

Locus EIM Standard EDD SPECIFICATION EIM 53

As with all data types, EIM has standard EDD upload formats which are required for loading data into the database. Due to the nature and complexity of laboratory analytical data, Locus has developed a comprehensive EDD format that helps projects capture all required data from laboratory analysis. Additionally, Locus has developed a second EDD format to assist in collecting data in California that have special requirements for Geotracker.

EIM Standard 53

The format has the following characteristics:

- ♦ The file has to be an ASCI file with no header or footer and with each record alike with respect to format.
- ♦ Every analytical result is represented by a single record.
- ♦ No field should be enclosed in quotation marks.
- ♦ Every field must be separated by a semi-colon.
- ♦ The column titled VVL represents if a data field contains lookup valid values. These values are provided in the valid value section of Locus EIM.
- ♦ Each record (last record excluded) must be terminated with a carriage return.
- ♦ Required fields are in bold.



EIM 53 EDD Format

| Field | Field Name | Length | VVL | Field Contents |
|-------|---------------------|--------|-----|--|
| 1 | FIELD_SAMPLE_ID | C25 | No | Field Sample number or identifier. Must be left blank for lab-originated samples (e.g., lab control samples, method blanks, blank spikes, etc.). Should be populated for lab duplicates and matrix spikes and duplicates (if the sample that is spiked is the client sample). |
| 2 | LAB_ID | C10 | Yes | Code or identifier for a lab. Has list of values. |
| 3 | ANALYTICAL_METHOD | C30 | Yes | Analytical method used. Has list of values. |
| 4 | ANALYSIS_DATE | Date | No | Date of analysis, MM/DD/YYYY or DD-MON-YY |
| 5 | PARAMETER_CODE | C12 | Yes | Analyte CAS Number or other code (for those parameters that do not have a CAS Number). |
| 6 | RESULT_TYPE_CODE | C5 | Yes | Code identifying the type of result (Target, TOC, Surrogate, Spike, etc.). Has list of values. |
| 7 | LAB_RESULT | C10 | No | Analytical result (see also Field #53 BASIS). Required of all samples except surrogates and spikes. If not detected, enter the laboratory reporting limit here. If detected above the MDL and below the reporting limit, enter the result in this field and a "J" in Field #13. Some facilities may specify reporting only to the reporting limit and not to the MDL. For these cases, enter the laboratory reporting limit and a "U" flag in Field #13 if the result is below the laboratory reporting limit. |
| 8 | LAB_UNITS | C10 | Yes | Unit of measure of the result. Has list of values. Enter the units associated with the entry in the LAB_RESULT or SPIKED_RESULT column |
| 9 | LAB_REPORTING_LIMIT | C10 | No | Actual reporting limit realized by the lab, adjusted for preparation, dilution, etc. Required for all non-spiked samples. |
| 10 | LAB_MATRIX | C10 | Yes | Matrix of sample as analyzed by the lab. Has list of values. |
| 11 | LAB_SAMPLE_ID | C20 | No | Internal ID assigned by lab to a sample. |
| 12 | ANALYSIS_TIME | Time | No | Time of analysis (HH:MM), military time. |
| 13 | LAB_QUALIFIER | C10 | No | Laboratory qualifier. |



| Field | Field Name | Length | VVL | Field Contents |
|-------|-----------------------|--------|-----|--|
| 14 | RETENTION_TIME | Time | No | Retention time (MM:SS), required for TICS only. For others enter NA or leave blank. |
| 15 | DILUTION_FACTOR | C7 | No | Dilution factor if the sample was diluted. |
| 16 | PREP_METHOD | C20 | No | Preparation method (if applicable) |
| 17 | PREP_DATE | Date | No | Date of preparation MM/DD/YYYY (if applicable) |
| 18 | ANALYSIS_LOT_ID | C20 | No | Laboratory analysis batch number or ID. |
| 19 | PREP_AMOUNT | C10 | No | Amount of sample used in the preparation. |
| 20 | PREP_UNITS | C10 | No | Unit or measure of sample preparation amount. Has list of values. |
| 21 | PREP_AMT_BASIS | C5 | No | The basis of the weight of the amount of the sample prepared: W or D are the only valid values. |
| 22 | SAMPLE_DELIVERY_GROUP | C20 | No | Laboratory sample delivery group. |
| 23 | LAB_BLANK_SAMPLE_ID | C20 | No | ID of laboratory method blank that is associated with the sample identified in the FIELD_SAMPLE_ID and/or LAB_SAMPLE_ID fields. Can be left blank if only one method blank is run with a given prep or analysis lot, |
| 24 | ERROR | C10 | No | +/- 2-sigma error (pertains to radiological results only) |
| 25 | PARAMETER_NAME | C60 | No | Name of parameter. Any correct synonym is acceptable. |
| 26 | ANALYSIS_TYPE_CODE | C5 | Yes | Coded value specifying type of analysis (e.g., Initial, Reanalysis, Re-extraction, Dilution, etc.). Has list of values. |
| 27 | FILTERED_FLAG | C1 | Yes | Flag to identify whether sample was filtered or not. The only valid values are Y or N. |
| 28 | LEACHED_FLAG | C1 | Yes | Flag to identify whether sample was leached prior to being analyzed. The only valid values are Y and N. |
| 29 | LEACHATE_METHOD | C20 | No | Method used to leach a sample (if applicable) |
| 30 | LEACHATE_DATE | Date | No | Sample leachate date MM/DD/YYYY (if applicable) |
| 31 | LEACHATE_TIME | Time | No | Sample leachate time (if applicable) HH:MM, military time. |
| 32 | SAMPLE_PREP_LOT_ID | C20 | No | Laboratory prep lot number or ID (if applicable). |



| Field | Field Name | Length | VVL | Field Contents |
|-------|------------------------|--------|-----|--|
| 33 | LEACHATE_LOT_ID | C20 | No | Laboratory leachate lot number or ID (if applicable) |
| 34 | PREP_TIME | Time | No | Time of preparation HH:MM (if applicable). |
| 35 | METHOD_DETECTION_LIMIT | C10 | No | Method detection limit. |
| 36 | SAMPLE_DATE | Date | No | Date sample was created in the lab: MM/DD/YYYY, Should be left blank for field originated samples (see discussion below for SAMPLE_PURPOSE) |
| 37 | SAMPLE_PURPOSE | C5 | Yes | Coded value identifying purpose of the sample. Should be populated only for lab originated QC samples (e.g., Lab Control Samples, Lab Control Sample Duplicates, Blank Spikes, Blank Spike Duplicates, Method Blanks, Lab Duplicates or Replicates, etc.) or lab-transformed samples (e.g., Matrix Spikes and Duplicates). Has list of values. |
| 38 | ORIGINAL_LAB_RESULT | C10 | No | The concentration of the analyte in the original (unspiked) sample. Should be populated only for matrix spikes and duplicates. |
| 39 | SPIKE_ADDED | C10 | No | Amount of spike added to sample. Applicable only to spiked samples or surrogates. |
| 40 | SPIKED_RESULT | C10 | No | Concentration of the analyte in the spiked sample. Applicable only to spiked samples or surrogates. |
| 41 | SPIKE_RECOVERY | C10 | No | Percent recovery. Applicable only to spiked samples or surrogates. |
| 42 | RPD | C10 | No | Calculation of relative percent difference (applicable only to matrix spike duplicates, lab control sample duplicates, blank spike duplicates, and lab replicates or duplicates). |
| 43 | RPD_LIMIT | C10 | No | Upper limit for RPD (percent) (applicable only to matrix spike duplicates, lab control sample duplicates, blank spike duplicates, and lab replicates or duplicates). |
| 44 | UPPER_LIMIT | C10 | No | Upper spike recovery control limit (in percent). Applicable to surrogates or spiked samples only. |
| 45 | LOWER_LIMIT | C10 | No | Lower spike recovery control limit (in percent). Applicable to surrogates or spiked samples only. |
| 46 | LAB_ARRIVAL_DATE | Date | No | Date that the sample arrived at the lab (mm/dd/yyyy). Applicable to field samples only. |



| Field | Field Name | Length | VVL | Field Contents |
|-------|--------------------|--------|-----|---|
| 47 | LAB_ARRIVAL_TIME | Time | No | Time that the sample arrived at the lab (HH:MM). Applicable to field samples only. |
| 48 | HARD_COPY_DUE_DATE | Date | No | Hardcopy lab report due date. |
| 49 | RUSH_TAT | C1 | No | Specify if sample was submitted as "Rush" – valid values for this field are Y and N. |
| 50 | EDD_DUE_DATE | Date | No | Date (mm/dd/yyyy) the EDD (electronic data deliverable) is due. |
| 51 | SUBCONTRACT | C1 | No | Enter Y (Yes) if analysis was performed by a subcontractor lab. Otherwise, field can be left blank. |
| 52 | SUBCONTRACT_LAB_ID | C10 | Yes | Code or identifier for the subcontract lab. Has list of values. |
| 53 | BASIS | C3 | No | Basis for reporting the result. Has list of values. |

Notes:

- a. Fields in Bold Regular font are required for all records (e.g., LAB_ID).
- b. Fields in Italic font are required for various subsets of samples and/or analyses.
- c. Fields In Regular font are optional.

Have Questions? Contact Locus at info@locustec.com for more information and how to use this EIM EDD format with your selected analytical laboratory.