

START

EAL-0394
Data Package Transmittal

E0025-EAL

0045575

Date: 6-25-96

to: Sample Management

From: EAL

Data Package for Sample Batch



Transmitted by:

Diane H. Call



June 21, 1996

To: Jim Green, H9-10

INTRODUCTION:

The following samples were submitted for analysis of Total chromium by ICP on May 8, 1996. Your sample numbers were assigned the following EAL numbers:

<u>Customer Sample Number</u>	<u>EAL Number</u>	<u>Matrix Type</u>
B0HDB1	EAL02489	water
B0HDD3	EAL02490	water
B0HDF0	EAL02491	water
B0HDF2	EAL02492	water
B0HDG2	EAL02493	water
B0HDG3	EAL02494	water
B0HDC2	EAL02495	water
B0HDH0	EAL02496	water
B0HDH1	EAL02497	water
B0HDH2	EAL02498	water
B0HDH3	EAL02499	water
B0HDH4	EAL02500	water
B0HDH7	EAL02501	water
B0HDH9	EAL02502	water
B0HDJ1	EAL02503	water



The samples were also assigned a batch number of 960508A. The corresponding Sampling Analysis Form (SAF) number was SAF B96-104. EAL analyzed the samples in support of the Ion Exchange Batch Equilibrium Tests.

(The following HEIS numbers had previously been assigned other EAL numbers: B0HDB1, B0HDF0, B0HDF2, B0HDG3, B0HDC2, B0HDH2 and B0HDH4. When this batch was received, they were presented as new samples and were thus logged in by the receiving analyst.)

NOTABLE EVENTS:

There were no significant events encountered during the analysis.

RESULTS:

A summary of results and associated quality control parameters is included on spreadsheets included in this data package. All samples were analyzed in

accordance with approved analytical methods and good laboratory practice.
Please contact John McCluskey at 372-0642 if you have any questions.

John McCluskey 06/25/96
Signature of Analyst Date

Diane H. Call 6-25-96
Signature of QA Coordinator Date
Acting

Environmental Analytical Laboratory

ICP Results

Batch # 960508A

Analyst: John McCluskey

Sample Results for Jim Green and Rick Kerkow:

CUSTOMER ID OR HEIS NUMBER	LABORATORY ID	ANALYTE	RESULT	UNITS	DATE PREPARED	INSTRUMENT SERIAL NUMBER	DATE ANALYZED	QUANTITATION LIMIT
B0HDB1	EAL02489	Cr (total)	68	ug/L	04/18/96	1545	06/05/96	3.1
B0HDD3	EAL02490	Cr (total)	74	ug/L	04/18/96	1545	06/05/96	3.1
B0HDF0	EAL02491	Cr (total)	31	ug/L	04/18/96	1545	06/05/96	3.1
B0HDF2	EAL02492	Cr (total)	38	ug/L	04/18/96	1545	06/05/96	3.1
B0HDG2	EAL02493	Cr (total)	71	ug/L	04/24/96	1545	06/05/96	3.1
B0HDG3	EAL02494	Cr (total)	43	ug/L	04/24/96	1545	06/05/96	3.1
B0HDC2	EAL02495	Cr (total)	97	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH0	EAL02496	Cr (total)	32	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH1	EAL02497	Cr (total)	72	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH2	EAL02498	Cr (total)	87	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH3	EAL02499	Cr (total)	48	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH4	EAL02500	Cr (total)	6	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH7	EAL02501	Cr (total)	58	ug/L	04/25/96	1545	06/05/96	3.1
B0HDH9	EAL02502	Cr (total)	66	ug/L	04/25/96	1545	06/05/96	3.1
B0HDJ1	EAL02503	Cr (total)	83	ug/L	04/25/96	1545	06/05/96	3.1

U = Not above the associated Quantitation Limit

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Environmental Analytical Laboratory

ICP Results

Batch # 960508A

Quality Control Results for Jim Green and Rick Kerkow:

Analyst: John McCluskey

Covers samples EAL02489-EAL02503

analyzed 06/05/96

Name of QC	HEIS #	EAL #	Analyte	Expected Result	Analytical Result
Method Blank	NA	NA	Cr (total)	3.1U	3.1U
Calibration Blank	NA	NA	Cr (total)	3.1U	3.1U
Replicate	B0HDB1	EAL02489	Cr (total)	68ug/mL	66ug/L
Replicate	B0HDG2	EAL02493	Cr (total)	71ug/mL	72ug/L
Replicate	B0HDH2	EAL02498	Cr (total)	87ug/mL	48ug/L
Laboratory Control Sample (LCS)	NA	NA	Cr (total)	20ug/L	109% Recovery
water					

U = Not above the associated Quantitation Limit

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GENERAL VALIDATION CHECKLIST

BATCH NUMBER (from Sample Logbook): 960508ASAMPLE NUMBERS: EAL02489-02503 ANALYTES REQUESTED: Total ChromiumVALIDATOR: Diane Call SIGNATURE: Diane Call DATE: 6-25-96

Requested analytes were performed	<u>Yes</u>	No
Chain-of-custody forms are complete	Yes	<u>Not Available</u>
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	<u>Yes</u>	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	<u>Yes</u>	No
Narrative has been included and signed	<u>Yes</u>	No

INORGANIC PEER REVIEW CHECKLIST

SAMPLE #: EAL02489-02503 DATE SAMPLED: _____ DATE ANALYZED: 6/05/96
 PEER REVIEWER: Thomas H. Bellus SIGNATURE: Thomas H. Bellus DATE: 6/18/96

ICP Metals

Water samples were preserved with nitric acid to pH <2. Soil samples were refrigerated at 4°C.	Yes	No
Holding time requirement was met: 6 months from date sampled.	Yes	No
Date of multi-point calibration	6/05/96	-
The high calibration check standard was within 5% of expected value for each metal reported	Yes	No
The midpoint calibration check standard was within 10% of expected value for each metal reported	Yes	No
The response for each metal reported in each sample was less than the response for that metal in the highest calibration standard	Yes	No
The QC Standard (LCS) recovery and RPD calculations are correct, and the values were reported on the QC spreadsheet	Yes	No
The QC standard (LCS), at $\approx 10 \times$ MDL, met acceptance criteria for each metal reported	Yes	No
The reagent blank was analyzed and reported on the QC spreadsheet for each metal reported	Yes	No
Conversion to soil concentration was correct	Yes	NA

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**ERC LABORATORY MANAGEMENT
SAMPLING AUTHORIZATION FORM**

000007

SAF Number B96-104

Rev: 1

Program Type CERCLA

Project ID 100-HR-3 TS

Project Type TS

Operable Unit 100-HR-3

Task ID 6

Round Number 0

SAF Title Ion Exchange Batch Equilibrium Test

Task Manager J. W. Green, Jr.

Requester J. W. Green, Jr.

Charge Codes-

Analytical Services PE51M Rad Screening (EAL) PE51M

Sample Management PE51M Sampling Services PE51M

Sample Management Function Project Coordinator M. E. David

Estimated Start Date 04/10/96

Estimated Completion Date 06/17/96

SampleArea 100 Areas

Estimated Number of Samples 150

Sampling Organizations

ERC Field Sampling

Data Turnaround Requirements Priority

Matrix Water

Data Deliverable Requirements Summary

Laboratory Primary: EAL

Primary: Field Analysis

Primary: Quanterra

SAF Comment

** Batch samples are to be taken from wells 199-D8-53 (10 gallons), 199-D8-54A (10 gallons), 199-H4-3 (10 gallons), 199-H4-12A (10 gallons), 199-K-22, (20 gallons), and 199-K-37 (20 gallons).

** Minimum and Full QC volumes for Technetium-99 at the Quanterra Laboratories has been provided.

** Revision 1 -- Preservative for Titration to pH 4.5 analysis at the EAL.

COC Comments

Date 04/17/96

SAFStatus: Revised

4/17/96 1:10:00 PM

ERC Laboratory Management

Field Sampling Requirements
Laboratory AnalysisLaboratory: EALMatrix: Water

Parameter / Analysis	Reference Method	Container / Volume	VolReq	Preservation	Holding Times
IC Anions - 300.0 Chloride, Nitrate, Sulfate	EPA300.0	G/P 20 ml	Full QC	Cool 4C	
Titration to pH 4.5	TITRATE	G/P 50 ml	Full QC	Cooled to 4C	14 Days
ICP Metals - 6010A (TAL) Chromium	EPA6010A	G/P 100 ml	Full QC	HNO3 to pH <2	6 Months
Chromium Hex - 7196A	EPA7196A	G/P 25 ml	Full QC	Cooled to 4C	24 Hours

Key¹ Container Types:

P = Plastic (Polyethylene)
 G = Glass
 Gs = Glass w/septum cap
 Gs' = Glass w/septum cap
 No head space in container

aG = Amber Glass
 aGs = Amber Glass w/septum cap
 aGs* = Amber Glass w/septum cap -
 No head space in container

FSR Comment: ** Minimum and Full QC volumes for Technetium-99 at the Quanterra Laboratories has been provided.