EIM Help – Results Template

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How to Use This Help

Use the grid below when you fill out your **Results Template**. Each row corresponds to a column in the template.

Other Templates to Consider

Did you use a deployed instrument to collect continuous data? Enter your data in the **Time Series Results Template**. Did you collect discrete water levels from wells? Enter your data in the **Well Water Level Template**. Find them in the EIM Help Center.

Color Coding in Grid

Color coding gives you a quick indication of required fields. This information is also in the "Requirements" column.

- **Yellow/Bold** = Required.
- **Purple** = Required if Field Collection Type is Sample or Measurement.
- **Orange** = Required if Field Collection Type is Sample.
- Gray = Don't fill out anymore. We no longer take this info.

Color coding **FOR LABS**: See the bars on the left side of the columns. These are the minimum fields you should populate for your clients:

- **Red** = Required.
- **Pink** = Required if applicable.
- **Blue** = Required for specific tissue or taxonomic data.

Key to Help Fields in Grid

- **Column (Col)**: Column heading (A, B, C, etc.) in the EIM template.
- **Field Name**: EIM field name.
- **Description**: EIM field description.
- **Requirements**: Indicates if field is required, conditionally required, or optional.
- **Type**: Type of data field, like text, number, date, or time.
- **Size**: The maximum number or length of characters allowed.
- **Valid Values and Conditions**: Accepted values and format. Longer lists of valid values are at end of document or online.
- **Examples and Guidance**: Examples are in bulleted lists.

Grid - How to Fill Out Your Results Template

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**	Text	20	Must be valid EIM Study ID.	Use Study ID from: 1. Your Study form, or 2. A Study already in EIM In a single template, don't submit data for more than one study. To load data for more than one study, use separate templates for each.
B	**Location ID**	**Unique ID** to identify the field Location in EIM.	**Required**	Text	15	Must be valid EIM Location ID.	Location IDs are from Column A in your Location template or an existing location in EIM. You will commonly have multiple result records associated with a Location ID. The Location ID indicates a specific sampling location. All result records associated with that sampling location use that Location ID.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
C	**Study Specific Location ID**	**Unique ID** to identify the field location within a particular Study. Only needs to be unique to the Study, not to all of EIM. Can be the same as Location ID, an abbreviation of Location ID, or something totally different.	**Required**	Text	40	Free text / preferred format. IDs of 8 characters or fewer will display better on GIS map.	▪ If your Location ID for a monitoring well is "CITGO-34586-MW4," your **Study-Specific Location ID (SSLID)** could be "MW-4." SSLID is often the location identifier written on the sample jar label. Each **Location ID must be paired 1-to-1 with a SSLID**. Once you establish a Location ID/SSLID pairing (by submitting results), use the same pairing for all future data submittals to your study. If you aren't sure what Location ID/SSLID pairings were previously used in your study, download your results data from EIM Search or contact your Data Coordinator. **Download help for** How to Name and Describe EIM Field Locations.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
D	**Field Collection Type**	General type of data collection conducted in field. Also flags method blank data for low-level PCB congeners by EPA1668C, B, or A	**Required**	Text	11	▪ **Sample** - discrete sample collected in the field that is sent to a lab for analysis. ▪ **Measurement** - discrete data collected in the field (in-situ) using an instrument, like pH meter. ▪ **Observation** - record of an unsuccessful measurement or sampling attempt. ▪ **QC Blank** - lab method blank data **only for** uncorrected low-level PCB congeners by EPA1668C, B, or A	**Measurements** are collected **in-situ**. If you removed environmental media and analyzed it in a secondary location, such as a vehicle, enter as a **Sample** and enter a Result Lab Name (BC) of "Mobile lab at data collector field site." **Download help for** Field Measurements **For Observations,** use only if a sample or measurement was planned or required but not obtained. Download help for "Entering Observations." **For Time Series data,** (deployed instrument that collected continuous measurements) use the Time Series Template. **Download help for** Low-Level PCB Congener Data to see full list of required fields if **QC Blank**.
E	**Field Collector**	Name or type of organization that collected the data.	**Required**	Text	15	Must be a valid EIM Field Collector Code. See table of Field Collector valid values (in this document).	▪ Consultant ▪ Ecology
F	**Field Collection Start Date**	Date of measurement, sample collection or observation in field. For temporal composites, including passive samples, this is the date the composite began.	**Required**	Date	10	MM/DD/YYYY	▪ 06/23/1999 ▪ 12/15/2022 **Download help for** Passive Sampling Data

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
G	Field Collection Start Time	Time of measurement, sample collection or observation in field, in local time. For temporal composites, including passive samples, this is the time the composite began.	**Required for**: ▪ Parameters that commonly exhibit diel (daily) fluctuation or have a holding time of 48 hours or fewer.	Time	8	HH:MM:SS or HH:MM ▪ Enter 24-hour time ▪ Enter local time	▪ 19:20 (interpreted as 7:20 PM) ▪ 07:00 (interpreted as 7:00 AM) ▪ 00:07:00 (interpreted as 12:07 AM) ▪ 00:00:00 (interpreted as 12 AM midnight) Leave blank for unknown time - don't enter zero. **Measurements:** Important for parameters measured in the field that commonly exhibit diel fluctuation. **Samples**: Important for calculating if holding times specified in the analysis method are met. **See table of** parameters that require Field Collection Start Time (in this document).
H	Field Collection End Date	For temporal composites, including passive samples, this is the date the composite ended.	Optional	Date	10	MM/DD/YYYY	▪ 06/23/1999 ▪ 03/05/2023 Leave blank for discrete samples. Only for data collection that took place over time, like temporal composites and other special cases.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
I	Field Collection End Time	For temporal composites, including passive samples, time that field data collection ended, in local time.	Optional	Time	8	HH:MM:SS or HH:MM ▪ Enter 24-hour time ▪ Enter local time	▪ 19:40:36 (interpreted as 7:40 PM) ▪ 9:56 (interpreted as 9:56 AM) ▪ 00:00:00 (interpreted as 12 AM midnight) Leave blank for unknown time - don't enter zero. Leave blank for discrete samples. Only for data collection that took place over time, like temporal composites and other special cases.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
J	Field Collection Comment	Comments or descriptive information about the collection of data in the field.	Optional	Text	2000	Free text	▪ Cows in stream upgradient of sampling site. **You can have only one Field Collection Comment per field collection event.** A field collection event is: ▪ All measurements collected at the same location, depth, date, time, matrix and source, or ▪ All samples collected at the same location, depth, date, matrix and source, and Sample ID. **For Samples, this means you can only have one Field Collection Comment per Sample ID.** If you enter more than one Field Collection Comment per field collection event, EIM only takes the first one loaded and any others get deleted. If you want to comment about a particular result or group of results within a field collection event, enter it as a Result Comment or Result Additional Comment. **Download help for** How to Use EIM's Comment fields.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
K	Field Collection Area	The area in which the collection of field data occurred. For benthic macroinvertebrate (e.g., kick-net area) and periphyton (surface area of substrate scraped) count data. Also, for spatial composite samples, if known.	**Required for** freshwater benthic organism counts and periphyton counts.	Number	10	Must be a number.	▪ 8.20 ▪ 3 **Download help for** Periphyton Counts **Download help for** Benthic Invertebrate Identification and Counts **Download help for** Entering Composite Samples.
L	Field Collection Area Units	Units of measure associated with Field Collection Area.	**Required if** Field Collection Area is populated.	Text	10	▪ **cm2** - square centimeters ▪ **m2** - square meters ▪ **ft2** - square feet	
M	Field Collection Reference Point	Point from which collection depth of field data was measured.	**Required for**: ▪ Soil gas data ▪ Sediment data ▪ Sediment porewater data ▪ Soil data ▪ Chemistry data from Temporary Environmental Investigation Wells ▪ Water column profile data	Text	30	▪ **Land Surface** ▪ **Water Surface** ▪ **Sediment Surface** ▪ **Floor of Structure**	Water Surface is defined as the water-air interface. **Download help for** Entering Field Collection Depth or Height.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
N	Field Collection Upper Depth	Distance from Reference Point to upper boundary where field data was collected. Positive values represent depths below reference point. Negative values represent distance above reference point. If a discrete sample is collected at one depth, Upper and Lower Depth are the same value.	**Required for**: ▪ Soil gas data ▪ Sediment data ▪ Sediment porewater data ▪ Soil data ▪ Chemistry data from Temporary Environmental Investigation Wells ▪ Water column profile data	Number	10	Must be a number.	▪ **Composite Sample:** "5" if soil sample was taken between 5 and 7.5 feet below land surface. ▪ **Discrete Sample**: "5" if soil sample was taken 5 feet below land surface. **Download help for** Entering Field Collection Depth or Height. **Things that DON'T go in this field:** ▪ Elevation ▪ Well water level depth or elevation ▪ Well groundwater sample depth - except for Temporary Environmental Investigation Wells (download help)

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
O	Field Collection Lower Depth	Distance from Reference Point to lower boundary where field data was collected. Positive values represent depths below reference point. Negative values represent distance above reference point. If a discrete sample is collected at one depth, Upper and Lower Depth are the same value.	**Required for**: ▪ Soil gas data ▪ Sediment data ▪ Sediment porewater data ▪ Soil data ▪ Chemistry data from Temporary Environmental Investigation Wells ▪ Water column profile data	Number	10	Must be a number.	▪ **Composite Sample:** "7.5" if soil sample was taken between 5 and 7.5 feet below land surface. ▪ **Discrete Sample:** "5" if soil sample was taken 5 feet below land surface. **Download help for** Entering Field Collection Depth or Height. **Things that DON'T go in this field:** ▪ Elevation ▪ Well water level depth or elevation ▪ Well groundwater sample depth - except for Temporary Environmental Investigation Wells (download help)
P	Field Collection Depth Units	Unit of measure associated with Field Collection Upper Depth and Field Collection Lower Depth.	**Required for** results where Field Collection Upper and Lower Depth is populated.	Text	10	▪ **cm** - centimeters ▪ **m** - meters ▪ **in** - inches ▪ **ft** - feet	

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
Q	Well Water Level Measuring Point or TOC ID	ID for the point on the well from which water levels are measured. Often top of well casing (TOC).	**Required only for** well water levels. Not needed for groundwater chemistry data.	Text	8	▪ **TOC1** when measured from top of casing ▪ **TOC2** when measured from a secondary point at the top of casing (like when the casing gets cut off) ▪ **MP1** when measured from access port or similar ▪ **MP2** when measured from a secondary access port or similar	**Enter only for well water levels.** Use value you submitted in the Location template or that is stored in EIM. If the top of casing gets cut off or you have more than one measuring point, contact your EIM Data Coordinator. They will enter a new Measuring Point ID into EIM for you.
R	Sample ID	Primary ID to identify a sample. May be selected by the sampler or assigned by the lab.	**Required if** Field Collection Type is Sample.	Text	50	Free text. Must match the corresponding Sample ID used in reports or other documents.	▪ 1304017-04 ▪ C1 ▪ MW1 The laboratory-assigned sample ID is often entered in this field, but not always. For example, upland cleanup sites commonly use IDs like MW1 to identify the location from which the sample was collected. Check with your data coordinator if you have questions about Sample IDs. Split samples sent to different labs must be assigned the same Sample ID before entry into EIM. Don't enter the data with mismatching lab-assigned sample IDs. This includes bioassay and chemistry data from the same sample. For information on Sample IDs and field replicates, **download help for** Entering Field Replicates.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
S	Sample Field Replicate ID	Secondary ID to identify a field replicate sample. Field replicates are separate samples identically collected as close as possible to the same point in space and time as the original sample. They are stored in separate containers, each of which is identically processed and analyzed. Field replicates provide insight into field and laboratory procedure variability (and in some cases contaminant distribution).	**Required if** sample is a replicate and shares a Sample ID with one or more samples.	Text	4	Free text / preferred format.	▪ 1, 2, 3 ▪ FR1, FR2, FR3 Replicate samples often have separate Sample IDs; however, they may have the same Sample ID in some instances. The Sample Field Replicate ID is necessary to differentiate them in these cases. **Download help for** Entering Field Replicates.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
T	Sample Replicate Flag	Indicates that the sample is a field replicate. Field replicates are separate samples identically collected as close as possible to the same point in space and time as the original sample. They are stored in separate containers, each of which is identically processed and analyzed. Field replicates provide insight into field and laboratory procedure variability (and in some cases contaminant distribution).	**Required if** sample or measurement is a field replicate.	Text	1	▪ **P** - Primary ▪ **Y** - Yes ▪ **N** - No	**Download help for** Entering Field Replicates.
U	Sample Sub ID	Secondary ID to identify a set of field split samples. Mostly used for sediment data. For split samples with the same Sample ID or with different Sample IDs.	**Required if** sample is a field split and shares a Sample ID with one or more sub-samples.	Text	4	Free text / preferred format. First split is 1, second is 2, etc., no matter what the Sample ID is.	▪ 1, 2, 3 ▪ SS1, SS2, SS3 To create a split sample, a single field sample (often created by compositing several samples from the same field location) is split in the field into two or more sub-samples. This is done so different types of analyses can be performed (e.g., toxicity, chemistry) or the same analyses can be performed by different laboratories. Each split or sub-sample is analyzed individually.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
V	Sample Composite Flag	Indicates that the sample is a composite created by combining two or more discrete samples collected spatially and/or temporally.	**Required if** Field Collection Type is Sample.	Text	1	▪ **Y** - Yes ▪ **N** - No	If Location "Horizontal Coordinates Represent" value is 25 (centroid of monitoring area), then composite flag should be Y. **Download help for** Entering Composite Samples.
W	Storm Event Qualifier		**Leave Blank -** EIM no longer takes this info				
X	**Sample Matrix**	Describes the general environmental medium which was measured or from which a sample was taken.	**Required**	Text	14	▪ **Air/Gas** ▪ **Other Liquid** ▪ **Habitat** ▪ **Solid/Sediment** ▪ **Tissue** ▪ **Water**	The **matrix for porewater** is **Solid/Sediment** because it's a part of sediment.
Y	**Sample Source**	Describes the environmental resource which was measured or from which a sample was taken. More specific than Sample Matrix.	**Required**	Text	30	Must be a valid EIM Sample Source Code. See table of Sample Source valid values (in this document).	▪ Fresh/Surface Water
Z	Sample Use	Indicates that the sample was collected for a specific purpose, namely background, reference, or test. Commonly used for sediment data.	**Required for** sediment data when bioassay analyses were done on the same sample.	Text	1	▪ **B** - Background Sample ▪ **R** - Reference Sample ▪ **T** - Test Sample ▪ **I** - Initial Sample (for bioaccumulation T0 (time zero) tissue concentration data only).	Use "B" to indicate that a sample was collected as a background sample for the Study even if it's not included in the final background calculation (due to suspected contaminant sources or other inappropriate data).

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AA	Sample Collection Method	Method used to collect the sample or measurement.	**Required for** some samples. Data types like stormwater, macroinvertebrate, groundwater, soil and if available for others.	Text	20	Must be a valid EIM Method Code. Search for EIM Method valid values (online).	▪ PUMP-PERISTALTIC ▪ DIRECTPUSH **Download help for** learning About EIM Methods. Need a method added to EIM? Contact us online or ask your data coordinator.
AB	Sample Preparation Method	Method used to prepare the sample.	**Required for** some data types like TCLP/SPLP, filtered water samples, and others.	Text	20	Must be valid EIM Method Code. Search for EIM Method valid values (online).	▪ SW3010A ▪ FILTER.45um ▪ SW1311 **Download help for** learning About EIM Methods. **Download help for** Fraction Analyzed for information about filters. Need a method added to EIM? Contact us online or ask your data coordinator.
AC	Sample Method Other	Additional field for collection, preparation, or preservation method.	Optional	Text	20	Must be valid EIM Method Code. Search for EIM Method valid values (online).	**Download help for** learning About EIM Methods. **Download help for** Fraction Analyzed for information about filters. Need a method added to EIM? Contact us online or ask your data coordinator.
AD	Sample Taxon Name	Scientific or common name of the subject taxon, commonly species level. Specified when an analysis was performed by a lab on animal or plant tissue.	**Required if** Sample Source is Animal Tissue or Plant Tissue.	Text	254	Must be valid EIM Taxon Name. Search for EIM Taxa valid values (online).	▪ Oncorhynchus keta ▪ Achnanthes subhudsonis If you have **macroinvertebrate or plant COUNTS**, fill out Result Taxon Name instead. Need a critter 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
AE	Sample Taxon TSN	Integrated Taxon Identification System (ITIS) Taxonomic Serial Number (TSN).	Optional	Text	10	Must be valid EIM Taxon TSN. Search for EIM Taxa valid values (online).	▪ 161976 ▪ 3559
AF	Sample Tissue Type	Type of animal or plant tissue that was sampled or measured.	**Required if** Sample Source is Animal Tissue or Plant Tissue.	Text	254	Must be a valid EIM Tissue Type. Search for EIM Tissue Type valid values (online).	▪ Fillet, skin off ▪ Whole organism, not shell
AG	Sample Percent Sorted	Percent of sample that is sorted. For benthic macroinvertebrate and periphyton count data.	**Required for** macro-invertebrate and periphyton counts.	Number	3	0-100	▪ 30 (macroinvertebrates) ▪ 0.00001468 (periphyton) For macroinvertebrates, usually the number of grid squares counted, divided by the total number of grid squares, times 100. Periphyton count sample percent sorted is a very small number. **Download help for** Periphyton Counts. **Download help for** Benthic Invertebrate Identification and Counts
AH	**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, fish weight, flow, etc.	**Required**	Text	254	Must be a valid EIM Parameter Name. Search for EIM Parameter Names (online).	▪ Cadmium ▪ Fish, Number in Composite Sample **Observations** - use "Unable to measure" Need a parameter 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
AI	Result Parameter CAS Number	A unique number assigned by the Chemical Abstracts Service (CAS) Division of the American Chemical Society to each distinct chemical substance recorded in the Chemical Registry System.	**Required if** provided by your lab.	Text	15	Format XXXXXX-XX-X to XX-XX-X Must be a valid EIM CAS Number. Search for EIM Parameter CAS Numbers (online).	▪ 30002-00-9 ▪ 5905-01-1 Must include dashes. Don't enter non-CAS identifiers like "temp." Don't fill this out for Measurements. If your lab didn't supply CAS numbers, you don't need to provide them. EIM will automatically populate CAS numbers based on parameter names. If you provide CAS numbers, EIM will cross-check parameter names and CAS numbers for accuracy. Excel can reformat some CAS numbers into dates. EIM templates are preformatted to avoid this, but if you open a CSV in Excel, be cautious. **Download help for** Preserving Values Corrupted by Excel. **See info on** CAS numbers that reformat into dates (in this document).
AJ	Lab Analysis Date	The date that the lab analyzed the sample. This is the date the result was created by the lab analysis, not the date the report was generated by the lab.	**Required if** Field Collection Type is Sample.	Date	10	MM/DD/YYYY	▪ 06/23/1999 ▪ 11/15/2022 Don't fill this out for Measurements.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AK	Lab Analysis Date Accuracy	Indicates if the Lab Analysis Date is accurate to the day, week, month, or year. Except for historical data, most cases are day.	Optional	Text	1	▪ **D** - day ▪ **W** - week ▪ **M** - month ▪ **Y** - year	Don't fill this out for Measurements.
AL	Lab Analysis Time	The time that the lab analyzed the sample. This is the time the result was created by the lab analysis, not the time the report was generated by the lab.	**Required for** Parameters with a holding time of 48 hours or fewer	Time	8	HH:MM:SS or HH:MM ▪ Enter 24-hour time ▪ Enter local time	▪ 16:00:36 (interpreted as 4 PM) ▪ 9:56 (interpreted as 9:56 AM) ▪ 00:00:00 (interpreted as 12 AM midnight) Leave blank for unknown time - don't enter zero. **Don't fill this out for Measurements.** See table of parameters that require Field Collection Start Time AND Lab Analysis Time (in this document).

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AM	Result Value	Reported result value for a particular parameter.	**Required if** Field Collection Type is Sample or Measurement.	Number	10	Must be a number. ▪ No commas ▪ No less-than (<) symbols ▪ No "NDs" ▪ No zeros for non-detects	▪ 4.60 (lab analysis showed soil sample contained 4.60 micrograms of cadmium). ▪ 26.2 (water level 26.2 feet below the measuring point). **Measurements – check the accuracy of your instrument and report the appropriate significant digits. Download help for** Field Measurements for more info. If viewing your data in Excel, be cautious of auto-reformatting. Digits may be lost unless these cells are formatted as Text. For more information about preserving the formatting in this field, **download help for** Preserving Values Corrupted by Excel. **Observations –** leave this field blank **Non-detects/censored data** - record the reporting or detection limit in this field and use the appropriate qualifier (U or U-variant) in the Result Data Qualifier field. **Download help for** Entering Non-Detects and Estimates.
AN	Result Value Units	Unit of measure associated with a Result Value.	**Required if** Field Collection Type is Sample or Measurement.	Text	10	Must be a valid EIM Unit. Search for EIM Units (online).	▪ ug/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
AO	Result Reporting Limit	Minimum concentration at which detection of a parameter is reported. Usually chosen by the laboratory and usually above a parameter's method detection limit.	**Required for** non-detects and some J-qualified data. Also required for detects, if available. Not required for measurements.	Number	10	Must be a number. **Must have same units as Result Value.**	▪ 4.60 ▪ 0.23 Labs should provide this information for most data. You may not have this information for historical data. **Download help for** Entering Non-Detects and Estimates.
AP	Result Reporting Limit Type	Specifies the type of Reporting Limit provided by the lab.	**Required if** you enter a Result Reporting Limit.	Text	9	▪ **MRL** - Method Reporting Limit ▪ **PQL** - Practical Quantitation Limit ▪ **EQL -** Estimated Quantitation Limit ▪ **LLOQ** - Lower Limit of Quantitation (EPA SW-846 methods only ▪ **LOQ** - Limit of Quantitation ▪ **SQL** - Sample Quantitation Limit ▪ **CRQL** - Contract-Required Quantitation Limit (as defined by EPA) ▪ **LabDef** - Lab Defined (limited use)	

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AQ	Result Detection Limit	The minimum quantity of a parameter that can be distinguished from background.	**Required for** non-detects and some J-qualified data. Also required for detects, if available. Not required for measurements.	Number	10	Must be a number. **Must have same units as Result Value.**	▪ 2.90 ▪ 0.45 Labs should provide this information for most data. You might not have this information for historical data. **Download help for** Entering Non-Detects and Estimates.
AR	Result Detection Limit Type	Specifies the type of Detection Limit provided by the lab.	**Required if** you enter a Result Detection Limit.	Text	9	▪ **MDL -** Method Detection Limit ▪ **EDL** - Estimated Detection Limit ▪ **LOD -** Limit of Detection ▪ **IDL** - Instrument Detection Limit ▪ **CRDL -** Contract-Required Detection Limit (as defined by EPA) ▪ **MDC** - Minimum Detectable Concentration (radiochemistry)	

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AS	Result Data Qualifier	Standard annotations for documenting issues with Result Values, such as non-detects or estimates. Also used for: ▪ Well Water Level Measurements. ▪ Observations, to explain why a sample or measurement wasn't possible.	**Required if** applicable.	Text	3	Must be a valid EIM Result Data Qualifier. The qualifier must be appropriate to the type of data (lab/sample, measurement, well water level, observation). See table of "Result Data Qualifier valid values" (in this document). OR Search for EIM Result Data Qualifier Valid Values (online).	▪ **Lab/Sample** - J (Analyte positively identified. Associated numerical result is an estimate). ▪ **Measurement** - EST (Measurement value reported is estimated.). ▪ **Observation** - FH (Flow too high to measure). ▪ **Wells** - WLR (Well site was pumped recently). For **non-detects**, record the reporting or detection limit in the Result Value field and the appropriate qualifier (U or UJ, etc.) in this field. Don't use the < symbol before the value or an "ND" for the value. **Download help for** Entering Non-Detects and Estimates. **Note:** Since lab qualifiers aren't universal, the qualifiers in your dataset might not match EIM's. Pick a qualifier that best represents the one assigned by your lab. Put your lab's qualifier and definition in the Result Comment (column AZ) or Result Additional Comment (column BA) field. **If you use EST (measurements) you must add a comment** to Result Comment (column AZ) or Result Additional Comment (column BA) explaining why your result is an estimate. If the sample exceeds the holding time, you must enter a Result Data Qualifier.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AT	Fraction Analyzed	Indicates the fraction (total, dissolved, or suspended) of an aqueous sample that was analyzed. Also includes analyses performed on lab-generated leachates derived from solid samples	**Required for** Samples with Sample Matrix of "Water," unless Sample Source is "Freshwater Taxonomy" or "Salt/Marine Taxonomy." Also required if you analyzed sediments which were suspended in a water column or for lab leachates.	Text	15	▪ **Total** - analysis performed on an unfiltered or unseparated aqueous sample (dissolved + solids). ▪ **Dissolved** - analysis performed on an aqueous sample that has been filtered in the lab or the field such that only the soluble portion is analyzed. ▪ **Suspended** - analysis performed on solids retained from an aqueous sample after separation by filtering or centrifuging, etc. ▪ **Lab Leachate** - analysis performed on lab-generated leachate derived from a solid sample using TCLP or similar sample preparation.	**Download help for** Fraction Analyzed. **Don't fill this out for Measurements.** If Lab Leachate, Sample Preparation Method (AB) is required. **Download help for** Entering TCLP/SPLP Data.
AU	Field Filtered Flag	Indicates if a sample was filtered in the field (not the lab).	**Required if** Fraction Analyzed is Dissolved.	Text	1	▪ **Y** - Yes ▪ **N** - No	If "Yes," enter the filtration method in the Sample Preparation Method field (Column AB). Important for groundwater samples.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
AV	Result Basis	Physical state in which the analyte concentration was reported - either as the sample was received by the lab (wet weight) or adjusted to remove moisture (dry weight).	**Required for** Sediment, Soil and Tissue chemistry data or if this information was reported by the lab.	Text	3	▪ **Dry** - Analyte concentration in dry weight ▪ **Wet** - Analyte concentration in wet weight	Result Basis is sometimes concatenated with units in lab reports, like "mg/kg-dry." EIM stores Result Basis and units separately. Don't populate Result Basis for Measurements or Water Samples - leave it blank. **Download help for** Result (Weight) Basis.
AW	Digestion Method		**Leave Blank** - EIM no longer takes this info				
AX	Water Level Accuracy	Estimated accuracy of a well water measurement or a vertical hydraulic gradient measurement.	**Required only for** well water level and vertical hydraulic gradient measurements.	Text	3	**Accuracy in feet:** ▪ **WL2** - +0.01ft ▪ **WL1** - +0.1ft ▪ **WL0** - +1ft ▪ **WL6** - >1ft	
AY	Result Method	Procedure, method or instrument technology used to obtain a result. Includes lab (analysis), and field (measurement) methods.	**Required if** Field Collection Type is Sample or Measurement.	Text	20	Must be valid EIM Method Code. Search for EIM Method valid values (online).	▪ SW8260B ▪ GWLMT **Download help for** learning About EIM Methods. Need a method 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
AZ	Result Comment	Comments about the Result Value.	**Required for** results qualified with EST	Text	2000	Free text	▪ Result was qualified due to metal contamination during sampling and analysis ▪ Sample exceeded the 48 hour hold time as outlined in the QAPP If you qualified your data because it exceeded holding time, say that in the comment. **Download help for** How to Use EIM's Comment fields.
BA	Result Additional Comment	Additional comments about the Result Value.	Optional	Text	2000	Free text	For chemistry data from WHM or related SAM studies, enter the DCE (data collection event) information here. **Download help for** How to Use EIM's Comment fields.
BB	Result Lab Replicate ID	Additional ID for lab replicate samples with the same primary Sample ID.	**Required for** lab replicates with same Sample ID.	Text	4	Free text / preferred format	▪ 1, 2 ▪ LR1, LR2 ▪ REX1, REX2 ▪ DIL1, DIL2 Lab (analytical) replicates are separate analyses of sub-samples created in the lab from a single field sample. They are used to assess error associated with sample heterogeneity, sample treatment, and analytical procedures - or variability of organism responses to toxicity tests. **Download help for** Lab Dilutions and Re-Extractions.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
BC	Result Lab Name	Name of lab that analyzed the sample.	**Required if** Field Collection Type is Sample.	Text	254	Must be valid EIM Lab Name. Search for EIM Lab valid values (online).	▪ ALS Lab Group, Kelso WA ▪ EcoAnalysts Inc, Port Gamble WA **Don't fill this out for Measurements.** Some labs have new names due to mergers. Use the name the lab was under when your samples were analyzed. Need a lab 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
BD	Result Validation Level	Third-party or independent expert data validation following the most updated versions of USEPA guidance and national functional guidelines. Pre-August 2013 data follows older guidance.	**Required for** samples analyzed by EPA1668A, EPA1668B, EPA1668C, EPA1613A, EPA1613B, EPA1614, EPA1699 **OR for** studies where data are validated by third-party or independent experts following USEPA guidance and national functional guidelines. This may include certain Ecology Toxics Cleanup Program (TCP) and U.S. Army Corps of Engineers (USACE) sediment studies, TCP federal studies, and TCP cleanup studies.	Text	5	▪ **EPA1** ▪ **EPA2A** ▪ **EPA2B** ▪ **EPA3** ▪ **EPA4** Pre-August 2013 data only: ▪ **QA1** ▪ **QA2** See table of "Result Validation Level valid values" (in this document).	**If the data were NOT validated** by third-party or independent experts, leave this field blank and specify QA information ONLY at the Study level (Study QA Assessment Level). If your data were externally validated by third-party or independent experts and you are using this field to indicate the EPA validation stage, set your Study QA Assessment Level to "See Results." The minimum data validation stage for Toxics Cleanup Program data is EPA2B.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
BE	Result Taxon Name	Scientific or common name of the subject taxon. This is used if what you are reporting is an organism count. This is not used if an analysis was performed on animal or plant tissue.	**Required for** macro-invertebrate, periphyton, vertebrate, shellfish or plant counts or other taxonomic data submitted as counts.	Text	254	Must be valid EIM Taxon Name. Search for EIM Taxa valid values (online).	▪ Leptoceridae ▪ Achelia gracilipes If your data are not counts, but rather results from an analysis performed on animal or plant tissue, fill out Sample Taxon Name instead. Need a critter added to EIM? Contact us online or ask your data coordinator.
BF	Result Taxon TSN	Integrated Taxon Identification System (ITIS) Taxonomic Serial Number (TSN).	Optional	Text	10	Must be valid EIM Taxon TSN. Search for EIM Taxa valid values (online).	▪ 116547 ▪ 83584
BG	Result Taxon Unidentified Species	Indicates that a subject taxon hasn't been positively identified to the species level. The next highest taxonomic level (usually genus) is indicated in the Result Taxon Name field.	**Required if** more than one unidentified species in the same sample is reported under the same parent taxon.	Text	10	▪ **SP1** ▪ **SP2** ▪ **SP3** ▪ **SP4**, etc.	For unidentified taxa, roll the Result Taxon Name and TSN up to the next taxonomic level (usually genus). Assign codes sequentially for each unidentified, rolled up species with the same parent taxon in a sample. **Download help for** Entering Unidentified Species Data.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
BH	Result Taxon Life Stage	Describes life stage of an organism.	**Required for** some macro-invertebrate taxonomic data and vertebrate and shellfish counts.	Text	50	▪ **Adult** ▪ **Egg** ▪ **Juvenile** ▪ **Larva** ▪ **Megalopa** ▪ **Nauplius** ▪ **Nymph** ▪ **Pupa** ▪ **Zoea**	This field is used to separate counts, for example when there are both adults and larvae of the same taxon in an individual sample. For freshwater macroinvertebrates it is required if other than larvae. For marine macroinvertebrates it's required if other than adult. **Download help for** Benthic Invertebrate Identification and Counts.
BI	QC Blank Type (New field, 2023-6-29)	Type of QC blank reported. Currently, EIM accepts method blank data only for low-level PCB congener methods (EPA1668C, B, or A).	**Required for** method blank data by EPA1668C, B, or A	Text	50	▪ **Method Blank**	**For method blank data, also enter "QC Blank" in Field Collection Type** (column D) to distinguish it from regular results. EIM won't save method blank data for any other methods besides EPA1668C, B, or A. Currently, EIM doesn't accept other types of blank data, like trip or transfer. **Download help for** Low-Level PCB Congener Data.

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
BJ	QC Blank Censor Factor (New field, 2023-6-29)	Blank-censor indicator or factor. QC blank data are multiplied by this number to get the detection limit threshold. For uncensored low-level PCB congener data, EIM auto-calculates 1x, 3x, 5x, 8x, and 10x blank-censored results. The data are downloadable via EIM Search.	**Required for** uncensored low-level PCB data by EPA1668C, B, or A	Text	50	▪ **Uncensored** ▪ **1x** ▪ **2x** ▪ **3x** ▪ **5x** ▪ **8x** ▪ **10x** ▪ **Factor Unknown** Leave this field blank if it doesn't apply to your data.	For uncensored low-level PCB congener data by EPA1668C, B, or A, enter "Uncensored." **Note:** You can submit ANY data (PCB or otherwise) that's already blank-censored and qualified. Indicate the blank-censor factor here. If you don't know the blank censor factor, use "Factor Unknown." **Download help for** Low-Level PCB Congener Data. Historical Uncensored - Historical data that is known to be uncensored/blank corrected but lacks method blank info needed for auto-censoring.
BK	Lab Batch ID (New field 2023-6-29)	ID given to all environmental and QC samples analyzed in the same batch. Also known as analytical batch ID.	**Required for** uncensored low-level PCB data by EPA1668C, B, or A	Text	50	Free text	EIM accepts whatever format a lab provides. **Note:** This field was added for low-level PCB congener data. Do not use this field for any other data types. **Download help for** Low-Level PCB Congener Data.
BL	Lab GC Column ID (New field 2023-6-29)	ID of gas chromatography (GC) column used in the analysis.	**Required for** uncensored low-level PCB data by EPA1668C, B, or A	Text	50	▪ **SPB-OCTYL** ▪ **DB-1** ▪ **DB-1HT** ▪ **DB-1MS** ▪ **DB-5** ▪ **SGE-HT8** ▪ **ZB-1**	This field was added for low-level PCB congener data, but you can enter this for any pertinent data. **Download help for** Low-Level PCB Congener Data.

Valid Value Lists

Go back to Field Collector help.

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

Valid Value	Description
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

Go back to Sample Source help.

EIM Sample Source Valid Values

Air and Gas

Download help for Air, Vapor, and Soil Gas Data.

Valid Value	Additional Info
Indoor Air	Download help for "Air, Vapor, and Soil Gas Data"
Outdoor Air	Download help for "Air, Vapor, and Soil Gas Data"
Soil Gas	Gaseous elements and compounds in the small spaces between particles of the earth and soil. Download help for "Air, Vapor, and Soil Gas Data"
Bulk Atmospheric Deposition	Bulk Atmospheric Deposition – Collected during dry periods and precipitation events. Download help for "Atmospheric Deposition Data"
Dry Atmospheric Deposition	Dry Atmospheric Deposition – Collected during dry periods or sheltered from precipitation. Download help for "Atmospheric Deposition Data"
Wet Atmospheric Deposition	Wet Atmospheric Deposition – Collected only during precipitation events. Download help for "Atmospheric Deposition Data"

Animal and Plant

Valid Value	Additional Info
Animal Tissue	Download help for "Fish and Shellfish Tissue Data"
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. Download help for "Periphyton Chemistry"
Freshwater Taxonomy	Taxonomic information about freshwater organisms. Download help for "Benthic Invertebrate Identification and Counts."
Salt/Marine Taxonomy	Taxonomic information about salt/marine water organisms. Download help for "Benthic Invertebrate Identification and Counts."

Sediment, Porewater, and Elutriate

Note: EIM does not have rigid definitions of fresh, salt or brackish. Your specific project may define those. For example, the 2013 Sediment Management Standards, Chapter 173-204 WAC has guidelines for defining marine, brackish and freshwater sediments and porewater.

Valid Value	Additional Info
Freshwater Sediment	
Brackish Sediment	
Salt/Marine Sediment	
Freshwater Porewater	Porewater is the water filling the spaces between grains of sediment or soil.
Brackish Porewater	Porewater is the water filling the spaces between grains of sediment or soil.
Salt/Marine Porewater	Porewater is the water filling the spaces between grains of sediment or soil.
Elutriate	Supernatant of a sediment and lab water mixture (this is not porewater).

Soil and Substrate

Valid Value	Additional Info
Rock/Gravel	
Soil	Use “Soil” for duff samples and indicate “sampled duff” in Field Collection Comment.

Stormwater

Download help for Stormwater and Combined Sewer Data.

Valid Value	Additional Info
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).
Stormwater BMP Influent	Stormwater, Best Management Practice (BMP) influent.
Stormwater Catch Basin	

Valid Value	Additional Info
Stormwater In-Line	Stormwater, in-line conveyance or drainage.
Stormwater Outfall	
Stormwater Sheetflow	
Precipitation	

Water

Note: EIM does not maintain rigid definitions of marine, fresh or brackish water.

Valid Value	Additional Info
Fresh/Surface Water	
Brackish Water	
Salt/Marine Water	
Groundwater	Download help for "Well Information and Data"
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	
Spring/Seep	Spring or Seep. Download help for Spring and Seep Data.

Other

Valid Value	Additional Info
Industrial Discharge	Discharge from an industrial source (permitted).
Landfill Leachate	Leachate sampled from a landfill leachate collection system. Download help for "Landfill Monitoring Data"
Sewer In-Line	Sewer system, in-line.
Source - Other	Point source or discharge that is not stormwater, industrial, or WWTP.
WWTP Effluent	Wastewater treatment plant effluent.
WWTP Influent	Wastewater treatment plant influent.

Go back to Result Data Qualifier help.

EIM Result Data Qualifier Valid Values

Lab (Sample) Data Qualifiers

Choose the best match to the qualifiers reported by your lab.

Qualifier	Description
B	Analyte detected in sample and method blank AND the reported result is sample concentration without blank correction or associated quantitation limit.
B1	Analyte detected in sample and method blank AND the reported result is blank-corrected.
E	Reported result is an estimate because it exceeds calibration range.
G	Value is likely greater than the reported result AND the reported result may be biased low.
J	Analyte was positively identified AND the reported result is an estimate.
JG	Analyte was positively identified AND the value may be greater than the reported estimate.
JK	Analyte was positively identified AND the reported result is an estimate with unknown bias.
JL	Analyte was positively identified AND the value may be less than the reported estimate.
JT	Analyte was positively identified AND the reported result is an estimate below the associated quantitation limit but above the MDL.
JTG	Analyte was positively identified AND the value may be greater than the reported result, which is an estimate below the associated quantitation limit but above the MDL.
JTK	Analyte was positively identified AND the reported result is an estimate with unknown bias, below the associated quantitation limit but above the MDL.
JTL	Analyte was positively identified AND the value may be less than the reported result which is an estimate below associated quantitation limit but above MDL.
K	Reported result with unknown bias.
L	Value is likely less than the reported result AND the reported result may be biased high.
N	There is evidence the analyte is present in the sample AND this is a tentatively identified analyte.
NJ	There is evidence that the analyte is present in the sample AND the reported result for the tentatively identified analyte is an estimate.
NJT	There is evidence the analyte is present in the sample AND the reported result for the tentatively identified analyte is an estimate below the associated quantitation limit but above the MDL.

Qualifier	Description
NU	There is evidence the analyte is present in the sample AND the tentatively identified analyte was not detected at or above the reported result.
NUJ	There is evidence the analyte is present in the sample AND the tentatively identified analyte was not detected at or above the reported estimate.
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.
T	Reported result below associated quantitation limit but above MDL
U	Analyte was not detected at or above the reported result.
UJ	Analyte was not detected at or above the reported estimate
UJG	Analyte was not detected at or above the reported estimate with likely low bias.
UJK	Analyte was not detected at or above the reported estimate with unknown bias.
UJL	Analyte was not detected at or above the reported estimate with likely high bias.

Measurement Data Qualifiers

Use with discrete or time series field data.

Qualifier	Description
EST	Measurement value reported is estimated. See comment for additional detail. (Note: You must add a comment to the Result Comment (column AZ) or Result Additional Comment (column BA) field 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.
OOR	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 observation data qualifiers are under Well Water Level data qualifiers, in the next section.

Qualifier	Description
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, marked with an asterisk.

Qualifier	Description
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.

Qualifier	Description
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 Result Comment field (column AZ) or Result Additional Comment field (column BA) explaining the conditions.

Data Qualifiers No Longer In Use

Still used with older data in EIM.

Qualifier	Description
C	See Result Comment for qualifying statement

Go back to Result Validation Level help.

EIM Result Validation Level Valid Values

Result Validation Level is used only for Studies where data were validated by third-party or independent experts following USEPA guidance and national functional guidelines (2009, 2014, and 2016) or the most updated versions when available from the USEPA. Use this field for third-party or independent expert validated data following USEPA guidance and functional guidelines.

The Sampling and Analysis Plan or Quality Assurance Project Plan and study data validation report indicates what the appropriate EPA validation stage is. Applicable Ecology Toxics Cleanup Program (TCP) studies for Result Validation Level are TCP and U.S. Army Corps of Engineers sediment studies, TCP federal studies, and some TCP other cleanup studies. Consult the data validators if the validation stage is in question. If the data were not validated following USEPA guidance and functional guidelines, leave the Result Validation Level blank and instead populate the Study QA Assessment Level using the customary Level 1-5.

Current Result Validation Levels

Valid Value	Description
EPA1	EPA Stage 1 verification and validation based only on completeness and compliance of sample receipt condition checks.
EPA2A	EPA Stage 2A verification and validation based on completeness and compliance checks of sample receipt conditions and ONLY sample-related QC results.
EPA2B	EPA Stage 2B verification and validation based on completeness and compliance checks of sample receipt conditions and BOTH sample-related and instrument-related QC results.
EPA3	EPA Stage 3 verification and validation based on completeness and compliance checks of sample receipt conditions, both sample-related and instrument-related QC results, AND recalculation checks.
EPA4	EPA Stage 4 verification and validation based on completeness and compliance checks of sample receipt conditions, both sample-related and instrument-related QC results, recalculation checks, AND the review of actual instrument outputs.

References

- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review, EPA 542-R-20-007, November 2020.
- Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, EPA-540-R-08-005, January 2009.
- USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA 540- R- 20-005, November 2020.
- USEPA National Functional Guidelines for Inorganic Superfund Data Review, EPA 542-R-20-006, November 2020.

Historical Result Validation Levels

Prior to August 2013, QA1 and QA2 validation was applied to select datasets. Although no longer used for validation, some historical data submittals can still include them when pertinent. These valid values were formerly assigned at the Study level, but have been moved to the Result level.

Valid Value	Description
QA1	Level of quality assurance review acceptable for most sediment investigations conducted under the SMS, as well as for sediment sampling and analyses conducted to determine the suitability of dredged material for unconfined, open-water disposal at a DMMP site. A chemistry data review at this level evaluates field collection and handling, completeness, data presentation, detection limits (PQL shall not be greater than the SQS of the SMS), and the acceptability of test results for method blanks, certified reference materials, analytical replicates, matrix spikes and surrogate recoveries. A QA1 review of bioassay data covers similar field and reporting elements and evaluates the acceptability of test results for positive controls, negative controls, reference sediment, replicates, and experimental conditions (temperature, salinity, pH, dissolved oxygen). Detailed guidance on QA1 review procedures is provided in PTI (1989a) and is available from Ecology. Download Reference: PTI, 1989a. Puget Sound Dredged Disposal Analysis Guidance Manual: Data Quality Evaluation for Proposed Dredged Material Disposal Projects. Prepared for the Washington Department of Ecology, Olympia, WA. PTI Environmental Services, Bellevue, WA.
QA2	More vigorous level of quality assurance review appropriate for sediment data that are to be used for the development of AET values and SMS numerical chemical criteria. Also recommended in cases where the data may be used in litigation. At this level, a chemistry data review examines the complete analytical process from calculation of instrument and method detection limits, practical quantitation limits, final dilution volumes, sample size, and wet-to-dry ratios to quantification of calibration compounds and all analytes detected in blanks and environmental samples. QA2 review procedures are described in PTI (1989b), also available from Ecology. Download Reference: PTI, 1989b. Data validation guidance manual for selected sediment variables (OA2). Prepared for the Washington Department of Ecology, Olympia, WA. PTI Environmental Services, Bellevue, WA.

Parameters that Require Field Collection Start Time

These parameters commonly exhibit diel (daily) fluctuations, so you need to **provide Field Collection Start Date (F) and Time (G)**.

Parameter Name
Conductivity
Dissolved Oxygen
pH
Specific Conductivity
Temperature, air
Temperature, hyporheic
Temperature, water

Parameter Name
Turbidity
Water level in well (depth below top of well casing)
Water level in well (depth below measuring point)
Water level in well (depth below land surface)

Parameter Name
Depth to product (LNAPL) in well (depth below top of well casing)
Depth to product (LNAPL) in well (depth below measuring point)
Depth to product (LNAPL) in well (depth below land surface)

Parameters that Require Field Collection Start Time AND Lab Analysis Time

These parameters have short holding times (48 hours or fewer) specified in the analytical method. We check these parameters for holding time exceedances, so you need to **provide Field Collection Start Date (F) and Time (G) and Lab Analysis Date (AK) and Time (AL)**. **If the sample exceeded the holding time, you must enter a Result Data Qualifier (AS).**

Parameter Name	CAS Number
Apparent color	
Chromium, Hexavalent	18540-29-9
E. coli	68583-22-2
Enterococci	
Fecal Coliform	
Fecal Streptococci	
Klebsiella	

Parameter Name	CAS Number
Nitrate as N	
Nitrate as NO3	
Nitrite as N	
Nitrite as NO2	
Orthophosphate as P	
Orthophosphate as PO4	
pH	

Parameter Name	CAS Number
Settleable Solids	
Sulfite	14265-45-3
Surfactants	
Total coliform	
Total Residual Chlorine	
True Color	
Turbidity	

EIM Parameter CAS Numbers That Reformat into Dates

Why It Happens

An Excel glitch that we can't control causes certain EIM Result Parameter CAS Numbers to reformat into dates when you reopen your saved CSV EIM Results template in Excel. Reopening the CSV file causes Excel to default the cell format to "General." Download help for "Preserving Values Corrupted by Excel."

Note: This doesn't happen in your Results template because we preformat this field as "Text," so CAS Numbers display correctly.

How to Prevent It

If you need to edit your Results Template, use your original, preformatted Excel template instead of your saved CSV template. Here's a list of affected EIM Parameters with correct CAS Numbers.

Result Parameter Name	Result Parameter CAS Number ("date" format)	Result Parameter CAS Number (correct format)
(-)-Loliolide	2/6/5989	5989-02-6
[2,2'-Bifuran]-5,5'-dicarbo	1/1/5905	5905-01-1
1-Octanol, 2-butyl	2/8/3913	3913-02-8
2(3H)-Furanone, dihydro-3,5-dimethyl-	1/7/5145	5145-01-7
4-Penten-2-One, 4-Methyl-	2/3/3744	3744-02-3
5-Hexen-2-One, 5-Methyl-	9/8/3240	3240-09-8
6-Nitrochrysene	2/8/7496	7496-02-8
8-Heptadecene	4/6/2579	2579-04-6
Aceanthrenequinone	11/1/6373	6373-11-1
Azulene, 1,2,3,4,5,6,7,8-octahydro-1,4-dimethyl-7-(1-methylethenyl)-, [1S-(1 alpha,4 alpha,7 alpha)]-	12/1/3691	3691-12-1
Benzene, 1-Ethenyl-4-Ethyl-	7/7/3454	3454-07-7
Benzene, 2-Ethyl-1,3-Dimethyl-	4/4/2870	2870-04-4
Benzoic acid, 3,4-dimethoxy-, 4-[ethyl[2-(4-methoxy	6/7/3625	3625-06-7

Result Parameter Name	Result Parameter CAS Number ("date" format)	Result Parameter CAS Number (correct format)
Bisphenol E	8/5/2081	2081-08-5
C.I. Direct Blue 1, tetrasodium salt	5/1/2610	2610-05-1
Captafol	6/1/2425	2425-06-1
Carbadox	7/5/6804	6804-07-5
Chloropropylate	10/2/5836	5836-10-2
Cyclopentane, (4-octyldodecyl)-	9/5/5638	5638-09-5
Cyclopropane, 1,2-dimethyl-, trans-	6/4/2402	2402-06-4
Disulfoton sulfone	6/5/2497	2497-06-5
Dodine	10/3/2439	2439-10-3
Ergostanol	2/9/6538	6538-02-9
Ergosta-7,22-dien-3-ol, (3.beta.,5.alpha	11/4/2465	2465-11-4
Hexadecane, 1-chloro-	3/1/4860	4860-03-1
Hexanoic Acid, 3,5,5-Trimethyl-	10/1/3302	3302-10-1
Hydrogen Sulfide	6/4/7783	7783-06-4
Isobutylparaben	2/3/4247	4247-02-3
Lenacil	8/1/2164	2164-08-1
Lithium perchlorate	3/9/7791	7791-03-9
Mancozeb	1/7/8018	8018-01-7
Niobium	3/1/7440	7440-03-1
Oxazole, 2,4-dimethyl	5/1/7208	7208-05-1
Oxydisulfoton	7/6/2497	2497-07-6
Palladium	5/3/7440	7440-05-3
PBDE-001	6/1/7025	7025-06-1
Pentadecanal-	11/9/2765	2765-11-9
Phorate Sulfone	4/7/2588	2588-04-7
Phoratoxon sulfoxide	5/8/2588	2588-05-8

Result Parameter Name	Result Parameter CAS Number ("date" format)	Result Parameter CAS Number (correct format)
Picloram	2/1/1918	1918-02-1
Platinum	6/4/7440	7440-06-4
Potassium	9/7/7440	7440-09-7
Pyrene, 4-methyl-	12/6/3353	3353-12-6

Go back to Result Parameter CAS Number help.

Document Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
9/10/2013	2013.01	Changes to EIM data model	CN
10/13/2017	3.00	Changed versioning system and made formatting updates for new help center. Moved to Word/PDF from Excel for accessibility reasons. Lab EDD requirements added.	CN
4/17/2018	3.01	Under Sample and Result Taxon, changed Latin Name to Scientific Name. Added Result Detection Limit Type MDC (Minimum Detectable Concentration – Radiochemistry)	CN
01/24/2019	3.1	Removed “Landfill Gas” and “Landfill HGCS Groundwater” from Sample Source valid values list and moved “landfill leachate” down under the Other heading. Added link to Air, Vapor, and Soil Gas Data guidance. Removed “(permitted)” from WWTP Effluent description and “(permitted or non-permitted)” from Source-Other description. Replaced links to two previous guidance documents (“Benthic Organism Counts – Freshwater” & “Benthic Organism Counts – Marine”) with the link to the new combined guidance document “Benthic Invertebrates Identification and Counts.” Fixed link to Comment document in Column J.	KC
05/08/2019	3.2	Added info about CAS numbers reformatting as dates and more CAS number examples. Updated links to new web address.	CN
11/07/2019	3.3	EIM Result Validation Level valid values list, added the EPA Stage into the descriptions	KC
12/04/2019	3.4	Added local time and time zone info to Field Collection Date fields.	CN
05/03/2020	3.5	Removed dash from Study-Specific Location ID in Field Name column. Removed Water Level Accuracy valid values in meters (WL3, WL4, WL5, WL7) and added comment in examples column.	KC
06/16/2020	3.6	Renamed link for “Naming Conventions for EIM Field Locations to “How to Name and Describe Field Locations.” Accessibility edits.	CN
02/03/2021	3.7	Added sample sources for atmospheric deposition.	CN
03/16/2021	3.8	Added note about duff in sample source list under soil valid value.	KC
04/14/2021	3.9	Clarified accepted format for times; seconds are optional. Added guidance that unknown times should not be entered as zero. Added 3 parameters to list of result parameter CAS numbers that reformat into dates.	KC
11/04/2021	3.10	Clarified that there should only be data for a single study in each result template.	KC
11/17/2021	3.11	Added soil gas to the list of data types that Field Collection Reference Point is required for.	KC

Revision Date	Revision No.	Summary of Changes	Reviser(s)
02/03/2023	3.12	Refined description of Field Collection Start Date, added text about composite samples to Field Collection End Date and Time, added text to the examples in time fields, clarified that Lab Analysis Date and Lab Analysis Date Accuracy should be left blank for measurements, added definition of Field Collection Reference Point of Water Surface.	KC
6/28/2023	4.0	Changes to accommodate low-level PCB congener data: (1) Added 4 new columns to end of template – QC Blank Type (BI), QC Blank Censor Factor (BJ), Lab Batch ID (BK), and Lab GC Column ID (BL). (2) Also added new valid value "QC Blank" to Field Collection Type field. Added latest style and accessibility elements.	CN
7/6/2023	4.1	Added "or independent" to Result Validation Level description. So, "Third-party or independent data validation…" Updated National Functional Guideline references to most recent.	CN
10/12/2023	4.2	Clarified Field Collection Time is important for measurements especially DO and Temperature, added soil gas to list of data types that Field Collection Upper and Lower Depth are required for, added explanation to requirements for CAS numbers, added guidance language for Result Data Qualifier, added note to description of WLZ data qualifier, added link to help document "Preserve Values Corrupted by Excel" to page 40 and Result Value.	KC
08/26/2024	4.3	Added "Don't fill this out for measurements" to Examples and Guidance for Result Parameter CAS number and Lab Analysis Time. Updated the description of Sample Collection Method to "Method used to collect the sample or measurement." Updated wording in Well Water Level Measuring Point or TOC ID fields including adding valid value descriptions. Fixed typo in the QC Blank Censor Factor description and added "Leave this field blank if it doesn't apply to your data". Added sentence "Do not use this field for any other data types" to the Lab Batch ID guidance. In description for Result Method replaced word "derive" with "obtain." Added "in-situ" to description for Measurement in Field Collection Type and changed text "For Observations, enter a record only if" to "For Observations, use only if." Added section about Measurements and Samples and when to use "Mobile lab at data collector field site" under "Examples and Guidance" for Field Collection Type. Removed sentence "For water levels measured in meters, contact your EIM Data Coordinator" from Water Level Accuracy.	KC
11/21/2024	4.4	Added valid value "2x" to QC Blank Censor Factor. Added "Ergostanol" (6538-02-9) to list of CAS Numbers that reformat as dates in Excel.	CN
05/21/2025	4.5	EIM is no longer taking data for the following fields because we don't use them anymore: Storm Event Qualifier (W) and Digestion Method (AW). These fields are still in the template (for less disruption) but leave them blank. Removed "EIM automatically assigns time zone (PDT or PST) based on Field Collection End Date" as it's not yet implemented. Assume local time by date.	CN

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11/04/2025	4.6	Removed Grain Size and Percent Solids from Results that don't need a Result Basis. Updated Lab Analysis Date and Time descriptions to clarify that they should represent when a sample was analyzed, not when a lab produced the report. Added "Not required for measurements" for Reporting Limit and Detection Limit.	CN, KC
7/31/2026	5.0	Major updates for new Loader.	CN
8/20/2026	5.1	Removed "unknown" values from valid values.	CN