Data Dictionary

Sample Method	Sample Method Description
GRAB	Grab Sample is taken a selected location, depth and time usually near shore
COMPOSITE	Composite Sample is made by mixing several discrete samples into one
SHALLOW	Shallow samples are made by creating a small dam to create enough depth to get a bottle submerged
POLE	Pole sample is taken by attaching a bottle to pole but is otherwise similar to a grab sample
AUTO	Auto sample is collected by an autosampler
POINT	Point (depth) sample is taken at a single depth usually with a special bottle sampler such as a Van Dorn.
UNKN	Unknown - Sample Method Type is not specified
N/A	Not Applicable
BKRN	Bulk precipitation deposition sample.
INSITU	In-situ is a measurement collected on site.
BKSNW	Bulk snow deposition sample.
BKDRY	This is a blank sample from periods when there was no measurable precipitation collected by rinsing the rain or snow collector with DI water.
SNCOR	Snow Core
INTEG	Depth Integrated Sample
BKRNC	Bulk precipitation deposition composite sample.

Analysis Location Type	Analysis Location Description
LAB	Analytical Laboratory
FLD	Field
FLDL	Field Laboratory
TP	Transect Point
N/A	Not applicable
VP	Vertical Profile

Region Code	Region
1	Region 1 - Northern
2	Region 2 - Rocky Mountain
3	Region 3 - Southwestern
4	Region 4 - Intermountain
5	Region 5 - Pacific Southwest
6	Region 6 - Pacific Northwest
8	Region 8 - Southern
9	Region 9 - Eastern
10	Region 10 - Alaska

Qualifier Code	Qualifier Description
	None
E	Estimated Value
V	Value affected by possible contamination or instrument

	malfunction.
ND	Not Detected
Sample Measurement	Sample Measurement Location Description
BANK	Bank - Stream waters edge
CENT	Lake centroid - Center of the Lake
CHLC	Channel center - Center of a stream channel
DEEP	Over deep spot of the Lake or Stream
INLT	Inlet - A stream flowing into a lake or pond
OUTL	Outlet - A stream flowing out of a lake or pond
POOL	Stream Pool - An area of the stream with greater than average depth and slower than average flow. Pools typically occur where the river bends or meanders.
RIFL	Stream Riffle - A raised area of the active channel that results in an increase in flow velocity. Riffle areas are typically preceeded by pools and represent the fastest current in a given stream.
SHOR	Shore - Lake waters edge
UNKN	Unknown
N/A	Not applicable

Sample Type	Sample Type Description
N/A	Not Applicable
CALC	Calculated value using formula
BLANK	A quality assurance sample consisting of deionized or distilled water.
CHECK	A sample of a known concentration, used for quality assurance purposes.
DUPLICATE	A second sample taken with a regular sample used for comparison for quality assurance.
REGULAR	A sample which follows standard protocol and is not taken for QA/QC purposes.
SPIKE	A sample of high concentration of known chemical constituents used to test equipment or laboratory measurements.
SPLIT	A routine sample which is divided into two or more subsamples, which are then sent to different analytical laboratories.
TRIPLICATE	A third sample taken with a regular sample used for comparison for quality assurance.
UNKN	Unknown -The Sample Type is not specified
EXPERIMENT	Other (ie. Special experiment)
DUP_AVG	Regular/Duplicate Average

Parameter	Parameter Description
AcidityCO2	Acidity as CO2
AcidityTot	Acidity, Total as CaCO3
AgDis	Silver, Dissolved as Ag +
AgTot	Silver, Total as Ag +
AlDis	Aluminum, Dissolved as Al 3+
AlExt	Aluminum, Extractable as Al 3+
AlInOrgMono	Aluminum, Inorganic Monomeric as Al 3+
AlkDis	Alkalinity, Dissolved as CaCO3

AlkTot	Alkalinity, Total as CaCO3
AlOMono	Aluminum, Organic Monomeric as Al 3+
AlTot	Aluminum, Total as Al 3+
AlTotMono	Aluminum, Total Monomeric as Al 3+
ANC	Acid Neutralizing Capacity, Total as CaCO3
AnOrg	Anions, Organic
AnSum	Sum of Major Anions
AreaLake	Area, Lake Surface
AreaWshed	Area, Contributing Watershed
AsDis	Arsenic, Dissolved as As
AsDis3+	Arsenic, Dissolved as As 3+
AspectCatch	Aspect, Catchment
AsTot	Arsenic, Total as As
BaDis	Barium, Dissolved as Ba 2+
BareSoil%	Percent of Bare Soil in Catchment above Lake/Stream
BaromPres	Barometric Pressure
BDis	Boron, Dissolved as B
BeDis	Beryllium, Dissolved as Be 2+
Bedrock%	Percent of Exposed Bedrock/Scale in Catchment above Lake/Stream
BNC	Base Neutralizing Capacity
BrDis	Bromide, Dissolved as Br -
CaDis	Calcium, Dissolved as Ca 2+
Cat/An	Cation/Anions Ratio
CatBSum	Sum of the Base Cations
CaTot	Calcium, Total as Ca 2+
CatSum	Sum of Major Cations
CdDis	Cadmium, Dissolved as Cd 2+
Chlor-a	Chlorophyll a
Clarity	Clarity, Water (Transparency measurement from Secchi Disk Mean)
ClDis	Chloride, Dissolved as Cl -
CloudCover	Percent Cloud Cover
ClTot	Chloride, Total as Cl -
CO3	Alkalinity, Carbonate as CO3 2 -
CoDis	Cobalt, Dissolved as Co 2+
Color	Color, True
ColorApparent	Color, Apparent (Visual Comparison Method)
Cond	Conductivity @ 25 Degrees C
CondCalc	Conductivity, Calculated
Conifer%	Percent of Conifer in Catchment above Lake/Stream
Count	Count
CrDis	Chromium, Dissolved as Cr
CrDis2+	Chromium, Dissolved as Cr 2+
CrDis3+	Chromium, Dissolved as Cr 3+
CrDis6+	Chromium, Dissolved as Cr 6+
CrTot	Chromium, Total as Cr
CuDis	Copper, Dissolved as Cu 2+
CuTot	Copper, Total as Cu 2+
DepthSamp	Depth, Sample
DepthSnow	Depth, Snow
DepthTot	Depth, Total Water (Total water depth at sampling site)

DepthWat	Depth, Water (Average water depth at sampling site)
DIC	Carbon, Dissolved Inorganic as C
DICAirEQ	Carbon, Dissolved Inorganic, Air Equilibrated as C
Discharge	Discharge
DO	Dissolved Oxygen as O2
DOC	Carbon, Dissolved Organic as C
E.coli	Escherichia coli
Elev	Site Elevation
ElevGain	Gain in Elevation
Fcoliform	Fecal Coliform
FDis	Fluoride, Dissolved as F -
FeDis	Iron, Dissolved as Fe 3+
FeTot	Iron, Total as Fe 3+
FTot	Fluoride, Total as F -
FTotDis	Fluoride, Total Dissolved as F -
Grad%Strm	Gradient, Percent Stream
GrassForb%	Percent of Grass and Forb in Catchment above Lake/Stream
H+	Hydrogen as H+ (Hydrogen ion calculated from (10^(-pH))*1000000)
H3O	Hydronium as H3O+
HardTot	Hardness, Total as CaCO3
Hardwood%	Percent of Hardwood in Catchment above Lake/Stream
HCO3	Alkalinity, Bicarbonate as HCO3 -
HgDis	Mercury, Dissolved as Hg+
HgDis2+	Mercury, Dissolved as Hg 2+
HgTot	Mercury, Total as Hg+
KDis	Potassium, Dissolved as K +
KTot	Potassium, Total as K +
LatDD	Latitude, Decimal Degrees
LatDDActual	Actual Latitude, Decimal Degrees
LiDis	Lithium, Dissolved as Li+
LongDD	Longitude, Decimal Degrees
LongDDActual	Actual Longitude, Decimal Degrees
MeadShrubs%	Percent of Meadows Shrubs in Catchment above Lake/Stream
MeHg	Methylmercury as CH3Hg+
MgDis	Magnesium, Dissolved as Mg 2+
MgTot	Magnesium, Total as Mg 2+
MnDis	Manganese, Dissolved as Mn 2+
MnTot	Manganese, Total as Mn 2+
MoDis	Molybdenum, Dissolved as Mo
NaDis	Sodium, Dissolved as Na +
NaTot	Sodium, Total as Na +
NH3	Ammonia as NH3
NH3-N	Ammonia as N
NH4	Ammonium, Dissolved as NH4+
NH4-N	Ammonium, Dissolved as N
NH4Tot	Ammonium, Total as NH4+
NH4Tot-N	Ammonium, Total as N
NiDis	Nickel, Dissolved as Ni
NiTot	Nickel, Total as Ni
NO2	Nitrite, Dissolved as NO2 -

NO2-N	Nitrite, Dissolved as N
NO2NO3-N	Nitrite-Nitrate, Total as N
NO3	Nitrate, Dissolved as NO3 -
NO3-N	Nitrate, Dissolved as N
NO3Tot	Nitrate, Total as NO3 -
NO3Tot-N	Nitrate, Total as N
OH	Hydroxide as OH-
OrthoPDis	Phosphorus, Ortho Dissolved as P
OrthoPO4-P	Phosphate, Ortho Dissolved as P 5+
Other%Catch	Percent of Other in Catchment above Lake/Stream
PbDis	Lead, Dissolved as Pb 2+
PbTot	Lead, Total as Pb 2+
PDis	Phosphorus, Dissolved as P
PDisInOrg	Phosphorus, Dissolved Inorganic as P
pH	pH, Closed System
pHAirEQ	pH, Air Equilibrated
pHBubbled	pH, Bubbled (Using diffusion tubes for 20 minutes with standard air containing 300 ppm CO2)
Pheno	Phenophytin
PO4	Phosphate, Dissolved as PO4 3-
PO4-P	Phosphate, Dissolved as P
PrecipAn	Precipitation, Annual
Precipitating	Precipitating During Collection
ProtocolDev	Did sample collection deviate from protocol?
PTot	Phosphorus, Total as P
PTotDis	Phosphorus, Total Dissolved as P
RbDis	Rubidium, Dissolved as Rb +
ReachLN	Reach Length
RelHum	Relative Humidity Percent
ResidTime	Residence Time
Runoff	Runoff, Surface Water
SampleWt	Sample Weight
SbDis	Antimony, Dissolved as Sb 3+
SbTot	Antimony, Total as Sb 3+
SecDis	Secchi Dissappearance Depth
SecReapp	Secchi Reappearance Depth
SeDis	Selenium, Dissolved as Se
SeTot	Selenium, Total as Se
SiDis	Silicon, Dissolved as Si
SiO2	Silica, Dissolved as SiO2
SiTot	Silicon, Total as Si
SizeCatch	Size, Catchment
SlopeCatch	Slope, Catchment
Snow/Ice%	Percent Snow or Ice cover on Lake or Stream
Snow/Ice%Catch	Percent Snow or Ice cover in Catchment above Lake or Stream
SO4	Sulfate, Dissolved as SO4 2-
SO4Tot	Sulfate, Total as SO4 2-
SrDis	Strontium, Dissolved as Sr 2+
SRP	Phosphorus, Soluble Reactive as P
StageHeight	Stage Height
StageStrmObs	Observed Stream Stage

StrahlerOrd24	Strahler order measured from 1:24,000-scale maps (Strahler, 1957)
StrahlerOrd250	Strahler order measured from 1:250,000-scale maps (Strahler, 1957)
Strat	Lake Statification Types
StrmOrder	Stream Order
Talus%	Percent of Talus in Catchment above Lake/Stream
TempAir	Temperature, Ambient Air
TempWat	Temperature, Water
TiDis	Titanium, Dissolved as Ti
TKN	Nitrogen, Total Kjeldahl as N
TOC	Carbon, Total Organic as C
Trees%	Percent of Trees in Catchment above Lake/Stream
TSS	Total Suspended Solids, Dried at 103-105 Deg C
TurbJTU	Turbidity in Jackson Turbidity Units (JTUs)
TurbNTU	Turbidity in Nephelometric Turbidity Units (NTUs)
UsualCollectPt	Usual Collection Point
VDis	Vanadium, Dissolved as V
VolLake	Volume, Lake
WatLevObs	Observed Water Level
WidthStrm	Width, Stream
WindDir	Wind Direction
WindSpeed	Wind speed
WshedLAR	Watershed Lake Area Ratio
ZnDis	Zinc, Dissolved as Zn 2+
ZnTot	Zinc, Total as Zn 2+