/L NO3. Check method if uncertain
Field Or Lab	Yes	Whether the sample was analyzed in the field or transported to a lab for analysis.
Analytical Organization	Yes	Organization conducting the analysis for the parameter.
Limit of Quantitation	No	Not required for field parameter methods defined in OWEB or DEQ method manuals. Previously referred to as the Method Reporting Limit (MRL). All laboratory parameter methods (like nutrients, solids, <i>E. coli</i> , etc.) should have an LOQ.
Low Level QC limit	Cond.	Required for any parameter that uses RPD for QC. If, like for conductivity, there is no low detection level when the QC criteria type changes then use 0. Default is 5 x LOQ

**Data reporting** includes one row of data for each sample collected. The first columns are sample information followed by parameter results. Each reported parameter must include 7 columns. If 3 parameters are reported, then 3 x 7, or 21 columns are needed in addition to the sample information columns. Each of the columns must be present but only the result field must be populated. However, in a row (sample) you may have some parameters with results and other parameters without results that are left blank for that sample. The only requirement is that one parameter result per a row be populated.

Each parameter must be defined on the project information worksheet. In the column headers below the generic term "PARAM" is used but in your data submission this must be replaced by each relevant parameter name. Common parameters and associated abbreviations are listed below this table.

**Table 2: Data sheet field descriptions**

Column Header	Required	Description
SITE DESCRIPTION (Location)	Yes	Waterbody name and brief narrative describing location. Property owner's names will not be used.
LATITUDE (decimal degrees)	Cond.	Required when a LASAR_ID does not already exist. Should be provided in decimal degrees (12.12345)
LONGITUDE (decimal degrees)	Cond.	Required when a LASAR_ID does not already exist. Should be provided in decimal degrees (-123.12345)
<i>LAT/LONG SOURCE</i>	Cond.	Required when a lat/long is provided. Should provide enough info to determine which datum was used. DEQ uses the NAD83 datum.
LASAR_ID	Cond.	If the LASAR ID is already established for a site then it should be provided
StationID	Yes	Each unique lat/long must have unique ID
StartDate	Yes	Date sample was collected
StartTime	Yes	Time sample was collected
SampleDepth	No	Depth where the sample collection or measure was made. This can be a number or descriptor like 'bottom'
<i>SampleDepthUnit</i>	Cond.	Required when a numeric sample depth is used.
EndDateTime	No	Time sampling finished. For time integrated samples, etc.
SampleMedium	Cond.	Required if not water. Medium in which sample or measurement was taken (example: Water, Sediment, etc.) Default is water
SampleColMthd	Cond.	Required when analysis not done in the stream
<i>SampleColEquip</i>	Cond.	Required if samples are collected. Examples "water bottle", "bucket", etc.
SampleColEquipID	No	Use this field if you are able to identify sample collection equipment
SampleColEquipCmnt	No	Comments regarding the sample collection equipment for a particular sample.
DupBatchKey	Cond	Required when date is not the only way duplicates are batched together. Value could be sampler's name, equipment group, route number, etc. For samples batched per day, blank is OK.

Column Header	Required	Description
<b>Reported Parameter Result Columns</b>		
PARAM_RESULT	No	The numeric result unless the result is outside the limit of quantitation then it should be reported as < or > the LOQ value
PARAM_DUP	No	The numeric result as above but for the duplicate sample
PARAM_PREC	No	Assigned data quality level based on the calculations comparing primary and duplicate result
PARAM_ACC	No	Accuracy determination based on relevant accuracy criteria for the method
PARAM_DQL	No	Overall data quality determined as the lower of the precision and accuracy as well as professional judgment relevant to the measure
PARAM_METHOD	Cond.	If more than one method is used for the parameter in the submitted dataset, then method must be identified for each row. If a single method is used and defined in the project info worksheet then this can be blank
PARAM_COMMENTS	No	Comments relevant to the specific result
SITE COMMENTS	No	Comments relevant to the sample that may impact all parameter results
SAMPLE COLLECTOR(S)	No	Names or unique initials of sample collectors.

### Common parameter abbreviations

t=Temp;	tds=Total Dissolved Solids;	d=Depth;
ph=pH;	ts=Total Solids;	se=Secchi Depth;
do=Dissolved Oxygen;	tss=Total Suspended Solids;	k=Potassium;
w=Winkler DO;		q=Stream Discharge;
tb=Turbidity;	no3=Nitrate;	mv=Mean Velocity;
sc=Specific Conductivity;	no2=Nitrite;	csa=Cross Section Area;
sl=Salinity;	nit=Nitrate + Nitrite;	wl=Water Level.
	tkn=Total Kjeldahl Nitrogen;	
ec=E. coli;	nh3=Ammonia;	
ent=Enterococcus;	op=Ortho Phosphorus;	
fc=Fecal Coliform;	tp=Total Phosphorus;	
en=Enterococcus;	bod=Biological Oxygen Demand;	

If your parameter is not listed above contact the DEQ volunteer monitoring coordinator to have it added.