

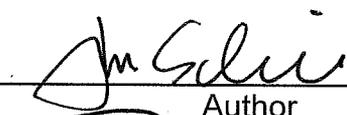
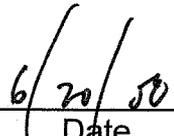
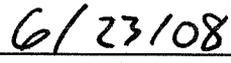
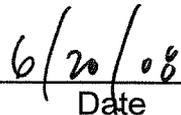
CHESTER LabNet

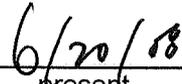
12242 SW Garden Place ❖ Tigard, OR 97223-8246 ❖ USA
Telephone 503-624-2183 ❖ Fax 503-624-2653 ❖ www.chesterlab.net

Standard Operating Procedure
AD-008.05

SAMPLE RECEIPT AND LOG IN
CHESTER LABNET PROPRIETARY METHOD

Approvals:

 _____ Author	 _____ Date
 _____ Lead Project Manager	 _____ Date
 _____ QA/QC	 _____ Date

Effective from: 
Effective until: present

SAMPLE RECEIPT AND LOG IN CHESTER LABNET PROPRIETARY METHOD

1.0 Introduction

- 1.1 This method is a Chester LabNet proprietary method.
- 1.2 This method is applicable to all matrices of samples received by Chester LabNet.
- 1.3 There is no detection limit associated with this, or any, administrative Standard Operating Procedure.
- 1.4 Method Performance: There is no validation data associated with this, or any, administrative Standard Operating Procedure.

2.0 Summary

- 2.1 Scope and Application: This method is applicable to all samples received by Chester LabNet.
- 2.2 Summary of Method: Samples are received and the sample container and sample integrity are inspected. Chain of Custody forms are checked against shipment contents and signed with the date and time noted on the form. Anomalies are communicated to the client and corrective actions carried out. An analysis request form is filled out and unique laboratory identification numbers are assigned to each sample by the laboratory information management system (LIMS). A worklist for the analysts is prepared and a project file is created which contains all pertinent documents relating to the sample batch. Samples are transferred to the appropriate analyst for preparation or appropriate storage location until analysis can begin.
- 2.3 Interferences: N/A

2.4 Sample collection/preservation/shipment/storage: Collection, field preservation and shipment of samples is performed by the client. Chester LabNet has no control over the actions of the client in the field. Upon receipt, samples should be stored appropriately, based upon analytical method requirements.

3.0 Safety

3.1 The Chester LabNet Chemical Hygiene plan should be followed. Samples of unknown origin and/or constitution should always be treated as hazardous.

3.2 This method presents no safety risk beyond typical laboratory safety hazards.

3.3 No carcinogenic reagents are used in this method.

4.0 Pollution Prevention and Waste Management

4.1 No chemicals are used in this administrative Standard Operating Procedure.

4.2 Blue ice received from clients is returned to clients. Dry ice and "wet" ice is disposed of in the sanitary sewer system.

4.3 Paper waste generated during the log-in process is recycled. "Scratch" paper is utilized for printing where the printout is not considered critical.

5.0 Apparati, Equipment and Supplies

5.1 Laboratory Information Management System (LIMS)

5.2 Analysis request forms

5.3 Sample log in forms

5.4 Job file folders (manila folders)

5.5 Thermometer

6.0 Reagents and Standards

6.1 N/A

7.0 Preparation, Calibration and Standardization

7.1 N/A

8.0 Procedure

8.1 Determine if samples are to be accepted or rejected:

8.1.1 All samples are to be accepted unless they are rejected per the following section of this SOP.

8.1.2 Samples are to be rejected, and the client immediately notified by phone if:

8.1.2.1 The samples are obviously not intended for Chester LabNet (e.g. PUFs, Tedlar bags, summa canisters, etc.)

8.1.2.2 The laboratory is incapable of performing the analysis due to the condition of the sample (broken sample container, inappropriate sample matrix such as glass fiber filters for OC/EC analysis, XRF samples with large holes in them, etc.)

8.1.2.3 The client asks the laboratory to not analyze the sample (e.g. "void" samples)

8.1.2.4 Note that for internal documentation reasons, the sample may be logged into the LIMS, however, no analysis will be requested.

8.2 Examine the Verified Time of Sample Receipt (VTSR) and sampling date.

8.3 Examine the shipping container for the presence of custody seals. If custody seals are present, examine the integrity of each seal. Note the presence/absence of custody seals and seal condition on the CoC provided with the samples.

8.4 If requested by the client, retain the bill of lading (air bill) if attached to the exterior of the shipping container.

8.5 Open the shipping container and note the presence/absence of the following items:

- 8.5.1 Bottle for monitoring transit temperature
- 8.5.2 Chain of custody (CoC) form
- 8.5.3 Client sample analysis request (often part of the CoC form)
- 8.5.4 Ice (Blue ice, dry ice or "wet" ice)

8.6 If present, immediately take the temperature of the fluid in the transit temperature bottle. Do not remove the bottle from the shipping container. Note the temperature on the CoC form provided with the samples.

8.7 If a temperature bottle is supposed to be present, but is not in the shipping container, place the thermometer into the cooler so that the bulb is at the same level as the samples. Close the cooler lid as far as practical, wait two minutes, then quickly remove the thermometer and read the temperature.

8.8 Remove the sample containers and examine for breakage or leakage. Note any problems on the CoC form. Compare the sample ID number and tag number (if present) with those listed on the CoC form. Note any discrepancies on the CoC form. In case of discrepancies, notify the client contact and proceed with any agreed upon corrective actions.

8.9 For stack testing methods only, complete the Source Sample Receipt Checklist

8.10 For projects requiring a written record that the pertinent steps in the sample receipt process have been followed, a preprinted checklist will be filled out during the sample receipt.

8.10.1 Each step in the procedure will be checked off on the list immediately after that particular step has been accomplished.

8.10.2 Included on the checklist will be the client and project names, date and time of sample receipt, chain of custody form ID number, number and type of samples, and the name and signature of the person receiving the samples.

8.10.3 The signed original checklist is placed in the job file folder and included in the data package sent to the client.

8.11 Sign and date the CoC form. If the samples are from an existing client, proceed to section 8.13

8.12 If the samples are from a new client, initiate the job in the accounting software:

8.12.1 Assign a new client/job identification number in the format X000, where X is the first letter of the client's business name (e.g., C for Chester LabNet), and 000 are ascending numbers to differentiate clients with the same letter (e.g., if Chester LabNet were C001, Crucial Analytical Services would be C002 or some other number).

8.12.2 For all samples, enter the client name, invoicing address, ship to address, contact name and appropriate phone numbers into the accounting software.

8.12.3 Retrieve next report number from the Report Log clipboard. Record the client name, number and brief description of analysis requested on the Report Log.

8.13 Fill out an Analysis Request form, including the following:

8.13.1 Client name and client/job ID number

8.13.2 Date samples received

8.13.3 Date results are due to the client, if different from standard turn around time

8.13.4 Report number

8.13.5 Number of samples

8.13.6 Analytes and costs

8.13.7 Purchase order or Project Number

8.14 Log samples into the LIMS as described in Standard Operating Procedure AD-007, Laboratory Informational Management System (LIMS)

8.15 Write the LIMS generated laboratory ID numbers on the analysis request form. Place the completed form in the analysis request book.

8.16 Using the LIMS, print out sample labels and affix to their corresponding samples. For all samples except filters tare weighed by Chester LabNet, each label will contain the following

information:

- 8.16.1 Client sample number
- 8.16.2 LIMS generated laboratory sample ID
- 8.16.3 Client/job ID number
- 8.16.4 Report number

(Filters tare weighed by Chester LabNet will have been labeled prior to being shipped to the client, and are not relabeled after receipt back from the field.)

- 8.17 Using the LIMS, print out the Analyst Worklist(s), and place in the appropriate worklist folder in the lab. Note that for XRF, analysis run sheets are used in lieu of worklists. The XRF run sheets contain 15 sample IDs or less (usually 10) and the corresponding deposit mass and area. Samples that require gravimetry prior to other analyses will have all worklists and run sheets with them until the gravimetric process is complete. Only after confirmation that all samples were weighed and passed QC, will the worklists be placed in appropriate folders for further analysis.
- 8.18 Transfer the samples to the appropriate area (e.g., weighroom for equilibration, refrigerator/freezer or sample staging area in the lab)
- 8.19 Prepare a job file folder, labeling the folder with the client name and ID number and the report number. Place the completed chain of custody form and all other pertinent documents (e.g., air bills, telephone contact sheets etc) in the folder. Place the folder in the work-in-progress queue.
- 8.20 Fill in a line on the Samples in Progress Whiteboard. Include the client ID, analysis requested, and due date. If unusual client requests are made, notify the analyst in person of these departures from normal analytical processes.

9.0 QA/QC

9.1 Sample Receipt Checklist.

- 9.1.1 Frequency: once per sample receipt batch requiring a checklist
- 9.1.2 QC statistic: completed checklist

- 9.1.3 Corrective action: contact client for any discrepancies or errors. Note corrective actions at the bottom of the checklist.

10.0 Calculations

10.1 N/A

11.0 References

- 11.1 U.S. EPA. 1978 (revised 1983). National Enforcement Investigation Center (NEIC) Policies and Procedures. U.S. Environmental Protection Agency, Office of Legal and Enforcement Counsel, Denver, CO.
- 11.2 U.S. EPA. 1979. Handbook for Analytical Quality Control in Water and Wastewater Laboratories. EPA-600/4-79-019. U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, OH.

12.0 Definitions

- 12.1 Corrective Action: the action taken to address and/or eliminate where possible the causes of a nonconformity, such as exceeding a control limit. Actions may include reanalyzing a sample, or noting the non-conformance in the data report.
- 12.2 Frequency: The number of occurrences of a specified event within a given interval. The number of samples or analytical runs with which a given QC sample or metric must be analyzed or verified.
- 12.3 Holding Time: the maximum times that samples may be held prior to analysis while still being considered valid or non-compromised.
- 12.4 Laboratory Information Management System (LIMS): a comprehensive computerized database system that a laboratory uses for sample tracking and data management, from sample receipt to reporting and archiving.
- 12.5 QC Statistic: any of a number of statistical permutations performed on raw data to generate a metric capable of being subjected to control limits and corrective actions.
- 12.6 Reagent: a single chemical or combination of chemicals or a chemical solution used in the preparation or analysis of samples.

13.0 Analysts' Notes

13.1 N/A

Laboratory Analysis Request Form

Client: _____
 Number of samples: _____
 Date Received: _____
 Sample Type: _____

Project Number: _____
 Report Number: _____
 Date Due: _____

LabNet ID's:

Gravimetry

#	Test	Price
	Gross Weight	

XRF

#	Protocol	Price

Carbon Analysis

#	Test	Price	Worklist #
	OC/EC		

Specialty Tests

#	Test	Price
	Resuspension	
	HF Digestion	
	Extraction	

Conventional Analysis

#	Test	Price	Worklist #	Analytes
	GFAA			
	ICP			
	IC Anions			
	IC Cations			
	CVAA			Hg
	UV-VIS			Cr VI

Notes:

Total Price per Sample: \$ _____
 Purchase Order No: _____

Invoice Date: _____
 Invoice # _____

Figure 1. Example Analysis Request Form

ICP Worklist Number: 9749 Date Requested: 11/ 6/02
 Client: A005 (Client Name)
 Report #: 02-270

Lab ID	Analyte	Results in ug/L	Expected	% Recovery
1. kv:ICV	Pb	_____	_____	_____
2. bl:ICB	Pb	_____		
3. bl:Prep_Blk	Pb	_____		
4. bl:Meth_Blk	Pb	_____		
5. Spike of _____	Pb	_____	Spk Amount	Spike Rec.
6. 02-T11920 0211055A/B-01	Pb	_____		
7. Dup of _____	Pb	_____	Difference	RPD
8. 02-T11932 0211055A/B-03	Pb	_____		
9. Spike of _____	Pb	_____	Spk Amount	Spike Rec.
10. 02-T11935 0211010-07A	Pb	_____		
11. 02-T11936 0211055A/B-05	Pb	_____		
12. 02-T11942 0211010-05A	Pb	_____		
13. 02-T11943 0210726-05A	Pb	_____		
14. kv:CCV	Pb	_____	Expected	% Recovery
15. bl:CCB	Pb	_____		

Figure 2. Example Analyst Worklist

**CHESTER LABNET
SAMPLE RECEIPT CHECKLIST**

Client Rocky Mountain Arsenal Date _____
 SDG _____ Time _____
 # Samples _____ Matrix _____
 Chain of Custody Form Number(s) _____

- Custody Seals Inspected, If Present
- Transit Temperature Bottle Inspected, If Present
 Temperature Taken
- Chain-of-Custody Form Inspected
 Has Form Been Signed?
 Have Date and Time Custody Released Been Noted on Form?
 Condition of Custody Seals Noted
 Transit Temperature Noted
- All Sample Containers Inspected
 Does Number of Samples Match Number on COC Form?
 Do All Sample ID Numbers Match Those on the COC Form?
 Are the Sample Containers Intact?
- Chain-of-Custody Form Signed and Dated
- Corrective Actions
 Client Contacted Due to Mismatching Sample ID Numbers
 Client Contacted Due to Broken Sample Container(s)
 Client Contacted Due to Leaking Sample Container(s)
 Corrective Actions Documented on Phone Contact Sheet
 Corrective Actions Accomplished
 Phone Contact Sheet Placed in Job File Folder

Signed _____

Notes _____

Figure 3. Example Sample Receipt Checklist

CHESTER LABNET
SOURCE SAMPLE RECEIPT CHECKLIST

Client _____ Date _____
Runs _____ Time _____

Custody Seals Inspected, If Present

Chain-of-Custody Form Inspected

CoC present with samples? *

CoC indicate analytical methodology to be used? (eg M29 etc) !!

CoC indicate if compliance testing? (esp. M26) !!

M26 samples have Thiosulfate added in field? !!

M29 indicate FH/BH separate or combined? !!

Has Form Been Signed?

Have Date and Time Custody Released Been Noted on Form?

All Sample Containers Inspected

Does Number of Samples Match Number on CoC Form? !!

Do All Sample ID Numbers Match Those on the CoC Form? !!

Did client mark sample volumes prior to shipment? *

If required by method, did client vent samples prior to shipment?

Are the Sample Containers Intact? !!

Are signs of leakage present? *

Chain-of-Custody Form Signed and Dated by CLN

Corrective Actions

Client Contacted Due to Mismatching Sample ID Numbers

Client Contacted Due to Broken Sample Container(s)

Client Contacted Due to Leaking Sample Container(s)

Client contacted for verification of methodology?

Corrective Actions Documented?

Corrective Actions Accomplished?

Items marked !! shall be addressed prior to any analytical work being started.
*Items marked * shall be noted in case narrative upon reporting of results to client.*

Signed _____

Notes _____

Figure 4. Example Source Sample Receipt Checklist

XRF Analysis Request Form

Date of Request: _____
 Date Results Required: _____
 Client Name: _____
 Run Number: _____
 Protocol: _____
 Sample Description: _____
 Total # of Samples: _____
 Report Number: _____
 Date Data Processed: _____
 Date Worklist Released: _____
 Comments: _____

Initial/Date: _____
 Load: _____
 Ag Collimator: _____
 Ta collimator: _____
 Resume: _____
 QA: _____
 Unload: _____

	a	b
Cond	Date/Time	Date/Time

Pos.	LIMS ID	S	Deposit Area	Mass	Client ID	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16	<i>QS001</i>					

Figure 5. Example XRF Run Sheet