

Method for Sample Login, Control, and Disposition

1. Introduction

This document describes how to submit samples to the Energy Geochemistry Lab (EGL) for analysis and the procedures followed for tracking and disposition.

2. Interfaces with Other Methods

Most other methods in the EGL rely on this procedure.

3. Materials and Equipment

- a. Samples to be submitted.
- b. Login form for electronic data entry to the LIMS (Laboratory Management Information System), available from the EGL web page at, <http://energy.usgs.gov/GeochemistryGeophysics/GeochemistryLaboratories/GeochemistryLaboratoriesLIMS.aspx>.

4. Procedure

Potential submitters are encouraged to send email queries about sample requirements for any given procedure. Those requirements, now available on charts, are posted on the EGL web page, along with other submittal info.

<http://energy.usgs.gov/GeochemistryGeophysics/GeochemistryLaboratories/GeochemistryLaboratoriesLIMS.aspx>

Submitters indicate their intent to have samples delivered in upcoming days by brief email notification to Login (EnergyLabs@usgs.gov) including information about anticipated arrival time and conveyance method for the physical samples being sent. A digital log-in form (*spreadsheet template*) is also available on the referred site.

The form requests routine information, some of which is mandatory, such as sample identification, desired analyses or tests as well as the origin and physical state of the material. Once the form has been completed and approved by the LIMS Coordinator, the submitter should then arrange appropriate shipment for the samples. An accurate packing list accompanying the samples is required.

On receipt, samples are given a careful check to ensure a one-to-one match exists between the sample labels and the entries included with the Login spreadsheet. Exact matches receive priority processing into the system while mismatches between sample labels and log-in entries must be completely resolved between the requestor and either login personnel or the LIMS Coordinator before analytical work begins. Once the Sample Coordinator and the LIMS Coordinator agree that requirements have been met then the samples are entered into LIMS and scheduled for analytical

work. Appropriate in-house sample labels are then applied and the sample set is routed to a temporary storage location at the EGL until an analyst takes possession. Submitters are notified electronically by the LIMS Coordinator regarding the successful admission to the system and potential analysts are notified through an entry made to the 'backlog' file.

LIMS generates a pdf formatted report that is e-mailed to the submitter after jobs are complete. The submitter is given 120 calendar days to review the analytical results before any unused sample portions may be returned. Those wishing return of unused sample portions should indicate this on the Login form. On the expiration of the 120-day interval all samples are either returned as requested or handled in accordance with policies stipulated in the U.S. Geological Survey Manual (U.S. Geological Survey, 2009: "*Physical Samples*" section).

5. Calibration and Quality Control Samples

None.

6. Limits, Precautions, and Interferences

In accordance with the EGA QA Manual, customers are expected to notify the Sample Coordinator of any hazardous or unusual sample characteristics of matrices, and of unusual analyte concentrations, if known.

7. Acceptance of Data

Data, as it pertains to this method, derives exclusively from submitters. A cross check of the submitter's info [comparisons of physical info with digital counterparts] is limited to that which submitters provide.

8. Data Handling and Transfer

Login form copies and any miscellaneous papers pertaining to a job are curated in month-dated folders in a file cabinet in Room 1111, south end Bldg. 20. Physical samples, when not actively undergoing analytical procedures, are also stored in this room. Organic section samples are stored separately.

Inorganic section analysts follow a check-out and check-in procedure when removing or returning sample sets from/to Room 1111. A log book dedicated to that purpose serves to quickly locate active jobs without a computer. All samples not being actively analyzed or not planned for analysis in the near term should be returned to the 'incoming' shelf.

The Organic section maintains independent procedures for sample handling and transfer.

9. References

U.S. Geological Survey, 2009, Geology Discipline Research Records Schedule 432-1-S5: U.S. Geological Survey Manual, accessed Oct 2013 at <http://www.usgs.gov/usgs-manual/schedule/432-1-s5/gd.html#samp>

10. Attachments

None

11. History of Changes

R0: Initial Issue