

START 9713512.2535

E0019

0046106

File written on Wednesday, June 05, 1996 at 10:50

Sample #	SAF#	Assigned To	Matrix
GE14RMO1A	B0HGC2	B96-119	Doris Ayres Water
GE14RMO1B	B0HGC3	B96-119	Doris Ayres Water
GE14RMO1C	B0HGC4	B96-119	Doris Ayres Water

Samples changed as noted. Assign a SAF number of B96-119. SDR in process to document these changes.  
 D Ayres  
 6-7-96



971351...2536

ERC FIELD SCREENING/EAL  
DATA PACKAGE TRANSMITTAL FORM

Transmittal Date: 5/16/95

To: Sample Management  
(organization)

From: EAL  
(organization)

Delivery Group Number:

Data Package Contents:

Data package for EAL sample batch 960514A



Transmitted by:

Paul E Duerkson  
PAUL E DUERKSEN 5/16/96

Sign/Print Name

Date

Received by:

Sign/Print Name

Date

CC:

971351.2537

May 15, 1996

000001

TO: Rick McCain, H9-10

**INTRODUCTION:**

We received the following samples on May 14, 1996. Your samples were assigned the following EAL numbers.

<u>Customer Sample Number</u>	<u>EAL Number</u>	<u>Matrix Type</u>
GE14RM01A	EAL02515	water
GE14RM01B	EAL02516	water
GE14RM01C	EAL02517	water



The samples were also assigned a batch number of 960514A. There was not a corresponding Sampling Analysis Form (SAF) number. Per your request, one sample was analyzed for anions and cations.

**NOTABLE EVENTS:**

There are several notable events, which should be discussed.

1. The anion ion chromatograph was calibrated several times on May 14, 1996. However, due to temperature fluctuations in the laboratory, chloride was consistently out of calibration. The chloride result is shown on the attached excel spreadsheet with an asterisk. This indicates that this concentration is an estimation because of chloride being out of calibration.
2. Nitrate was present in concentrations above the detection limit, but below the lowest calibration level. As a result, this concentration is indicated as a less than value.
3. An unknown peak is co-eluting with fluoride; thus causing a potential interference. Another unknown peak was detected between nitrate and phosphate.
4. For QC purposes, your sample was batched with 100-NR-2 samples EAL02508-EAL02510, EAL02513 and EAL02514.
5. There were no significant events for the cation analysis.

**RESULTS:**

A summary of results and associated quality control parameters is shown on spreadsheets included in this data package. All samples were analyzed in accordance with approved analytical methods and good laboratory practice. Please contact Stacey Bolling at 373-5433, if you have any questions.

Stacey D. Bolling  
Signature of Analyst

5/15/96  
Date

Paul E. Wuerke  
Signature of QA Coordinator

5/16/96  
Date

EAL  
 BATCH # 960514A  
 SAMPLE RESULTS

ANALYST SIGNATURE: *Shirley O. Bell*

CUSTOMER ID OR HEIS NUMBER	LABORATORY ID	ANALYTE	RESULT	UNITS	DATE PREPARED	INSTRUMENT SERIAL NUMBER	DATE ANALYZED	QUANTITATION LIMIT
GE14RMO1A	EAL02515	Fluoride	10.8	ug/mL	5/14/96	14693	5/15./96	0.030
GE14RMO1A	EAL02515	Chloride	55.3*	ug/mL	5/14/96	14693	5/15./96	0.021
GE14RMO1A	EAL02515	Nitrate-Nitrogen	<3.4*	ug/mL	5/14/96	14693	5/15./96	0.006
GE14RMO1A	EAL02515	Phosphate-Phosphorus	89.7	ug/mL	5/14/96	14693	5/15./96	0.020
GE14RMO1A	EAL02515	Sulfate	349	ug/mL	5/14/96	14693	5/15./96	0.039
GE14RMO1A	EAL02515	Sodium	2100	ug/mL	5/14/96	14692	5/15./96	0.288
GE14RMO1A	EAL02515	Potassium	103	ug/mL	5/14/96	14692	5/15./96	0.159
GE14RMO1A	EAL02515	Magnesium	45.8	ug/mL	5/14/96	14692	5/15./96	0.066
GE14RMO1A	EAL02515	Calcium	180	ug/mL	5/14/96	14692	5/15./96	0.510

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\*Please refer to narrative  
 U = analyte was not detected above the associated quantitation limit

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GENERAL VALIDATION CHECKLIST

BATCH NUMBER (from Sample Logbook): 960514A

SAMPLE NUMBERS: EA02515 ANALYTES REQUESTED: Anions, Cations

VALIDATOR: PAUL E DUERKSEN SIGNATURE: Paul E Duerksen DATE: 5/16/96

Requested analytes were performed	<u>Yes</u>	No
Chain-of-custody forms are complete	<u>Yes</u>	Not Available
Anomaly reports are complete and signed	Yes	<u>None</u>
Organic peer review checklist is complete	Yes	<u>Not Required</u>
Inorganic peer review checklist is complete	<u>Yes</u>	Not Required
Radiochemical peer review checklist is complete	Yes	<u>Not Required</u>
Spreadsheets (for Results and QC) are in proper format and have been signed	<u>Yes</u>	No
HEIS numbers have been included	Yes	Not Required
Client sample identification has been included	<u>Yes</u>	Not Required
EAL sample numbers have been included	<u>Yes</u>	No
SAF has been included	Yes	<u>No</u>
Narrative has been included and signed	<u>Yes</u>	No

NOTE: minimal QC at request of client  
PSW

9713512.2541

INORGANIC PEER REVIEW CHECKLIST

000005

SAMPLE #: EAL0258/15 DATE SAMPLED: 5/14/96 DATE ANALYZED: 5/15/96

PEER REVIEWER: John McCluskey SIGNATURE: [Signature] DATE: 05/15/96

IC Anions and/or Cations

Water samples for sulfate and/or nitrate were refrigerated to 4°C	<input checked="" type="radio"/> Yes	NA
Holding time requirement was met: 48 hours from date sampled for nitrate; 28 days for other ions	<input checked="" type="radio"/> Yes	No
Date of multi-point calibration	<u>05/15/96</u>	<u>05/14/96</u>
The calibration check standard met acceptance criteria for each ion reported	Yes	<input checked="" type="radio"/> No
The response for each ion reported in each sample was less than the response for that ion in the highest calibration standard	<input checked="" type="radio"/> Yes	No
Spike recovery and RPD calculations are correct, and the values were reported on the QC spreadsheet	<input checked="" type="radio"/> Yes	No
Spike recovery met acceptance criteria for each ion reported	<input checked="" type="radio"/> Yes	No
The reagent blank was analyzed and reported on the QC spreadsheet	<input checked="" type="radio"/> Yes	No
Conversion to soil concentration was correct	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> NA

(Cl) was

JMM

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Batch 960514A

Page \_\_\_\_ of \_\_\_\_

Data Turnaround  
 Priority  
 Normal

Collector <i>R.G. McCain</i>	Company Contact <i>R.G. McCain</i>	Telephone No. <i>372-9593</i>
Project Designation <i>SE-125 Tank</i>	Sampling Location <i>BC-5 Pump &amp; Treat Site</i>	SAF No. <i>TCPN = W2513</i>
Ice Chest No.	Field Logbook No. <i>GE14RMO1.DOC</i>	Method of Shipment
Shipped To <i>EAL</i>	Offsite Property No.	Bill of Lading/Air Bill No.
Possible Sample Hazards/Remarks	Preservative <i>none</i>	
	Type of Container <i>VOA</i>	
	No. of Container(s) <i>1</i>	
Special Handling and/or Storage	Volume <i>40ml anions cations</i>	

## SAMPLE ANALYSIS

Sample No.	Matrix	Date Sampled	Time Sampled						
<i>GE14RMO1A</i>	<i>water</i>	<i>5/14/96</i>	<i>11:21 am</i>	<i>L</i>	<i>EAL</i>	<i>02515</i>			
<i>GE14RMO1B</i>	<i>water (filtered)</i>	<i>5/14/96</i>	<i>11:21 am</i>	<i>L</i>	<i>EAL</i>	<i>02516</i>			
<i>GE14RMO1C</i>	<i>water (filtered)</i>	<i>5/14/96</i>	<i>11:21 am</i>	<i>L</i>	<i>EAL</i>	<i>02517</i>			

	Sign/Print Names	Special Instructions	
Relinquished By <i>[Signature]</i> Date/Time <i>5/14/96 12:15</i>	Received By <i>[Signature]</i> Date/Time <i>5/14/96 12:15</i>	<p><i>3 samples from rainwater in SE-125 Tank</i></p> <p><i>pH ≈ 10</i></p> <p><i>cond ≈ 7.5 mS/cm @ 22.5 °C</i></p> <p><i>Anions &amp; Cations by Ion Chrom</i></p> <p><i>from GE14RMO1B, hold others.</i></p>	<p style="text-align: center;">Matrix</p> <p>S = Soil</p> <p>SE = Sediment</p> <p>SO = Solid</p> <p>SL = Sludge</p> <p>W = Water</p> <p>O = Oil</p> <p>A = Air</p> <p>DS = Drum Solids</p> <p>DL = Drum Liquids</p> <p>T = Tissue</p> <p>WI = Wipe</p> <p>L = Liquid</p> <p>V = Vegetation</p> <p>X = Other</p>
Relinquished By	Received By		
Relinquished By	Received By		
Relinquished By	Received By		

Received By	Title	Date/Time
Disposal Method	Disposed By	Date/Time

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**ERC LABORATORY MANAGEMENT  
SAMPLING AUTHORIZATION FORM**

SAF Number: B96-119

Rev: 0

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Program Type CERCLA

Project ID 100-BC-5 TS

Project Type TS

Operable Unit 100-BC-5

Task ID 1

Round Number 0

SAF Title 100-BC-5 Tank SE-125 Sampling

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Task Manager

Requester

Charge Codes-

Sample Management Function Project Coordinator

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Estimated Start Date

Estimated Completion Date

SampleArea 100 Areas

Estimated Number of Samples 3

Sampling Organizations

Data Turnaround Requirements

Matrix Water

Data Deliverable Requirements

Laboratory Primary: EAL

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Date 06/05/96

SAFStatus: Draft

6/5/96 9:15:00 AM

## ERC Laboratory Management

## Field Sampling Requirements

## Laboratory Analysis

Laboratory: EALMatrix: Water

Parameter / Analysis	Reference Method	Container / Volume	VolReq	Preservation	Holding Time
VOA - 8260A (TCL)	EPA8240A	Gs* 40 ml	Full QC	Cool 4C	14 Days
IC Anions - 300.0	EPA300.0		Full QC		28 Days/48 Hours
Cations (IC) - 300.7	EPA300.7		Full QC		28 Days

## Key to Container Types

G - Glass	aG - Amber Glass
Gs - Glass w/ septum cap	aGs - Amber Glass w/ septum cap
Gs* - Glass w/septum cap- no head space in container	aGs* - Amber Glass w/septum cap- no head space in container
P - Plastic (Polyethylene)	

FSR Comment:

SAF Number: B96-119

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SAF Status: Draft

6/5/96 9:15:00 AM

BHI-EE-001 (12/94)