EIM Help – Composite Samples

Version 1.5
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Composite sampling is a technique whereby multiple temporally or spatially discrete media or tissue[+] samples are combined, thoroughly homogenized, and treated as a single sample. Composite sampling can improve spatial or temporal coverage of an area without increasing sample number. Appropriateness of composite sampling is dependent upon the sampling objectives and the site characteristics.

*[+]**For tissue data,** download help for Aquatic Vertebrate and Shellfish Tissue Data, which governs tissue data entry, including tissue composite samples.*

How to enter Location information for composite samples

Spatial composite

For a composite sample consisting of multiple samples taken from different locations throughout a site and combined together for analysis, create one location in EIM which represents that composite sample.

The coordinates for the location should be the "centroid" of the individual sampling points which comprise the composite sample.

The Location Description should explain that the location represents the centroid of the composite sampling locations and where the samples were generally located.

Location ID (A)	Location Name (B)	Location Description (D)	Horizontal Coordinates Represent (AC)
VCNW0001_SS-1	VCNW0001 Speedy Gas Station_SS-1	Centroid of sampling locations for Soil Sample 1 composite sample. Located on North Side of Gas Station.	25 (centroid of monitoring area)

Temporal composite

For a composite sample of individual samples taken at the same location, but spaced by sampling time, create one location in EIM to represent that sampling point. Fill out the following fields accordingly:

Location ID (A)	Location Name (B)	Location Description (D)	Horizontal Coordinates Represent (AC)
VCNW0001_WA-1	VCNW0001 Speedy Gas Station_WA-1	Northwest end of dock on Lake Potter	24 (discrete monitoring point)

How to enter result data for composite samples

Field Collection Start Date (Column F) & **Field Collection End Date** (Column H): Field Collection Start Date is always required. Field Collection End Date can be used for composites that are taken over more than one day.

Field Collection Start Time (Column G) & **Field Collection End** Time (Column I): Field Collection Start and End Time should be entered if appropriate.

Field Collection Comment (Column J): Include any information which explains what the composite sample represents including how many samples comprise the composite and what time they were taken, if appropriate.

Field Collection Area (Column K): Enter the approximate size of the geographical area in which the composite samples were taken (e.g. 200).

Field Collection Area Units (Column L): Units of measure associated with your defined Field Collection Area (e.g. ft2).

Field Collection Upper and Lower Depth, Units, and Field Collection Reference Point (Columns M - P): If you are compositing samples across a depth profile, such as water column or sediment core samples, download help for "Field Collection Depth or Height" for instructions on populating these four fields.

Sample Composite Flag (Column V): Each result in the composite sample should be marked with a composite flag "Y."

Sample Collection Method (optional, Column AA): Search for EIM Method valid values online. Need a method added to EIM? Contact us online or ask your Data Coordinator.

Sample Preparation Method (optional, Column AB): Search for EIM Method valid values online. Need a method added to EIM? Contact us online or ask your Data Coordinator.

Document revision history

Revision Date	Revision No.	Summary of Changes	Reviser(s)
12/23/09	1.0	Original Document	CN, KC, CL
6/13/11	1.1	Updates to reflect changes to location spreadsheet	CN
8/1/13	1.2	Updated references to spreadsheet column headings per data model change	CN
09/13/17	1.3	Updated links and moved to new format with accessibility features.	KC, CN
03/08/18	1.4	Added two preparation method examples, which were previously listed as collection methods.	KC
07/19/18	1.5	Removed tables of examples from Sample Collection and Preparation Method	KC