

Template color coding: **YELLOW/BOLD** – required; **PURPLE** - required if Field Collection Type is Measurement; **ORANGE** - required if Field Collection Type is Observation

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
A	Study ID	UNIQUE ID to identify the Study in EIM.	REQUIRED	Alpha	20	Must be valid EIM Study ID. Each time-series batch must contain only one distinct Study ID for all records.	Use value from "Study ID" field in your Study form.
B	Instrument ID	ID used to uniquely identify the instrument that was used to measure your result values.	REQUIRED	Alpha	50	Free text Use the ID on the instrument. If it doesn't have one, create one.	Ex: "E-61326", "FlowMeter 3A", "Instrument7" This field is required to uniquely identify sets of time-series data within a batch that were collected by the same instrument. If you have two or more instruments measuring the same parameter over the same period of time at the same location, this is the field you would use to uniquely identify the different datasets based on instrument.
C	Location ID	UNIQUE ID to identify the field Location in EIM.	REQUIRED	Alpha	15	Must be valid EIM Location ID. Each time series batch must contain only one distinct Location ID for all records.	Location IDs are from Column A in your Location template. You will commonly have multiple result records associated with the same Location ID.
D	Study Specific Location ID	Unique ID to identify the field location within a particular Study. Only needs to be unique to the Study, not all of EIM. Can be same as Location ID, an abbreviation of Location ID, or something totally different.	REQUIRED	Alpha	40	Free text / preferred format An ID of 8 characters or less will display better on the GIS map.	Ex: If your Location ID for a monitoring well is "CITGO-34586-MW4," your Study-Specific Location ID could be "MW-4." Each Location ID must be paired 1-to-1 with a Study-Specific Location ID Each time series batch must contain only one Study-Specific Location ID for all records. Download help for "Naming Conventions for EIM Field Locations."

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E	Field Collection Type	General type of data collection conducted in field.	REQUIRED	Alpha	11	<p>Measurement – discrete data collected in the field using an instrument (Ex. pH meter)</p> <p>Observation - record of an unsuccessful or rejected measurement(s)</p>	<p>Enter an observation if you want to document a data gap (timespan of unsuccessful or rejected measurements). Enter one observation, with appropriate start and end date/time values, per timespan. Documenting data gaps in EIM is optional.</p> <p>Download help for "Entering Observations"</p>
F	Field Collector	Name or type of organization that collected the data.	REQUIRED	Alpha	15	<p>Must be a valid EIM Field Collector Code</p> <p>See table of Field Collector valid values (in this document).</p>	Ex. "Consultant"
G	Field Collection Reference Point	Point from which the indicated collection depth was measured from.	REQUIRED only for records with an indicated Field Collection Depth.	Alpha	30	<p>Land Surface, Water Surface, Sediment Surface, Floor of Structure</p>	<p>Ex. "Land Surface"</p> <p>If your instrument is recording measurements while simultaneously being moved in a vertical profile, submit your results using the EIM Result Template as discrete data.</p>
H	Field Collection Depth	<p>Distance from the Reference Point to where the measurement was taken.</p> <p>Positive values represent depths below the reference point.</p> <p>Negative values represent distance above the reference point.</p>	REQUIRED only for records with an indicated Field Collection Reference Point.	Num		<p>There can only be one depth associated with each instrument deployment.</p>	<p>Ex. "7.5" if the instrument you were using was measuring 7.5 centimeters below Water Surface.</p> <p>Ex. "-5" if the instrument you were using was measuring 5 feet above Land Surface.</p> <p>If depth varies over the deployment period, you can either enter the time series data without an associated depth, or you will need to enter your results using the EIM Result Template as discrete data.</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
I	Field Collection Depth Units	Unit of measure associated with the Field Collection Depth	REQUIRED only for records with an indicated Field Collection Depth.	Alpha	10	cm centimeters, m meters, in inches, ft feet,	
J	Matrix	Describes the general environmental medium which was measured or from which a sample was taken.	REQUIRED	Alpha	14	Air/Gas, Other Liquid, Habitat, Solid/Sediment, Tissue, Water	Ex. "Water"
K	Source	Describes the environmental resource which was measured or from which a sample was taken. More specific than Sample Matrix.	REQUIRED	Alpha	30	Must be a valid EIM Sample Source Code. See table of Sample Source valid values (in this document).	Ex. "Fresh/Surface Water"
L	Start Date	The date a measurement was taken or that an observation was started.	REQUIRED	Date		MM/DD/YYYY	Ex. "06/23/1999"
M	Start Time	The time a measurement was taken or that an observation was started.	REQUIRED	Time		HH:MM:SS (24 hour)	Ex. "15:22:14" See the section "Time zone and daylight saving time" in the " How to Submit Time-Series Data to EIM " help document for more information on times.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
N	End Date	The date an observation ended.	Required only if Field Collection Type is Observation.	Date		MM/DD/YYYY Leave this field blank if Field Collection Type is Measurement.	Ex. "06/23/1999" Enter an observation if you want to document a data gap (timespan of unsuccessful or rejected measurements). Enter one observation, with appropriate start and end date/time values, per timespan. Documenting data gaps in EIM is optional. Download help for "Entering Observations"
O	End Time	The time an observation ended.	REQUIRED only if Field Collection Type is Observation.	Time		HH:MM:SS (24 hour) Leave this field blank if Field Collection Type is Measurement.	Ex. "15:22:14"
P	Result Parameter Name	Name of the parameter reported for the result. Parameters are most often thought of as chemical analytes, but also include things like Temperature, Water; Dissolved Oxygen; and Flow..	REQUIRED	Alpha	254	Must be a valid EIM Parameter Name Search for EIM Parameter Names (online). Observations - use "Unable to measure."	Ex. "Temperature, Water" Need a parameter added to EIM? Contact us online or ask your Data Coordinator.
Q	Result Value	Reported result for a particular parameter.	Required if Field Collection Type is Measurement	Num			Ex. "11.2" Observations – leave this field blank.
R	Result Unit	Unit of measure associated with a Result Value.	Required if Field Collection Type is Measurement	Alpha	10	Must be a valid EIM Unit. Search for EIM Units (online).	Ex. "mg/L" Observations – leave this field blank. Need a unit added to EIM? Contact us online or ask your Data Coordinator.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
S	Result Data Qualifier	<p>Standard annotations for documenting issues with Result Values, such as estimates or a correction being performed.</p> <p>Also used for:</p> <ul style="list-style-type: none"> – Well Water Level Measurements. <p>Observations, to explain why a sample or measurement wasn't possible.</p>	Required if applicable.	Alpha	3	<p>Must be a valid EIM Result Data Qualifier.</p> <p>See table of "Result Data Qualifier valid values" (in this document).</p> <p>OR</p> <p>Search for EIM Result Data Qualifier Valid Values (online).</p>	<p>Ex. (measurement) "IA" = Instrument result adjusted; reported result meets study objectives</p> <p>Ex. (observation) "FH" = Flow too high to measure.</p> <p>Download help for "Adjusted Time Series Data."</p> <p>If you use EST, add a comment to the Comment field (column U) explaining why your result is an estimate.</p>
T	Result Method	<p>Procedure or method used to derive a result.</p>	Required if Field Collection Type is Measurement	Alpha	20	<p>Must be valid EIM Method Code</p> <p>Search for EIM Method valid values (online).</p>	<p>Ex. "TEMPTHERM" - Temperature by thermistor</p> <p>Ex. "DO-CLARK - Dissolved Oxygen (DO) by Electrochemical Polarographic (Clark) Cell Sensor with Fixed Membrane (Flow Dependent).</p> <p>Download help for learning "About EIM Methods."</p> <p>Need a method added to EIM? Contact us online or ask your Data Coordinator.</p>
U	Comment	<p>For Measurements, this field is for comments about the Result Value.</p> <p>For Observations, this field is used to explain why a measurement was not able to be taken.</p>	REQUIRED if Field Collection Type is Observation	Alpha	2000	Free text	<p>Ex. (measurement) "Adjusted Result Value as part of a linear drift identified after deployment."</p> <p>Ex. (observation) "The pH probe on our Multimeter stopped recording over this period of time for an unknown reason."</p> <p>Download help for "How to Use EIM's Comment fields."</p>

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
V	Groundwater Result Accuracy	Indicates the estimated accuracy of a well water measurement.	Required only for well water level measurements.	Alpha	3	Accuracy for feet WL2 +0.01ft WL1 +0.1ft WL0 +1ft WL6 >1ft	
W	Groundwater Level Measuring Point ID	ID for the point on the well where water levels are measured. Often top of well casing (TOC).	Required only for well water levels. Not needed for groundwater chemistry data.	Alpha	8	TOC1 MP1	Use value you submitted in the Location spreadsheet template (Well Water Level Measuring Point or TOC ID). EIM uses this to tie water level depths to the well elevation in order to calculate water level elevation.

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EIM Field Collector valid values

Valid Value	Description
Business	Business, Trained Staff
ConsDistrict	Conservation District
Consultant	Consultant, Professional
Ecology	WA Dept of Ecology
GovFed	Government, Misc. Federal
GovLocal	Government, Misc. Local
GovState	Government, Misc. State
GovTribal	Government, Tribal
HealthLocal	Health Dept., Local
HealthState	Health Dept., State
NGO	Non-Governmental Organization
NOAA	National Oceanic & Atmospheric Administration
University	University
USACE	US Army Corps of Engineers
USEPA	US Environmental Protection Agency
USGS	US Geological Survey
USNPS	US National Parks Service
UtilityPrivate	Utility, Private
UtilityPublic	Utility, Public
Volunteer	Volunteer, Trained
WellDriller	Well Driller
WellOwner	Well Owner
WDFW	WA Dept of Fish & Wildlife
WDNR	WA Dept of Natural Resources

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EIM Sample Source valid values

Valid Value	Additional Info
Air/Gas	
Indoor Air	
Outdoor Air	
Landfill Gas	Ambient landfill gas monitoring. Not what is vented into a treatment system.
Soil Gas	Gaseous elements and compounds in the small spaces between particles of the earth and soil
Animal/Plant	
Animal Tissue	
Animal Tissue - Lab Exposure	Animal tissue purposefully exposed to specific contaminants in a lab setting
Plant Tissue	
Periphyton	Mixture of algae, cyanobacteria, heterotrophic microbes, and other elements that are attached to submerged surfaces in aquatic settings.
Freshwater Taxonomy	Taxonomic information about freshwater organisms. Download help for "Benthic Organism Counts - Freshwater."
Salt/Marine Taxonomy	Taxonomic information about salt/marine water organisms. Download help for "Benthic Organism Counts - Marine."
Landfill	
Landfill Gas	Ambient landfill gas monitoring. Not what is vented into a treatment system.
Landfill HGCS Groundwater	Landfill Hydraulic Gradient Control System Groundwater
Landfill Leachate	Leachate sampled from a landfill leachate collection system
Sediment	
Freshwater Sediment	
Brackish Sediment	
Salt/Marine Sediment	
Freshwater Porewater	Porewater is the water filling the spaces between grains of sediment.
Brackish Porewater	
Salt/Marine Porewater	
Elutriate	Supernatant of a sediment and lab water mixture (this is not porewater).
Soil/Substrate	
Rock/Gravel	
Soil	
Stormwater	
CSO Outfall	Combined Sewer Overflow (CSO) outfall
CSS In-Line	Combined Sewer System (CSS) in-line
CSS Catch Basin	Combined Sewer System (CSS) catch basin
Stormwater BMP Effluent	Stormwater, Best Management Practice (BMP) effluent
Stormwater BMP Mid	Stormwater, Best Management Practice (BMP) treatment zone (like stormwater pond)

Valid Value	Additional Info
Stormwater BMP Influent	Stormwater, Best Management Practice (BMP) influent
Stormwater Catch Basin	Stormwater, catch basin
Stormwater In-Line	Stormwater, in-line conveyance or drainage
Stormwater Outfall	Stormwater, outfall
Stormwater Sheetflow	Stormwater, sheetflow
Precipitation	
Water	
Fresh/Surface Water	
Brackish Water	
Salt/Marine Water	
Groundwater	
Pit Water	Standing water at bottom of excavation pit or trench, composed of pooled surface water runoff, groundwater seepage, or both. Download help for "Entering Pit Water Data."
Precipitation	
Other	
Industrial Discharge	Discharge from an industrial source (permitted)
Sewer In-Line	Sewer system, in-line
Source - Other	Point source or discharge that is not stormwater, industrial, or WWTP (permitted or non-permitted)
WWTP Effluent	Wastewater treatment plant effluent (permitted)
WWTP Influent	Wastewater treatment plant influent

EIM Result Data Qualifier valid values

[Go back to Result Data Qualifier help](#)

Measurement Data Qualifiers (for use with discrete or time-series data)	
EST	Measurement value reported is estimated. See comment for additional detail. (Note - You must add a comment to the Comment field (column U) explaining why your result is an estimate).
EQP	Inconsistent equipment performance (sensor, instrument, etc.); reported result meets study objectives.
IA	Instrument result adjusted; reported result meets study objectives
OOD	Out of range; dataset not in expected range for instrument type, data type, or historical climatology; reported result meets study objectives.
OUT	Outlier within dataset; single result is unexpected or discontinuous.
REJ	Data are unusable for all purposes. Results rejected due to serious deficiencies in the ability to analyze the sample or conduct a measurement and meet quality control criteria. For samples the presence or absence of the analyte cannot be verified.
VAR	Variation within dataset; multiple results creating an unexpected pattern.
Observation Data Qualifiers (well-specific ones are under Well Water Level Data Qualifiers)	
FA	No site access
FD	Site was dry
FE	Equipment failure
FH	Flow too high to measure
FI	Ice-impacted
FL	Above or below instrument or method limit
FS	Stagnant water - no flow
FT	Flow tidally impacted
Well Water Level Data Qualifiers (includes well-specific observation data qualifiers*)	
WLA	Well water level affected by atmospheric pressure.
WLB	Well water level affected by tidal stage.
WLC	Well water level affected by ice.
WLD	Well was dry during measurement attempt*
WLE	Well was flowing recently.
WLF	Well was flowing and could not be measured*
WLG	Nearby well(s) flowing during measurement.
WLH	Nearby well(s) flowing recently.
WLI	Well site was being injected during measurement.
WLJ	Nearby well site(s) being injected during measurement.
WLK	Water was cascading down inside of well.
WLL	Well water level affected by brackish or saline water.
WLM	Well was plugged and not in hydraulic contact with the aquifer.*
WLN	Well measurement discontinued.*

WLO	Well water level affected by/could not be measured due to obstruction in well.*
WLP	Well site was being pumped during measurement.
WLR	Well site was pumped recently.
WLS	Nearby well(s) being pumped during measurement.
WLT	Nearby well(s) pumped recently.
WLV	LNAPL (floating product) or other foreign substance on well water.
WLW	Well was destroyed and could not be measured*
WLX	Well water level affected by nearby surface-water stage.
WLZ	Well water level affected by other conditions. Note - You must add a comment to the Comment field (column U) field explaining the conditions.
Qualifiers No Longer in Use (but still associated with older data in EIM)	
C	See Result Comment for qualifying statement

Document Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
9/10/13	2013.01	Changes to EIM data model	CN
10/13/17	3.0	Changed versioning system and made formatting updates for new help center. Moved to Word/PDF from Excel for accessibility reasons.	CN
01/27/20	3.1	Clarified language in several fields about how to submit observations	KC
05/03/20	3.2	Removed dash from Study-Specific Location ID in Field Name column	KC
03/31/23	3.3	In EIM Result Data Qualifier valid value table, for EST qualifier, fixed the column name and number of the field that the explanatory comment should be put in	KC
10/12/23	3.4	Added note that if using EST qualifier an explanation should be put into comment field, removed Lab (Sample) Data Qualifiers from data qualifier table and Result Validation Level valid values section because neither applies to timeseries measurements, added note to description of WLZ data qualifier.	KC
10/31/23	3.5	Added sentence to Start Time “See the section “Time zone and daylight saving time” in the “How to Submit Time-Series Data to EIM” help document for more information on times.”	KC
12/13/23	3.6	Removed Groundwater Result Accuracy valid values in meters (WL3, WL4, WL5, WL7) because they were deactivated in 2020.	KC