

# Data Package

45928

Contract Lab Program Data Package  
for  
Du Pont Environmental Remediation Services

## INORGANICS DATA PACKAGE

Christiana River Tidal Study  
Grab Water Samples  
Collected on 12/17/92, 12/18/92 by SN/DB  
LLI Sample No. 1908350-1908359, 1908981-1908993



SAMPLE DATA

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AR318816

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CASE NARRATIVE



CASE NARRATIVE FOR INORGANICS

Laboratory Name: Lancaster Laboratories

SDG Number: CRT02

Date Received: 12/19/92

Explanatory Notes:

The inappropriate error flag, % Recovery Failed, Repeat by Standard Additions, is due to a manufacturer's (Varian) software error. The software is designed to follow the analysis protocol for USEPA Contract Laboratory Program ILM01.0. Following this protocol, method of standard additions is not required for samples demonstrating sample absorbance or concentration less than 50% of the spike absorbance or concentration; however, the Varian software prints this flag, regardless of sample absorbance or concentration, whenever the percent recovery is below 85% or above 115%.

Varian has been informed of this problem and has communicated that the problem will be resolved in a future software revision. The software is needed to operate the instrument and to control the automatic spiking function of the autosampler. Since the software will not permit this error to be disabled, data that demonstrates this error will be manually corrected on the raw data by the analyst.

Calibration Standards:

Instrument calibration standards are prepared monthly from stock solutions purchased from Spex or Baker chemical.

Total ICP integration time is 24 seconds.

Case Narrative reviewed and approved by:

Eric W. Cuba Date 1/8/93  
Eric W. Cuba, Chemist II Coordinator  
Inorganic Data Packages

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 SOW No.: 3/90\_

EPA Sample No.	Lab Sample ID
CHRDF	1908989
CHRDM	1908988
CHULF	1908359
CHULT	1908358
CRCH-	1908983
CRCHF	1908984
CRHLF	1908993
CRHLT	1908992
CRTFB	1908985
JAMFM	1908354
JAMLF	1908357
JAMLT	1908356
JAMMF	1908351
JAMMT	1908350
JAMMTD	1908353
JAMMTS	1908352
JBMTF	1908987
JSBFL	1908982
JSBHT	1908981
JSBLF	1908991

Were ICP interelement corrections applied ? Yes/No YES  
 Were ICP background corrections applied ? Yes/No YES  
 If yes - were raw data generated before application of background corrections ? Yes/No NO\_

Comments:

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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Eric W. Cuba Name: Eric W. Cuba  
 Date: 1/8/93 Title: Chemist II Coordinator

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_  
Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
SOW No.: 3/90\_

EPA Sample No.	Lab Sample ID
JSBLT	1908990
JSBMT	1908986

Were ICP interelement corrections applied ? Yes/No YES  
Were ICP background corrections applied ? Yes/No YES  
If yes - were raw data generated before application of background corrections ? Yes/No NO\_

Comments:  
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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Eric W. Cuba Name: Eric W Cuba  
Date: 1/9/93 Title: Chemist II Coordinator

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Sample Reference List for SDG # CRT02  
with a Package Type of CLPI

max 5/9 03

Lab Sample Number	Sample Code	Client Sample Description
1908350	JAMMT	St. James St. Bridge - Mid Tide Unspiked Water
1908351	JAMMF	St. James St. Bridge - Mid Tide Unspiked Filtered
1908352	JAMMT	St. James St. Bridge - Mid Tide <u>Matrix Spike</u> Water
1908353	JAMMT	St. James St. Bridge - Mid Tide Duplicate Water
1908354	JAMFM	St. James St. Bridge - Mid Tide Duplicate Filtered
1908355	FLDBL	Field Blank Grab Water Sample
1908356	JAMLT	St. James St. Bridge - Low Tide Grab Water Sample
1908357	JAMLF	St. James St. Bridge - Low Tide Filtered Water
1908358	CHULT	Churchman's Road - Low Tide Grab Water Sample
1908359	CHULF	Churchman's Road - Low Tide Filtered Grab Water
1908981	JSBHT	James St. Bridge - High Tide Grab Water Sample
1908982	JSBFL	James St. Bridge - High Tide Filtered Water Sample
1908983	CRCH-	Churchman's Road - High Tide Grab Water Sample
1908984	CRCHF	Churchman's Road - High Tide Filtered Water Sample
1908985	CRTFB	Field Blank Grab Water Sample
1908986	JSBMT	James St. Bridge - Mid Tide Grab Water Sample
1908987	JBMTF	James St. Bridge - Mid Tide Filtered Water Sample
1908988	CHRDM	Churchman's Road - Mid Tide Grab Water Sample
1908989	CHRDF	Churchman's Road - Mid Tide Filtered Water Sample
1908990	JSBLT	James St. Bridge - Low Tide Grab Water Sample
1908991	JSBLF	James St. Bridge - Low Tide Filtered Water Sample
1908992	CRHLT	Churchman's Road - Low Tide Grab Water Sample
1908993	CRHLF	Churchman's Road - Low Tide Filtered Water Sample

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JAMMT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908350\_

Level (low/med): LOW\_ Date Received: 12/18/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	<del>1990</del>			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>48.9</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>47600</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>2220</del>		N	P
7439-92-1	Lead	<del>2.9</del>	B		F
7439-95-4	Magnesium	<del>2130</del>			P
7439-96-5	Manganese	113			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5920</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>10400</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>74.9</del>			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JAMMF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908351\_

Level (low/med): LOW\_ Date Received: 12/18/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>21.2</del>			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>18300</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>217</del>		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	<del>7280</del>			P
7439-96-5	Manganese	<del>8429</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>6080</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>1100</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>48.4</del>			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JAMFM

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908354\_

Level (low/med): LOW\_ Date Received: 12/18/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>49.6</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>1700</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>153</del>		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	<del>6750</del>			P
7439-96-5	Manganese	<del>80.5</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5590</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>20200</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>44.0</del>			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JAMLT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908356\_

Level (low/med): LOW Date Received: 12/18/92

% Solids: 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	<del>41400</del>			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>260.1</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>12800</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>1830</del>		N	P
7439-92-1	Lead	<del>272</del>	B		F
7439-95-4	Magnesium	<del>7090</del>			P
7439-96-5	Manganese	<del>109</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5400</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>9660</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>79.3</del>			P
	Cyanide				NR

Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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EPA SAMPLE NO.

JAMLF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908357\_

Level (low/med): LOW\_ Date Received: 12/18/92

% Solids: \_\_\_\_\_0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>40.9</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	17100			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>165</del>		N	P
7439-92-1	Lead	1.0	U	W	F
7439-95-4	Magnesium	<del>6750</del>			P
7439-96-5	Manganese	<del>83.3</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5130</del>			P
7782-49-2	Selenium	1.0	U	W	F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>9450</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>40.9</del>			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CHULT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908358

Level (low/med): LOW Date Received: 12/18/92

% Solids: 0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	<del>21540</del>			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>2579</del>			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>10300</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>2480</del>		N	P
7439-92-1	Lead	<del>230</del>			F
7439-95-4	Magnesium	<del>2500</del>			P
7439-96-5	Manganese	<del>254</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>3020</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>9110</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>2325</del>			P
	Cyanide				NR

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Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CHULF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908359\_

Level (low/med): LOW\_ Date Received: 12/18/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>31.2</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>9210</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>325</del>		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	<del>3950</del>	B		P
7439-96-5	Manganese	<del>116</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>2720</del>	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>8160</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>16.0</del>	B		P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JSBHT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908981\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	<del>2100</del>			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>6000</del>			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>17880</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>2250</del>		N	P
7439-92-1	Lead	<del>2.9</del>		S	F
7439-95-4	Magnesium	<del>6980</del>			P
7439-96-5	Manganese	<del>102</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5270</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>9710</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>78.0</del>			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JSBFL

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908982\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>4000</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>17400</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>138</del>		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	<del>6680</del>			P
7439-96-5	Manganese	<del>67.8</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5150</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>9640</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>34.7</del>			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CRCH-

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908983\_

Level (low/med): LOW Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	<del>1480</del>			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>46.5</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>10200</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	<del>6.0</del>	B		P
7439-89-6	Iron	2000		N	P
7439-92-1	Lead	<del>4.0</del>			F
7439-95-4	Magnesium	<del>4340</del>	B		P
7439-96-5	Manganese	<del>115</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>2920</del>	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>10600</del>			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>30.1</del>			P
	Cyanide				NR

Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CRCHF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908984\_

Level (low/med): LOW Date Received: 12/19/92

% Solids: 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>23.6</del> B			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	10200			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	314		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	4290	B		P
7439-96-5	Manganese	105			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	2720	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	10500			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	15.3	B		P
	Cyanide				NR

Color Before: YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 02

CRTFB

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908985\_

Level (low/med): LOW Date Received: 12/19/92

% Solids: 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	4.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	171	B		P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	7.0	U	N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	45.0	U		P
7439-96-5	Manganese	1.0	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	205	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	417	B		P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	4.0	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

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EPA SAMPLE NO.

JSBMT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908986\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1500			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	60.9			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	17800			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	2610		N	P
7439-92-1	Lead	5.0		S	F
7439-95-4	Magnesium	6980			P
7439-96-5	Manganese	126			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	6050			P
7782-49-2	Selenium	1.0	U	W	F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	9240			P
7440-28-0	Thallium	2.0	U	W	F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	89.8			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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EPA SAMPLE NO.

JBMTF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908987\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>28.4</del>			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>17000</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>170</del>		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	6460			P
7439-96-5	Manganese	<del>70.3</del>			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	5770			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	9020			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	33.4			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CHDRM

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908988\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2330	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	50.5	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	10400	U		P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	2740	U	N	P
7439-92-1	Lead	27.6	U		F
7439-95-4	Magnesium	4360	B		P
7439-96-5	Manganese	117	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	2850	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	9720	U		P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	29.3	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CHRDF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908989\_

Level (low/med): LOW Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F <i>R</i>
7440-39-3	Barium	<del>4310</del>	B		P <i>U</i>
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>10600</del>	B		P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	<del>215</del>	B	N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	<del>4310</del>	B		P
7439-96-5	Manganese	<del>87.4</del>	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>2850</del>	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	<del>10200</del>	B		P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	<del>1670</del>	B		P <i>U</i>
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JSBLT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908990\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	<del>2200</del>			P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>50.4</del>	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	<del>15900</del>			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	<del>12.4</del>	B		P
7439-89-6	Iron	2840		N	P
7439-92-1	Lead	<del>5.4</del>			F
7439-95-4	Magnesium	6340			P
7439-96-5	Manganese	135			P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	<del>5450</del>			P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	9510			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	81.6			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

JSBLF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908991\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	<del>38.4</del> 38.4	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	15600	U		P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	185	U	N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	6050	U		P
7439-96-5	Manganese	91.5	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	5180	U		P
7782-49-2	Selenium	1.0	U	CV	F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	9640	U		P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	27.8	U		P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CRHLT

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908992\_

Level (low/med): LOW Date Received: 12/19/92

% Solids: \_\_\_\_\_ 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.1	B		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	24.4	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	8390			P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	250		N	P
7439-92-1	Lead	7.4			F
7439-95-4	Magnesium	3320	B		P
7439-96-5	Manganese	73.6			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	2560	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	6850			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	11.1	B		P
	Cyanide				NR

Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CRHLF

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Lab Sample ID: 1908993\_

Level (low/med): LOW\_ Date Received: 12/19/92

% Solids: \_\_\_\_\_0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2000	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	45.7	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	8550	U		P
7440-47-3	Chromium	8.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.3	B		P
7439-89-6	Iron	3240		N	P
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium	3580	B		P
7439-96-5	Manganese	107			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	2920	B		P
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	11.0	U		P
7440-23-5	Sodium	6780			P
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	33.0			P
	Cyanide				NR

Color Before: YELLOW\_ Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLOUDY Artifacts: \_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



QUALITY CONTROL DATA



**Lancaster Laboratories**  
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1908981-93

Chain of Custody

Please print. Instructions on reverse side correspond with circled numbers.

1 Client: DVPART Acct. #: \_\_\_\_\_

Project Name/#: CHRISTINA RIVER TIDAL SWAY

Project Manager: JOEL KANNAZYU P.O. #: \_\_\_\_\_

Sampler: SCOTT MORTREY/DIN BACON Quote #: \_\_\_\_\_

2 **Sample Identification**

Sample Description	Date Collected	Time Collected	Grab Composite
JAMES ST. BRIDGE - HIGH TIDE	12/18/92	720	<input checked="" type="checkbox"/>
CHURCHMAN'S ROAD - HIGH TIDE		800	<input checked="" type="checkbox"/>
FIELD BRANK		1025	<input checked="" type="checkbox"/>
JAMES ST. BRIDGE - MID TIDE		1030	<input checked="" type="checkbox"/>

4 **Matrix**

Soil	Water	Other	Total # of Containers
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2

3 **Analyses Requested**

Analyses Requested	Date	Time	Received by	Date	Time
METALS - TOTAL					
METALS - DISSOLVED					

6 **Remarks**

For LLI use only  
FSC: \_\_\_\_\_  
SCR #: 1043957

7 **Turnaround time requested (please circle):** Normal Rush

(Rush TAT is subject to LLI approval and surcharge.)

**Rush results requested by (please circle):** \_\_\_\_\_

Sample Description	Date Collected	Time Collected	Grab Composite	Soil	Water	Other	Total # of Containers	Analyses Requested	Date	Time	Received by	Date	Time
JAMES ST. BRIDGE - HIGH TIDE	12/18/92	720	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	METALS - TOTAL					
CHURCHMAN'S ROAD - HIGH TIDE		800	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	METALS - DISSOLVED					
FIELD BRANK		1025	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1						
JAMES ST. BRIDGE - MID TIDE		1030	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2						

8 **Data package options (please circle if requested):**

QC Summary  (If yes, indicate QC sample and submit triplicate volume.)  
Tier I (NI)   
Tier II (NI)   
EPA CLP

Site-specific QC required? Yes No  
Data Package Chain of Custody required? Yes No

8 **Relinquished by:** \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received by: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

9 **Relinquished by:** JIM M. DIKE  
Date: 12/18/92 Time: 10:39  
Received by: SCOTT MORTREY  
Date: 12/18/92 Time: 12:00

SCOTT MORTREY  
Date: 12/18/92 Time: 10:30  
Received by: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

COOLER TEMP.  
4°C @ 9:20  
Date: 12/18/92 Time: \_\_\_\_\_



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Where quality is a science.

ANALYSIS REQUEST / ENVIRONMENTAL SERVICES

3456  
1908350-59  
1908335-40

Chain of Custody

Please print. Instructions on reverse side correspond with circled numbers.

1 Client: DUPONT Acct. #: \_\_\_\_\_  
 Project Name: CHESTERNA RIVER TREAT SWAY  
 Project Manager: Jess Kaczynski P.O. #: \_\_\_\_\_  
 Sampler: S. Netherly / D. Brown Quote #: \_\_\_\_\_

Matrix (4) Soil Water Other  
 Total # of Containers  
 Analyses Requested (5)  
 METALS-TOTAL  
 METALS-DISSOLVED  
 For LLI use only  
 FSC: \_\_\_\_\_  
 SCR #: 104390

Sample Identification	Date Collected	Time Collected	Grab (3)	Composite	Matrix (4)			Total # of Containers	Analyses Requested (5)		Remarks (6)
					Soil	Water	Other		METALS-TOTAL	METALS-DISSOLVED	
Sr. James Sr. Beale - High Tide	12/1/92	610	✓		✓	✓	2	✓	✓		
Churchman's Road - High Tide		645	✓		✓	✓	2	✓	✓		
Sr. James Sr. Beale - Mid Tide		930	✓		✓	✓	2	✓	✓		
Sr. James Sr. Beale - Dupont		930	✓		✓	✓	2	✓	✓		
Sr. James Sr. Beale - Mid Tide		930	✓		✓	✓	1	✓	✓		
Churchman's Road - Mid Tide		1000	✓		✓	✓	2	✓	✓		
Field Bank		955	✓		✓	✓	1	✓	✓		
Sr. James Sr. Beale - Low Tide		1300	✓		✓	✓	2	✓	✓		
Churchman's Road - Low Tide		1340	✓		✓	✓	2	✓	✓		

Temp. of water upon receipt: 50C.  
12/18/92 BR

7 Turnaround time requested (please circle): Normal Rush  
 (Rush TAT is subject to LLI approval and surcharge.)  
 Rush results requested by (please circle):  
 Fax #: \_\_\_\_\_  
 Phone #: \_\_\_\_\_

Relinquished by: [Signature] Date: 12/1/92 Time: 1500 Received by: [Signature] Date: 12/1/92 Time: 1200  
 Relinquished by: [Signature] Date: 12/1/92 Time: 1500 Received by: [Signature] Date: 12/1/92 Time: 1200

8 Data package options (please circle if requested):  
 QC Summary Site-specific QC required? Yes No  
 Tier I (NI) (If yes, indicate QC sample and submit triplicate volume.)  
 Tier II (NI)  
 EPA CLP Data Package Chain of Custody required? Yes No

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received for LLI by: [Signature] Date: 12/1/92 Time: 0855

U.S. EPA - CLP

2A  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Initial Calibration Source: LLI \_\_\_\_\_  
 Continuing Calibration Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	25000.0	24397.00	97.6	25000.0	24141.00	96.6	23754.00	95.0	P
Antimony	5000.0	5175.00	103.5	5000.0	5114.30	102.3	5009.70	100.2	P
Arsenic	50.0	50.79	101.6	50.0	49.59	99.2	50.21	100.4	F
Barium	5000.0	5079.80	101.6	5000.0	5036.60	100.7	4933.00	98.7	P
Beryllium	500.0	489.35	97.9	500.0	485.24	97.0	475.69	95.1	P
Cadmium	5000.0	4758.82	95.2	5000.0	4793.90	95.9	4802.60	96.1	P
Calcium	50000.0	50224.00	100.4	50000.0	49634.00	99.3	48655.00	97.3	P
Chromium	5000.0	5231.00	104.6	5000.0	5193.80	103.9	5095.40	101.9	P
Cobalt	1000.0	1001.10	100.1	1000.0	989.82	99.0	966.19	96.6	P
Copper	5000.0	4951.30	99.0	5000.0	4911.00	98.2	4815.20	96.3	F
Iron	5000.0	5036.70	100.7	5000.0	4982.30	99.6	4883.20	97.7	P
Lead	20.0	20.73	103.6	20.0	20.45	102.2	21.03	105.2	F
Magnesium	25000.0	24165.00	96.7	25000.0	24000.00	96.0	23665.00	94.7	P
Manganese	5000.0	5029.10	100.6	5000.0	4996.50	99.9	4905.60	98.1	P
Mercury	2.5	2.53	101.2	1.0	1.02	102.0	1.02	102.0	CV
Nickel	10000.0	9927.10	99.3	10000.0	9856.50	98.6	9686.50	96.9	P
Potassium	50000.0	50954.00	101.9	50000.0	50480.00	101.0	49327.00	98.7	P
Selenium	20.0	20.21	101.0	20.0	19.81	99.0	19.55	97.8	F
Silver	500.0	478.06	95.6	500.0	474.81	95.0	466.69	93.3	P
Sodium	50000.0	52505.00	105.0	50000.0	52393.00	104.8	49555.00	99.1	P
Thallium	40.0	40.70	101.8	40.0	42.60	106.5	43.70	109.2	F
Vanadium	2000.0	2078.60	103.9	2000.0	2058.50	102.9	2015.70	100.8	P
Zinc	5000.0	5026.50	100.5	5000.0	5000.70	100.0	4924.90	98.5	P
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN

IILMO2.1

27

AR318846

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Initial Calibration Source: LLI \_\_\_\_\_  
 Continuing Calibration Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				25000.0	23828.00	95.3	23911.00	95.6	P
Antimony				5000.0	5037.10	100.7	5062.50	101.2	P
Arsenic				50.0	49.75	99.5	47.40	94.8	F
Barium				5000.0	4946.20	98.9	4955.80	99.1	P
Beryllium				500.0	477.44	95.5	478.30	95.7	P
Cadmium				5000.0	4788.60	95.8	4662.30	93.2	P
Calcium				50000.0	48783.00	97.6	48794.00	97.6	P
Chromium				5000.0	5117.80	102.4	5115.40	102.3	P
Cobalt				1000.0	970.61	97.1	967.76	96.8	P
Copper				5000.0	4833.70	96.7	4835.60	96.7	P
Iron				5000.0	4905.80	98.1	4940.20	98.8	P
Lead				20.0	21.82	109.1			F
Magnesium				25000.0	23764.00	95.1	23843.00	95.4	P
Manganese				5000.0	4916.60	98.3	4925.20	98.5	P
Mercury				1.0	1.01	101.0	1.02	102.0	CV
Nickel				10000.0	9701.10	97.0	9713.60	97.1	P
Potassium				50000.0	49006.00	98.0	49147.00	98.3	P
Selenium				20.0	19.81	99.0	20.31	101.6	F
Silver				500.0	463.76	92.8	464.41	92.9	P
Sodium				50000.0	50177.00	100.4	53757.00	107.5	P
Thallium	40.0	38.50	96.2	40.0	38.40	96.0	39.60	99.0	F
Vanadium				2000.0	2020.80	101.0	2026.60	101.3	P
Zinc				5000.0	4936.00	98.7	4941.30	98.8	P
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN

ILMO2.1

28  
AR318847

U.S. EPA - CLP

2A  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Initial Calibration Source: LLI \_\_\_\_\_  
 Continuing Calibration Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum									NR
Antimony									NR
Arsenic				50.0	46.37	92.7	45.34	90.7	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	20.0	20.69	103.4	20.0	20.16	100.8	20.76	103.8	F
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium				20.0	20.95	104.8	20.94	104.7	F
Silver									NR
Sodium									NR
Thallium				40.0	42.10	105.2	43.50	108.8	F
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN

ILMO2.1

29

AR318848

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Initial Calibration Source: LLI \_\_\_\_\_  
 Continuing Calibration Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic				50.0	45.03	90.1			F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				20.0	20.88	104.4	21.47	107.4	F
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	20.0	20.77	103.8	20.0	21.13	105.6	20.05	100.2	F
Silver									NR
Sodium									NR
Thallium	40.0	42.00	105.0	40.0	42.80	107.0	41.90	104.8	F
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN

ILMO2.1

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AR318849

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Initial Calibration Source: LLI \_\_\_\_\_  
 Continuing Calibration Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				20.0	21.79	109.0			F
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	20.0	21.85	109.2	20.0	21.50	107.5	20.07	100.4	F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN

ILMO2.1

21

AR318850



U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Initial Calibration Source: LLI \_\_\_\_\_  
 Continuing Calibration Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	20.0	21.11	105.6	20.0	20.35	101.8	20.02	100.1	F
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN

ILMO2.1

AR318851<sup>22</sup>

U.S. EPA - CLP

2B

CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: CRT02

AA CRDL Standard Source: LLI

ICP CRDL Standard Source: LLI

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony				120.0	124.97	104.1	110.88	92.4
Arsenic	10.0	9.31	93.1					
Barium								
Beryllium				10.0	8.93	89.3	10.04	100.4
Cadmium								
Calcium								
Chromium				20.0	20.65	103.2	22.31	111.6
Cobalt				100.0	99.53	99.5	100.75	100.8
Copper				50.0	49.99	100.0	47.48	95.0
Iron								
Lead	3.0	2.79	93.0					
Magnesium								
Manganese				30.0	29.75	99.2	28.91	96.4
Mercury	0.2	0.21	105.0					
Nickel				80.0	78.42	98.0	79.62	99.5
Potassium								
Selenium	5.0	5.28	105.6					
Silver				20.0	18.18	90.9	98.25	491.2
Sodium								
Thallium	10.0	10.80	108.0					
Vanadium				100.0	100.71	100.7	98.80	98.8
Zinc				40.0	40.08	100.2	40.64	101.6

FORM II (PART 2) - IN

ILMO2.1

AR318852

U.S. EPA - CLP

2B  
CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 AA CRDL Standard Source: LLI \_\_\_\_\_  
 ICP CRDL Standard Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium				10.0	9.87	98.7	9.05	90.5
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3.0	3.15	105.0					
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium	5.0	5.10	102.0					
Silver								
Sodium								
Thallium	10.0	8.60	86.0					
Vanadium								
Zinc								

FORM II (PART 2) - IN

ILMO2.1

34

AR318853

U.S. EPA - CLP

2B  
CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 AA CRDL Standard Source: LLI \_\_\_\_\_  
 ICP CRDL Standard Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3.0	2.15	71.7					
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium	5.0	5.39	107.8					
Silver								
Sodium								
Thallium	10.0	10.80	108.0					
Vanadium								
Zinc								

U.S. EPA - CLP

3  
BLANKS

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_\_  
 Preparation Blank Matrix (soil/water): WATER  
 Preparation Blank Concentration Units (ug/L or mg/kg): UG/L\_

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	57.0	U	57.0	U	<del>156.6</del>	B	57.0	U	57.000	U	P
Antimony	22.0	U	22.0	U	<del>22.0</del>	U	22.0	U	22.000	U	P
Arsenic	-2.5	B	1.0	U	1.0	U	1.0	U	1.000	U	F
Barium	4.0	U	4.0	U	4.0	U	<del>4.0</del>	B	4.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	3.0	U	<del>3.0</del>	B	<del>4.5</del>	B	3.0	U	3.000	U	P
Calcium	23.0	U	23.0	U	23.0	U	<del>40.5</del>	B	23.000	U	P
Chromium	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Iron	7.0	U	7.0	U	7.0	U	7.0	U	<del>22.550</del>	B	P
Lead	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	F
Magnesium	45.0	U	45.0	U	45.0	U	45.0	U	45.000	U	P
Manganese	1.0	U	1.0	U	1.0	U	<del>1.0</del>	B	1.000	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Potassium	132.0	U	132.0	U	132.0	U	132.0	U	132.000	U	P
Selenium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	F
Silver	11.0	U	11.0	U	11.0	U	11.0	U	11.000	U	P
Sodium	72.0	U	72.0	U	72.0	U	72.0	U	<del>92.460</del>	B	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	F
Vanadium	6.0	U	6.0	U	6.0	U	6.0	U	6.000	U	P
Zinc	4.0	U	4.0	U	<del>13.1</del>	B	<del>5.0</del>	B	4.000	U	P
Cyanide											NR

FORM III - IN

IILMO2.1

AR318855

U.S. EPA - CLP

3  
BLANKS

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Preparation Blank Matrix (soil/water): \_\_\_\_\_  
 Preparation Blank Concentration Units (ug/L or mg/kg): \_\_\_\_\_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Aluminum			73.4	B							P
Antimony			22.0	U							P
Arsenic			-1.5	B	-1.2	B	1.0	U			F
Barium			10.4	B							P
Beryllium			1.0	U							P
Cadmium			3.7	B							P
Calcium			11.8	B							P
Chromium			8.0	U							H
Cobalt			5.0	U							P
Copper			7.9	B							P
Iron			16.2	B							P
Lead	1.0	U	1.0	U	1.0	U	1.0	U			F
Magnesium			58.6	B							P
Manganese			6.9	B							P
Mercury			0.1	U							CV
Nickel			16.9	B							P
Potassium			256.2	B							P
Selenium			1.0	U	1.0	U	1.0	U			F
Silver			11.0	U							P
Sodium			92.4	B							P
Thallium	-2.2	B	2.0	U	2.0	U	2.0	U			F
Vanadium			6.0	U							P
Zinc			9.3	B							P
Cyanide											NR

FORM III - IN

ILMO2.1

AR318856

U.S. EPA - CLP

3  
BLANKS

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Preparation Blank Matrix (soil/water): \_\_\_\_\_  
 Preparation Blank Concentration Units (ug/L or mg/kg): \_\_\_\_\_

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	1	C	1	C	2	C	3	C	C		
Aluminum											NR
Antimony											NR
Arsenic			1.0	U							F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead			1.0	U	1.0	U					F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	1.0	U	1.0	U	1.0	U					F
Silver											NR
Sodium											NR
Thallium			2.0	U							F
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

3  
BLANKS

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Preparation Blank Matrix (soil/water): \_\_\_\_\_  
 Preparation Blank Concentration Units (ug/L or mg/kg): \_\_\_\_\_

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	1.0	U	1.0	U	1.0	U					F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	1.0	U	1.0	U	1.0	U					F
Silver											NR
Sodium											NR
Thallium	2.0	U	2.0	U	2.0	U					F
Vanadium											NR
Zinc											NR
Cyanide											NR

FORM III - IN

ILMO2.1

AR318858



U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 2360-ICP1100

Method: P\_

Start Date: 12/19/92

End Date: 12/20/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
SO	1.00	2215		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
S	1.00	2219		-	-	X	-	X	-	-	-	X	X	X	-	-	-	-	-	-	-	-	-	X	X	-	-		
S	1.00	2223		-	-	X	-	X	-	-	-	X	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-		
S	1.00	2228		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-		
S	1.00	2231		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-	-		
S	1.00	2233		X	-	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-		
ICV	1.00	2236		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
ICB	1.00	2240		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
ICSA	1.00	2245		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
ICSAB	1.00	2249		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
CRI	1.00	2254		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
CCV	1.00	2259		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
B (1)	1.00	2303		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
V	1.00	2308		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
LCSW	1.00	2312		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMMT	1.00	2317		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMMT A	1.00	2321		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
JAMMT D	1.00	2326		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMMT S	1.00	2331		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMMT L	5.00	2335		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMMF	1.00	2340		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMFM	1.00	2344		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
ZZZZZ	1.00	2349		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCV	1.00	2353		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
CCB (2)	1.00	2358		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMLT	1.00	0002		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JAMLF	1.00	0007		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
CHULT	1.00	0012		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
CHULF	1.00	0016		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JSBHT	1.00	0021		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
JSBFL	1.00	0025		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		
CRCH-	1.00	0030		X	X	-	X	X	-	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-		



U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 2360-ICP1100\_

Method: P\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
SO	1.00	1433						X																					
S	1.00	1437						X																					
S	1.00	1441																											
S	1.00	1446																											
S	1.00	1449																											
S	1.00	1451																											
ICV	1.00	1454						X																					
ICB	1.00	1458						X																					
ICSA	1.00	1503						X																					
ICSAB	1.00	1507						X																					
CRI	1.00	1512						X																					
CCV	1.00	1517						X																					
B	1.00	1521						X																					
	1.00	1526						X																					
ICSW	1.00	1530						X																					
JAMMT	1.00	1535						X																					
JAMMT A	1.00	1539																											
JAMMT D	1.00	1544						X																					
JAMMT S	1.00	1548						X																					
JAMMT L	1.00	1553						X																					
JAMMF	1.00	1558						X																					
JAMFM	1.00	1602						X																					
ZZZZZZ	1.00	1607																											
CCV	1.00	1611						X																					
CCB	1.00	1616						X																					
JAMLT	1.00	1620						X																					
JAMLF	1.00	1625						X																					
CHULT	1.00	1630						X																					
CHULF	1.00	1634						X																					
JSBHT	1.00	1639						X																					
JSBFL	1.00	1643						X																					
CRCH-	1.00	1648						X																					



U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 4724-PE51 GF

Method: F\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.00	1454				X																							
S10	1.00	1458				X																							
S20	1.00	1502				X																							
S40	1.00	1506				X																							
S60	1.00	1511				X																							
S80	1.00	1515				X																							
ICV	1.00	1520				X																							
ICB -2.5	1.00	1524				X																							
CRA	1.00	1529				X																							
CCV	1.00	1533				X																							
CCB	1.00	1538				X																							
ZZZZZZ	5.00	1542																											
ZZZZ	5.00	1547																											
W	1.00	1551				X																							
PBWA	1.00	1556	91.0			X																							
LCSW	1.00	1600				X																							
LCSWA	1.00	1605	106.6			X																							
JAMMT	1.00	1609				X																							
JAMMTA	1.00	1614	102.5			X																							
JAMMF	1.00	1618				X																							
JAMMFA	1.00	1623	96.3			X																							
CCV	1.00	1627				X																							
CCB	1.00	1632				X																							
JAMMT S	1.00	1636				X																							
ZZZZZZ	1.00	1640																											
JAMMT D	1.00	1645				X																							
JAMMT DA	1.00	1649	96.3			X																							
JAMFM	1.00	1654				X																							
JAMFMA	1.00	1658	97.0			X																							
ZZZZZZ	1.00	1702																											
ZZZZZZ	1.00	1707																											
JAMLT	1.00	1711				X																							

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 4724-PE51 GF

Method: F\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
JAMLTA	1.00	1716	102.1			X																							
CCV	1.00	1720				X																							
CCB (3)	1.00	1724				X																							
JAMLE	1.00	1729				X																							
JAMLFA	1.00	1733	100.2			X																							
CHULT	1.00	1737				X																							
CHULTA	1.00	1742	101.2			X																							
CHULF	1.00	1746				X																							
CHULFA	1.00	1751	90.3			X																							
JSBHT	1.00	1755				X																							
JSBHTA	1.00	1800	104.7			X																							
JSBFL	1.00	1804				X																							
JSBFLA	1.00	1808	100.4			X																							
CCV	1.00	1813				X																							
CCB (4)	1.00	1817				X																							
CRCH	1.00	1821				X																							
CRCH-A	1.00	1826	94.9			X																							
CRCHF	1.00	1830				X																							
CRCHFA	1.00	1835	91.6			X																							
CRTFB	1.00	1840				X																							
CRTFBA	1.00	1844	90.4			X																							
JSBMT	1.00	1849				X																							
JSBMTA	1.00	1853	102.6			X																							
JBMTF	1.00	1858				X																							
JBMTFA	1.00	1902	92.6			X																							
CCV	1.00	1907				X																							
CCB (5)	1.00	1911				X																							
CHRD	1.00	1916				X																							
CHRDMA	1.00	1920	98.3			X																							
CHRDF	1.00	1925				X																							
CHR DFA	1.00	1929	89.4			X																							
JSBLT	1.00	1934				X																							



U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02

Instrument ID Number: 3812-V40Z GF

Method: F

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	1220		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S5	1.00	1226		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S10	1.00	1233		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S25	1.00	1240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S40	1.00	1246		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S50	1.00	1253		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICV	1.00	1259		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICB	1.00	1305		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CRA	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CRAA	1.00	1319		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1325		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1331		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	200.00	1338		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	200.00	1345		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PBW	1.00	1351		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PBWA	1.00	1358	102.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LCSW	1.00	1404		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LCSW	1.00	1411	105.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMT	1.00	1417		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMTA	1.00	1424	88.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMF	1.00	1430		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMFA	1.00	1437	90.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1443		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1450		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMT S	1.00	1456		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1503		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMT D	1.00	1509		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMMT DA	1.00	1516	88.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMFM	1.00	1522		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMFMA	1.00	1529	92.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1535		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZA	1.00	1542	106.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	





U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02

Instrument ID Number: 3812-V40Z GF

Method: F

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	1808																									
S5	1.00	1815													X												
S10	1.00	1822													X												
S25	1.00	1828													X												
S40	1.00	1835													X												
S50	1.00	1841													X												
ICV	1.00	1848													X												
ICB	1.00	1854													X												
CRA	1.00	1900													X												
CRAA	1.00	1907													X												
CCV	1.00	1914													X												
CCB	1.00	1920													X												
JAMLF	1.00	1926													X												
JAMLEA	1.00	1933	84.1												X												
CHULT	1.00	1939													X												
CHULTA	1.00	1946	88.2												X												
CHULF	1.00	1952													X												
CHULFA	1.00	1959	91.2												X												
JSBHT	1.00	2006													X												
JSBHTA	1.00	2012	84.4												X												
JSBFL	1.00	2019													X												
JSBFLA	1.00	2025	84.8												X												
CCV	1.00	2032													X												
CCB	1.00	2038													X												
CRCH-	1.00	2044													X												
CRCH-A	1.00	2051	89.5												X												
CRCHF	1.00	2057													X												
CRCHFA	1.00	2104	91.4												X												
CRTFB	1.00	2110													X												
CRTFBA	1.00	2117	105.8												X												
JSBMT	1.00	2123													X												
JSBMTA	1.00	2130	83.8												X												

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 3812-V40Z GF\_

Method: F\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
JBMTF	1.00	2136		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
JBMTFA	1.00	2143	86.3	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCV	1.00	2150		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCB	1.00	2156		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CHRD	1.00	2202		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CHRDMA	1.00	2209	90.5	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CHRDF	1.00	2215		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CHRDF A	1.00	2222	90.4	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
JSBLT	1.00	2228		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
JSBLTA	1.00	2235	90.0	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
JSBLF	1.00	2241		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
JSBLFA	1.00	2248	88.5	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
HLT	1.00	2255		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
HLTA	1.00	2302	93.1	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCV	1.00	2308		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCB	1.00	2314		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CRHLF	1.00	2321		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CRHLFA	1.00	2327	95.5	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCV	1.00	2334		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCB	1.00	2340		-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-		





U.S. EPA - CLP  
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ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_  
 Instrument ID Number: 4725-PE51 GF\_  
 Start Date: 12/21/92

Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Method: F\_  
 End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	1258		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S5	1.00	1303		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S15	1.00	1307		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S25	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S40	1.00	1317		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S50	1.00	1322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ICV	1.00	1327		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ICB	1.00	1332		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CRA	1.00	1336		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CCV	1.00	1341		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CCB	1.00	1346		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
PBW	1.00	1351		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
PBWA	1.00	1356	94.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
LCSW	1.00	1401		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
LCSWA	1.00	1406	86.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMT	1.00	1411		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMTA	1.00	1416	79.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMF	1.00	1421		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMFA	1.00	1426	70.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMT S	1.00	1431		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ZZZZZZ	1.00	1436		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1440		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CCB	1.00	1445		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMT D	1.00	1450		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMMT DA	1.00	1455	82.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMFM	1.00	1500		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMFMA	1.00	1505	70.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ZZZZZZ	1.00	1509		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1514		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
JAMLT	1.00	1519		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMLTA	1.00	1524	77.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JAMLF	1.00	1529		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 4725-PE51 GF\_

Method: F\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
JAMLFA	1.00	1534	80.4																	X									
CCV	1.00	1539																		X									
CCB	1.00	1543																		X									
CHULT	1.00	1548																		X									
CHULTA	1.00	1553	91.7																	X									
CHULF	1.00	1557																		X									
CHULFA	1.00	1602	91.6																	X									
JSBHT	1.00	1607																		X									
JSBHTA	1.00	1612	80.2																	X									
JSBFL	1.00	1617																		X									
JSBFLA	1.00	1622	82.7																	X									
CRCH-	1.00	1627																		X									
CRCH-A	1.00	1632	89.4																	X									
CRCHV	1.00	1637																		X									
CCB	1.00	1641																		X									
CRCHF	1.00	1646																											
CRCHFA	1.00	1651	82.5																										
CRTFB	1.00	1656																		X									
CRTFBA	1.00	1701	89.5																	X									
JSBMT	1.00	1706																		X									
JSBMTA	1.00	1711	82.0																	X									
JBMTF	1.00	1716																		X									
JBMTFA	1.00	1721	86.7																	X									
CHRDM	1.00	1726																		X									
CHRDMA	1.00	1731	72.9																	X									
CCV	1.00	1736																		X									
CCB	1.00	1740																		X									
CHRDF	1.00	1745																		X									
CHRDFA	1.00	1750	99.3																	X									
JSBLT	1.00	1755																		X									
JSBLTA	1.00	1800	67.7																	X									
JSBLF	1.00	1805																											

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U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 4725-PE51 GF\_

Method: F\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.00	2027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
S5	1.00	2031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
S15	1.00	2036		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
S25	1.00	2041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
S40	1.00	2045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
S50	1.00	2050		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
ICV	1.00	2055		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
ICB	1.00	2100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
CRA	1.00	2105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
CCV	1.00	2110		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
CCB	1.00	2114		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
CRCHF	1.00	2119		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
CHFA	1.00	2124	103.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
BLF	1.00	2129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
JSBLFA	1.00	2134	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CCV	1.00	2139		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
CCB	1.00	2144		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		

U.S. EPA - CLP  
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ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 4725-PE51 GF\_

Method: F\_

Start Date: 12/21/92

End Date: 12/22/92

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	2240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S5	1.00	2245		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S15	1.00	2250		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S25	1.00	2254		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S40	1.00	2259		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
S50	1.00	2304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ICV	1.00	2309		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ICB	1.00	2314		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CRA	1.00	2319		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CCV	1.00	2323		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CCB	1.00	2328		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JSBLF	1.00	2333		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
JSBLFA	1.00	2338	86.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
ZZZZZZ	1.00	2343		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2348		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	50.00	2353		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	50.00	2358		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0003		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0008		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0018		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	0023		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
CCB	1.00	0027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 2803-V400 GF\_

Method: F\_

Start Date: 12/21/92

End Date: 12/21/92

EPA Sample No.	D/F	Time	% R	Analytes																												
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N					
S0	1.00	1954		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	2001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S25	1.00	2007		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S50	1.00	2014		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S75	1.00	2021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S100	1.00	2027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	2033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	2040		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	2046		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRAA	1.00	2053		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	2059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	2105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
	1.00	2112		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
NA	1.00	2118	112.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSW	1.00	2124		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSWA	1.00	2131	132.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMT	1.00	2137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMTA	1.00	2144	110.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMF	1.00	2150		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMFA	1.00	2157	117.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMT S	1.00	2203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	2210		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2216		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	2222		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 2803-V400 GF\_

Method: F\_

Start Date: 12/22/92

End Date: 12/22/92

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	0119		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S10	1.00	0125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S25	1.00	0132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S50	1.00	0139		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S75	1.00	0146		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S100	1.00	0152		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	0158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICB	1.00	0204		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRA	1.00	0211		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRAA	1.00	0217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	0224		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	0230		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHULT	1.00	0236		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHULTA	1.00	0243	111.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHULF	1.00	0249		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHULFA	1.00	0256	99.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JSBHT	1.00	0302		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JSBHTA	1.00	0309	104.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JSBFL	1.00	0315		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JSBFLA	1.00	0322	110.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRCH-	1.00	0328		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRCH-A	1.00	0335	106.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	0341		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	0347		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRCHF	1.00	0353		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRCHFA	1.00	0400	104.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRTFB	1.00	0406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRTFBA	1.00	0413	106.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JSBMT	1.00	0419		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JSBMTA	1.00	0426	116.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JBMTF	1.00	0432		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JBMTFA	1.00	0438	108.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 2803-V400 GF\_

Method: F\_

Start Date: 12/22/92

End Date: 12/22/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z	C			
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I		E	G	A	L		N	N		
CHRDM	1.00	0444																							X				
CHDMA	1.00	0451	106.3																						X				
CCV	1.00	0457																							X				
CCB	1.00	0504																							X				
CHRDF	1.00	0510																							X				
CHR DFA	1.00	0516	106.8																						X				
JSBLT	1.00	0523																							X				
JSBLTA	1.00	0529	108.7																						X				
JSBLF	1.00	0536																							X				
JSBLFA	1.00	0542	108.5																						X				
CRHLT	1.00	0548																							X				
CRHLTA	1.00	0555	119.3																						X				
LF	1.00	0601																							X				
LF FA	1.00	0608	114.6																						X				
CCV	1.00	0614																							X				
CCB	1.00	0621																							X				

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02

Instrument ID Number: 2803-V400 GF

Method: F

Start Date: 12/22/92

End Date: 12/22/92

EPA Sample No.	D/F	Time	% R	Analytes																								
				A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z	C		
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I		E	G	A	L		N	N	
S0	1.00	1709		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1716		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S25	1.00	1723		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S50	1.00	1729		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S75	1.00	1736		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S100	1.00	1742		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1749		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1755		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRAA	1.00	1808		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1814		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1821		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMT D	1.00	1827		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMMT DA	1.00	1833	115.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMFM	1.00	1840		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMFMA	1.00	1846	107.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1853		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1859		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JAMLT	1.00	1905		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMLTA	1.00	1912	110.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMLF	1.00	1918		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
JAMLFA	1.00	1925	103.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1931		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1938		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

U.S. EPA - CLP

14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02

Instrument ID Number: 3998-V20 AA

Method: CV

Start Date: 12/22/92

End Date: 12/22/92

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.00	0900																											
S0.2	1.00	0901																											
S0.5	1.00	0903																											
S1.0	1.00	0904																											
S2.5	1.00	0906																											
S5.0	1.00	0907																											
ICV	1.00	0909																											
ICB	1.00	0910																											
CRA	1.00	0912																											
CCV	1.00	0913																											
CCB	1.00	0915																											
PBW	1.00	0916																											
SW	1.00	0918																											
MMT	1.00	0919																											
JAMMF	1.00	0921																											
JAMMT S	1.00	0922																											
JAMMT D	1.00	0924																											
JAMFM	1.00	0925																											
ZZZZZZ	1.00	0927																											
JAMLT	1.00	0928																											
JAMLF	1.00	0930																											
CCV	1.00	0931																											
CCB	1.00	0933																											
CHULT	1.00	0934																											
CHULF	1.00	0936																											
JSBHT	1.00	0937																											
JSBFL	1.00	0939																											
CRCH-	1.00	0940																											
CRCHF	1.00	0942																											
CRTFB	1.00	0943																											
JSBMT	1.00	0945																											
JBMTF	1.00	0946																											

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14  
ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Instrument ID Number: 3998-V20 AA

Method: CV

Start Date: 12/22/92

End Date: 12/22/92

EPA Sample No.	D/F	Time	% R	Analytes																						
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N
CHRDM	1.00	0948		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
CCV	1.00	0949		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
CCB	1.00	0951		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
CHRDF	1.00	0952		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
JSBLT	1.00	0954		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
JSBLF	1.00	0955		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
CRHLT	1.00	0957		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
CRHLF	1.00	0958		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
ZZZZZ	1.00	1000		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZ	1.00	1001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZ	1.00	1003		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZ	1.00	1004		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZ	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1007		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
CCB	1.00	1009		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 ICS Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	500000	500000	475510	479310.0	95.9	467040	470970.0	94.2
Antimony								
Arsenic								
Barium	0	500	7	488.3	97.7	6	480.2	96.0
Beryllium	0	500	1	460.5	92.1	1	450.9	90.2
Cadmium								
Calcium	500000	500000	474510	476850.0	95.4	461270	464760.0	93.0
Chromium	0	500	-17	446.7	89.3	-16	438.7	87.7
Cobalt	0	500	2	448.6	89.7	1	429.3	85.9
Copper	0	500	4	468.8	93.8	1	458.4	91.7
Iron	200000	200000	181120	182200.0	91.1	176770	178300.0	89.2
Lead								
Magnesium	500000	500000	489920	493300.0	98.7	482410	485870.0	97.2
Manganese	0	500	-13	441.4	88.3	-12	432.4	86.5
Mercury								
Nickel	0	1000	-25	845.2	84.5	-26	830.0	83.0
Potassium								
Selenium								
Silver	0	1000	-33	901.6	90.2	-34	880.0	88.0
Sodium								
Thallium								
Vanadium	0	500	4	474.2	94.8	4	466.4	93.3
Zinc	0	1000	-8	907.6	90.8	-10	896.2	89.6

FORM IV - IN

IILMO2.1

AR318883

U.S. EPA - CLP

4  
ICP INTERFERENCE CHECK SAMPLE

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 ICS Source: LLI \_\_\_\_\_

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium	0	1000	29	869.2	86.9	29	860.3	86.0
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

FORM IV - IN

ILMO2.1

AR3T8884<sup>51</sup>

U.S. EPA - CLP

5A  
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

JAMMT S

Lab Name: LANCASTER LABORATORIES

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CRT02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	3540.1000	1989.0000	2000.00	77.6		P
Antimony	75-125	496.7000	22.0000	500.00	99.3		P
Arsenic	75-125	43.2400	1.0000	40.00	108.1		F
Barium	75-125	1960.9000	68.8800	2000.00	94.6		P
Beryllium	75-125	48.7100	1.0000	50.00	97.4		P
Cadmium	75-125	47.0500	3.0000	50.00	94.1		P
Calcium							NR
Chromium	75-125	205.3600	8.0000	200.00	102.7		P
Cobalt	75-125	484.1700	5.0000	500.00	96.8		P
Copper	75-125	247.6200	5.0000	250.00	99.0		P
Iron	75-125	2841.2000	2221.1000	1000.00	62.0	N	P
Lead	75-125	20.0800	2.8700	20.00	86.0		F
Magnesium							NR
Manganese	75-125	581.8100	112.5400	500.00	93.9		P
Mercury	75-125	1.0100	0.1000	1.00	101.0		CV
Nickel	75-125	494.5100	8.0000	500.00	98.9		P
Potassium							NR
Selenium	75-125	9.2900	1.0000	10.00	92.9		F
Silver	75-125	43.6700	11.0000	50.00	87.3		P
Sodium							NR
Thallium	75-125	53.1000	2.0000	50.00	106.2		F
Vanadium	75-125	481.3000	6.0000	500.00	96.3		P
Zinc	75-125	558.5400	74.8600	500.00	96.7		P
Cyanide							NR

Comments:

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U.S. EPA - CLP

5B  
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

JAMMT A

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water) : WATER\_ Level (low/med): LOW\_

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Added (SA)	%R	Q	M
Aluminum							NR
Antimony							NR
Arsenic							NR
Barium							NR
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium							NR
Cobalt							NR
Copper							NR
Iron		2465.50	2221.10	500.0	48.9		P
Lead							NR
Magnesium							NR
Manganese							NR
Mercury							NR
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR
Cyanide							NR

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

U.S. EPA - CLP

6  
DUPLICATES

EPA SAMPLE NO.

JAMMT D

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Level (low/med): LOW\_

% Solids for Sample: 0 % Solids for Duplicate: 0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1989.0000		2121.7000		6.5		P
Antimony		22.0000	U	22.0000	U			P
Arsenic		1.0000	U	1.0000	U			F
Barium		68.8800	B	69.6900	B	1.2		P
Beryllium		1.0000	U	1.0000	U			P
Cadmium		3.0000	U	3.0000	U			P
Calcium	5000.0	17637.0000		18093.0000		2.6		P
Chromium		8.0000	U	8.0000	U			P
Cobalt		5.0000	U	5.0000	U			P
Copper		5.0000	U	5.0000	U			P
Iron		2221.1000		2372.3000		6.6		P
Lead	3.0	2.8700	B	5.8100		67.7		F
Magnesium	5000.0	7131.8000		7331.4000		2.8		P
Manganese		112.5400		116.6000		3.5		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		8.0000	U	8.0000	U			P
Potassium	5000.0	5921.4000		6049.5000		2.1		P
Selenium		1.0000	U	1.0000	U			F
Silver		11.0000	U	11.0000	U			P
Sodium	5000.0	10436.0000		10601.0000		1.6		P
Thallium		2.0000	U	2.0000	U			F
Vanadium		6.0000	U	6.0000	U			P
Zinc	20.0	74.8600		78.5600		4.8		P
Cyanide								NR

*ESCDL*

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7  
LABORATORY CONTROL SAMPLE

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 Solid LCS Source: \_\_\_\_\_  
 Aqueous LCS Source: LLI \_\_\_\_\_

Analyte	Aqueous (ug/L)			Solid (mg/kg)				%R
	True	Found	%R	True	Found	C	Limits	
Aluminum	2000.0	1920.60	96.0					
Antimony	500.0	521.37	104.3					
Arsenic	40.0	40.66	101.6					
Barium	2000.0	2024.00	101.2					
Beryllium	50.0	52.59	105.2					
Cadmium	50.0	47.79	95.6					
Calcium	4000.0	4075.90	101.9					
Chromium	200.0	216.52	108.3					
Cobalt	500.0	511.08	102.2					
Copper	250.0	260.88	104.4					
Iron	1000.0	1040.60	104.1					
Lead	20.0	20.79	104.0					
Magnesium	2000.0	1916.60	95.8					
Manganese	500.0	518.94	103.8					
Mercury	1.0	1.02	102.0					
Nickel	500.0	524.62	104.9					
Potassium	4000.0	4020.40	100.5					
Selenium	10.0	10.17	101.7					
Silver	50.0	45.92	91.8					
Sodium	4000.0	4421.70	110.5					
Thallium	50.0	51.20	102.4					
Vanadium	500.0	506.61	101.3					
Zinc	500.0	528.94	105.8					
Cyanide								



FORM VII - IN

ILMO2.1

AR318888 45



U.S. EPA - CLP

9  
ICP SERIAL DILUTION

EPA SAMPLE NO.

JAMMT L

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_

Matrix (soil/water): WATER Level (low/med): LOW\_

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1989.00		2225.35		11.9		P
Antimony	22.00	U	110.00	U			P
Arsenic							
Barium	68.88	B	72.05	B	4.6		P
Beryllium	1.00	U	5.00	U			P
Cadmium	3.00	U	15.00	U			P
Calcium	17637.00		17581.50	B	0.3		P
Chromium	8.00	U	40.00	U			P
Cobalt	5.00	U	25.00	U			P
Copper	5.00	U	25.00	U			P
Iron	2221.10		2217.95		0.1		P
Lead							
Magnesium	7131.80		7040.50	B	1.3		P
Manganese	112.54		109.65		2.6		P
Mercury							
Nickel	8.00	U	40.00	U			P
Potassium	5921.40		6023.50	B	1.7		P
Selenium							
Silver	11.00	U	55.00	U			P
Sodium	10436.00		10744.50	B	3.0		P
Thallium							
Vanadium	6.00	U	30.00	U			P
Zinc	74.86		121.00		61.6		P

45010

450x10L



FORM IX - IN

ILMO2.1

AR318890

17



VERIFICATION OF INSTRUMENT PARAMETERS

AR3T889T<sup>48</sup>

U.S. EPA - CLP

10  
Instrument Detection Limits (Quarterly)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 Date: 10/15/92  
 Flame AA ID Number : \_\_\_\_\_  
 Furnace AA ID Number : \_\_\_\_\_

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	57.0	P
Antimony	206.84		60	22.0	P
Arsenic			10		NR
Barium	493.41		200	4.0	P
Beryllium	313.04		5	1.0	P
Cadmium	226.50		5	3.0	P
Calcium	317.93		5000	23.0	P
Chromium	267.72		10	8.0	P
Cobalt	228.62		50	5.0	P
Copper	324.75		25	5.0	P
Iron	259.94		100	7.0	P
Lead			3		NR
Magnesium	279.08		5000	45.0	P
Manganese	257.61		15	1.0	P
Mercury			0.2		NR
Nickel	231.60		40	8.0	P
Potassium	766.49		5000	132.0	P
Selenium			5		NR
Silver	328.07		10	11.0	P
Sodium	589.59		5000	72.0	P
Thallium			10		NR
Vanadium	292.40		50	6.0	P
Zinc	213.86		20	4.0	P

Comments:

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10  
Instrument Detection Limits (Quarterly)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: \_\_\_\_\_ Date: 10/15/92  
 Flame AA ID Number : 3998-V20\_AA\_  
 Furnace AA ID Number : \_\_\_\_\_

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.65		0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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U.S. EPA - CLP

10  
Instrument Detection Limits (Quarterly)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: \_\_\_\_\_ Date: 10/15/92  
 Flame AA ID Number : \_\_\_\_\_  
 Furnace AA ID Number : 2803-V400\_GF

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium	276.80	BD	10	2.0	F
Vanadium			50		NR
Zinc			20		NR

Comments:

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10  
Instrument Detection Limits (Quarterly)

Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: \_\_\_\_\_ Date: 10/15/92  
 Flame AA ID Number : \_\_\_\_\_  
 Furnace AA ID Number : 3812-V40Z\_GF

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	283.30	BZ	3	1.0	F
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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U.S. EPA - CLP

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Instrument Detection Limits (Quarterly)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: \_\_\_\_\_ Date: 10/15/92  
 Flame AA ID Number : \_\_\_\_\_  
 Furnace AA ID Number : 4724-PE51\_GF

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	193.70	BZ	10	1.0	F
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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AR318896<sup>56</sup>

U.S. EPA - CLP

10  
Instrument Detection Limits (Quarterly)

Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: \_\_\_\_\_ Date: 10/15/92  
 Flame AA ID Number : \_\_\_\_\_  
 Furnace AA ID Number : 4725-PE51\_GF

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.00	BZ	5	1.0	F
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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U.S. EPA - CLP

11A  
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 Date: 01/15/92

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		Al	Ca	Fe	Mg	BE_
Aluminum	308.22	0.0000000	0.0001640	0.0000000	0.0002340	0.0000000
Antimony	206.84	-0.0000120	0.0000000	-0.0001220	0.0000000	0.0000000
Arsenic	193.70	-0.0071120	0.0000000	-0.0071120	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	-0.0000320	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	-0.0000390	0.0000000	-0.0000710	0.0000090	0.0000000
Calcium	317.93	0.0000000	0.0000000	-0.0000170	0.0003960	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000050	0.0000080	0.0000000
Cobalt	228.62	0.0000000	0.0000000	-0.0000040	-0.0000020	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000110	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000320	0.0000000	0.0000600	0.0000000
Lead	220.35	-0.0009830	-0.0000110	0.0000000	-0.0000190	0.0000000
Magnesium	279.08	0.0000000	0.0000890	0.0002080	0.0000000	-0.0031410
Manganese	257.61	-0.0005890	0.0000000	0.0000460	-0.0000280	0.0000000
Mercury						
Nickel	231.60	0.0000100	0.0000000	0.0000810	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0002140	0.0000000	-0.0000270	0.0000000
Selenium	196.03	0.0002130	0.0000170	0.0000420	-0.0000810	0.0000000
Silver	328.07	0.0000000	0.0000170	0.0000630	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	377.57	0.0006790	-0.0002420	0.0000460	0.0000110	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0000300	0.0000000	0.0000000
Zinc	213.86	0.0000350	0.0000000	0.0001160	0.0000380	0.0000000

Comments:

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11B  
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER LABORATORIES Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 Date: 01/15/92

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		CO_	CR_	CU_	K_	MN_
Aluminum	308.22	0.0001860	0.0002450	0.0000420	0.0000000	0.0013450
Antimony	206.84	-0.0038310	0.0070110	-0.0000150	0.0000000	-0.0001910
Arsenic	193.70	-0.0030800	0.0009500	0.0000180	0.0000000	-0.0004130
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000180	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000320	-0.0000120	0.0000120	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0009140	0.0000000	0.0000000	0.0003530
Chromium	267.72	-0.0000760	0.0000000	-0.0000150	0.0000000	-0.0011240
Cobalt	228.62	0.0000000	0.0000750	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000570	0.0000000	0.0000000	0.0000000	0.0000390
Iron	259.94	0.0000810	0.0001150	0.0000000	0.0000000	0.0008980
Lead	220.35	0.0002700	-0.0010390	-0.0000110	0.0000000	0.0000920
Manganese	279.08	-0.0018810	-0.0007860	0.0000000	0.0001870	-0.0080910
Manganese	257.61	0.0000000	0.0000000	-0.0000770	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0015590	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0001330	0.0000000	0.0000000
Selenium	196.03	0.0005990	-0.0002980	0.0004380	0.0000000	0.0002750
Silver	328.07	0.0000120	0.0000420	0.0000740	0.0000000	0.0001340
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	377.57	0.0001330	-0.0007970	0.0000000	0.0000000	-0.0002470
Vanadium	292.40	0.0000000	-0.0022240	-0.0000640	0.0000000	-0.0001760
Zinc	213.86	0.0000000	0.0000620	0.0043410	0.0000000	0.0000000

Comments:

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11B  
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 Date: 01/15/92

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		MO_	SI_	SR_	TI_	V_
Aluminum	308.22	0.0089550	0.0105440	0.0000000	0.0024810	0.0228200
Antimony	206.84	0.0048890	0.0000000	0.0000000	0.0011430	-0.0017710
Arsenic	193.70	0.0010720	0.0000000	0.0000000	-0.0000120	0.0055100
Barium	493.41	0.0000120	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000190	0.0000000	0.0000000	-0.0000350	0.0029800
Cadmium	226.50	0.0001370	0.0000000	0.0000000	0.0002920	-0.0000150
Calcium	317.93	0.0007860	0.0000000	0.0000000	0.0007140	0.0008280
Chromium	267.72	-0.0012330	0.0000000	0.0000000	0.0001710	-0.0880700
Cobalt	228.62	-0.0017320	0.0000000	0.0000000	0.0017060	0.0000300
Copper	324.75	0.0006890	0.0000000	0.0000000	0.0003140	0.0000620
Iron	259.94	0.0003620	0.0000000	0.0000000	0.0002420	0.0002960
Lead	220.35	-0.0019300	0.0000000	0.0000000	0.0003340	-0.0003050
Magnesium	279.08	-0.0215500	0.0000000	0.0001940	-0.0036750	-0.0003240
Manganese	257.61	-0.0001860	0.0000000	0.0000000	0.0000430	-0.0001500
Mercury						
Nickel	231.60	-0.0026600	0.0000000	0.0000000	0.0000000	-0.0004560
Potassium	766.49	0.0018950	0.0000000	0.0000000	0.0002270	0.0002670
Selenium	196.03	0.0001070	0.0000000	0.0000000	-0.0003270	0.0002030
Silver	328.07	0.0006400	0.0000000	0.0000000	0.0002520	0.0002910
Sodium	589.59	0.0004883	0.0000000	0.0000000	-0.0049410	0.0007290
Thallium	377.57	0.0000000	0.0000000	0.0023740	-0.0550300	-0.0042380
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0003140	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000360	0.0002510

Comments:

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U.S. EPA - CLP

12  
ICP LINEAR RANGES (QUARTERLY)

Lab Name: LANCASTER LABORATORIES \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: CRT02\_  
 ICP ID Number: 2360-ICP1100 Date: 10/15/92

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	6.00	600000.0	P
Antimony	6.00	200000.0	P
Arsenic	6.00	200000.0	P
Barium	6.00	100000.0	P
Beryllium	6.00	10000.0	P
Cadmium	6.00	100000.0	P
Calcium	6.00	600000.0	P
Chromium	6.00	100000.0	P
Cobalt	6.00	100000.0	P
Copper	6.00	100000.0	P
Iron	6.00	250000.0	P
Lead	6.00	100000.0	P
Magnesium	6.00	800000.0	P
Manganese	6.00	100000.0	P
Mercury			NR
Nickel	6.00	100000.0	P
Potassium	6.00	900000.0	P
Selenium	6.00	200000.0	P
Silver	6.00	50000.0	P
Sodium	6.00	900000.0	P
Thallium	6.00	200000.0	P
Vanadium	6.00	100000.0	P
Zinc	6.00	100000.0	P

Comments:

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AR318901 58

PREPARATION AND RUN LOGS

59

AR318902







RAW DATA

AR318906

37



ICP DATA

28

AR318907

Run Name: 9235402I11

Data Reviewed By: *NAJ 12-20-92*

Data Verified By: *Max Inaney 12-21-92*

LANCASTER LABORATORIES

PAGE: 1

INSTRUMENT ID: 02360

1 SO *SO* 12/19/92 22:15

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	24.00000	8.333	22.0000	26.0000	24.0000	_____	_____
__Al	554.00000	0.361	556.000	552.000	554.000	_____	_____
__As	23.66666	6.454	22.0000	24.0000	25.0000	_____	_____
__B	5.33333	28.64	5.00000	7.00000	4.00000	_____	_____
__Ba	50.00000	0.000	50.0000	50.0000	50.0000	_____	_____
__Be	22.00000	0.000	22.0000	22.0000	22.0000	_____	_____
__Ca	574.00000	0.000	574.000	574.000	574.000	_____	_____
__Cd	-0.66666	346.4	-2.0000	2.00000	-2.0000	_____	_____
__Co	-0.14814	1875.	1.11111	1.77777	-3.3333	_____	_____
__Cr	10.85186	51.66	17.2222	6.66668	8.66668	_____	_____
__Cu	12.00000	16.66	14.0000	10.0000	12.0000	_____	_____
__Fe	10.00000	20.00	8.00000	12.0000	10.0000	_____	_____
__K	254.66667	0.453	254.000	256.000	254.000	_____	_____
__Li	0.00000	0.000	0.00000	0.00000	0.00000	_____	_____
__Mg	8.00000	50.00	12.0000	8.00000	4.00000	_____	_____
__Mn	4.33333	35.25	3.00000	4.00000	6.00000	_____	_____
__Mo	4.00000	50.00	6.00000	4.00000	2.00000	_____	_____
__Na	143.00000	0.699	143.000	142.000	144.000	_____	_____
__Ni	3.66666	68.63	1.00000	6.00000	4.00000	_____	_____
__P	4.31034	55.25	6.00000	1.58621	5.34483	_____	_____
__Pb	3.99998	34.64	4.79998	4.79998	2.39999	_____	_____
__Sb	0.00000	0.000	-2.0000	2.00000	0.00000	_____	_____
__Se	8.66666	81.04	16.0000	8.00000	2.00000	_____	_____
__Si	32.66666	9.352	30.0000	32.0000	36.0000	_____	_____
__Sn	0.66666	173.2	2.00000	0.00000	0.00000	_____	_____
__Sr	1.00000	100.0	1.00000	0.00000	2.00000	_____	_____
__Ti	68.00000	7.781	72.0000	62.0000	70.0000	_____	_____
__Tl	19.33333	48.88	30.0000	16.0000	12.0000	_____	_____
__V	2.66666	43.30	2.00000	2.00000	4.00000	_____	_____
__Zn	42.00000	0.000	42.0000	42.0000	42.0000	_____	_____

AR318908

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 2

INSTRUMENT ID: 02360

2 S1 S 12/19/92 22:19

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ba	8381.33300	1.088	8421.00	8446.00	8277.00	_____	_____
__Cd	15219.00000	0.783	15276.0	15299.0	15082.0	_____	_____
__Cr	21792.14843	0.900	21815.2	21975.8	21585.3	_____	_____
__Cu	16009.00000	1.028	16068.0	16136.0	15823.0	_____	_____
__Fe	11339.00000	0.915	11386.0	11411.0	11220.0	_____	_____
__Mn	8186.33349	0.882	8216.00	8239.00	8104.00	_____	_____
__Mo	70637.00000	0.869	70912.0	71066.0	69933.0	_____	_____
__Ni	21818.33398	0.825	21860.0	21974.0	21621.0	_____	_____
__Pb	18771.19921	0.911	18840.5	18896.5	18576.4	_____	_____
__Zn	10730.00000	0.643	10760.0	10779.0	10651.0	_____	_____

AR318909 50

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 3

INSTRUMENT ID: 02360

3 S2 S 12/19/92 22:23

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__As	1663.66662	1.249	1640.00	1672.00	1679.00	_____	_____
__Be	1537.33337	0.762	1524.00	1542.00	1546.00	_____	_____
__Co	3447.81469	1.276	3401.33	3453.22	3488.88	_____	_____
__Li	16497.33398	0.474	16407.0	16538.0	16547.0	_____	_____
__P	5553.24121	0.692	5522.48	5540.89	5596.34	_____	_____
__Sb	9947.66699	0.537	9886.00	9980.00	9977.00	_____	_____
__Se	4008.66674	0.923	3966.00	4028.00	4032.00	_____	_____
__Si	6539.33349	1.139	6464.00	6541.00	6613.00	_____	_____
__Sn	3900.00000	0.712	3868.00	3914.00	3918.00	_____	_____
__Sr	9360.00000	0.669	9288.00	9390.00	9402.00	_____	_____
__Ti	24050.66601	0.674	23880.0	24069.0	24203.0	_____	_____
__Tl	1245.66662	0.858	1240.00	1239.00	1258.00	_____	_____
__V	3479.66674	0.692	3452.00	3491.00	3496.00	_____	_____

AR318910

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 4

INSTRUMENT ID: 02360

4 S3 S 12/19/92 22:28

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	1048.66662	1.588	1062.00	1054.00	1030.00	_____	_____
__B	1864.00000	0.107	1862.00	1866.00	1864.00	_____	_____

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AR318911

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 5

INSTRUMENT ID: 02360

5 S4 S 12/19/92 22:31

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
<u>  </u> K	13258.66699	0.533	13298.0	13301.0	13177.0	<u>      </u>	<u>      </u>
<u>  </u> Na	59632.33203	0.401	59612.0	59881.0	59404.0	<u>      </u>	<u>      </u>

AR318912 9.3

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 6

INSTRUMENT ID: 02360

6 S5 S 12/19/92 22:33

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Al	26733.33398	0.925	27014.0	26547.0	26639.0	_____	_____
__Ca	189651.67187	0.946	191691.	188306.	188958.	_____	_____
__Mg	30736.00000	0.900	31034.0	30487.0	30687.0	_____	_____

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AR318913

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 7

INSTRUMENT ID: 02360

7 ICV 12/19/92 22:36

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.47806	0.847	0.48130	0.47935	0.47352	_____	_____
___Al	24.39757	1.063	24.4893	24.5987	24.1045	_____	_____
___As	2.10778	1.424	2.08332	2.14128	2.09872	_____	_____
___B	1.00395	1.214	1.00750	1.01398	0.99038	_____	_____
___Ba	5.07988	1.339	5.10589	5.13109	5.00267	_____	_____
___Be	0.48935	1.291	0.49084	0.49479	0.48242	_____	_____
___Ca	50.22468	0.984	50.4205	50.5913	49.6621	_____	_____
___Cd	4.92920	0.883	4.92393	4.97516	4.88850	_____	_____
___Co	1.00118	1.135	1.00269	1.01172	0.98914	_____	_____
___Cr	5.23104	0.980	5.25303	5.26768	5.17243	_____	_____
___Cu	4.95136	1.256	4.97755	4.99620	4.88032	_____	_____
___Fe	5.03671	1.053	5.05165	5.08071	4.97777	_____	_____
___K	50.95428	1.664	51.0310	51.7613	50.0704	_____	_____
___Li	25.90547	1.461	26.0590	26.1832	25.4740	_____	_____
___Mg	24.16545	1.188	24.3045	24.3567	23.8351	_____	_____
___Mn	5.02919	1.029	5.05406	5.06386	4.96966	_____	_____
___Mo	25.03213	1.037	25.1080	25.2454	24.7428	_____	_____
___Na	52.50534	0.590	52.5585	52.7854	52.1719	_____	_____
___Ni	9.92718	1.075	9.96375	10.0108	9.80693	_____	_____
___P	25.63397	0.610	25.5574	25.8140	25.5304	_____	_____
___Pb	25.40632	0.962	25.4491	25.6266	25.1431	_____	_____
___Sb	5.17505	0.965	5.19895	5.20860	5.11761	_____	_____
___Se	2.07569	3.915	2.08066	2.15437	1.99205	_____	_____
___Si	1.94346	0.844	1.94521	1.95894	1.92625	_____	_____
___Sn	5.00657	0.806	5.03725	5.02166	4.96081	_____	_____
___Sr	1.04500	1.319	1.05020	1.05544	1.02937	_____	_____
___Ti	2.07159	1.358	2.07938	2.09502	2.04037	_____	_____
___Tl	5.38027	0.813	5.38778	5.41979	5.33323	_____	_____
___V	2.07869	1.464	2.09529	2.09722	2.04356	_____	_____
___Zn	5.02654	0.840	5.04003	5.06039	4.97921	_____	_____

AR318914<sup>95</sup>



Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 8

INSTRUMENT ID: 02360

8 ICB 12/19/92 22:40

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	-0.00162	151.1	0.00097	-0.0039	-0.0019	_____	_____
__Al	-0.00884	107.6	-0.0000	-0.0189	-0.0075	_____	_____
__As	-0.01115	27.38	-0.0111	-0.0080	-0.0142	_____	_____
__B	-0.00070	176.1	-0.0014	-0.0014	0.00072	_____	_____
__Ba	-0.00000	34.09	-0.0000	-0.0000	-0.0000	_____	_____
__Be	0.00001	35.15	0.00001	0.00002	0.00001	_____	_____
__Ca	0.00105	360.5	0.00423	-0.0031	0.00211	_____	_____
__Cd	0.00087	86.64	0.00043	0.00175	0.00043	_____	_____
__Co	-0.00085	100.7	-0.0010	0.00009	-0.0015	_____	_____
__Cr	-0.00310	79.00	-0.0015	-0.0059	-0.0018	_____	_____
__Cu	-0.00000	13841	0.00124	-0.0018	0.00062	_____	_____
__Fe	-0.00176	100.0	0.00000	-0.0035	-0.0017	_____	_____
__K	-0.00000	1009	-0.0256	-0.0256	0.05126	_____	_____
__Li	0.00000	103.1	0.00000	0.00000	0.00000	_____	_____
__Mg	-0.01953	0.080	-0.0195	-0.0195	-0.0195	_____	_____
__Mn	-0.00081	229.2	-0.0004	-0.0028	0.00081	_____	_____
__Mo	0.00259	103.1	0.00566	0.00071	0.00141	_____	_____
__Na	0.04202	40.01	0.04201	0.02520	0.05884	_____	_____
__Ni	0.00031	590.4	0.00215	-0.0015	0.00031	_____	_____
__P	-0.06683	26.01	-0.0863	-0.0531	-0.0609	_____	_____
__Pb	-0.00462	212.9	0.00106	0.00105	-0.0159	_____	_____
__Sb	0.00603	173.2	0.01205	0.01208	-0.0060	_____	_____
__Se	-0.00666	184.9	-0.0008	-0.0208	0.00166	_____	_____
__Si	0.00255	120.1	0.00563	-0.0005	0.00253	_____	_____
__Sn	-0.00342	228.7	0.00341	-0.0017	-0.0119	_____	_____
__Sr	-0.00010	200.4	-0.0001	-0.0003	0.00010	_____	_____
__Ti	-0.00069	249.8	-0.0012	-0.0020	0.00125	_____	_____
__Tl	0.01080	571.3	0.05421	-0.0598	0.03810	_____	_____
__V	-0.00479	34.88	-0.0038	-0.0067	-0.0038	_____	_____
__Zn	0.00031	169.1	0.00092	0.00001	-0.0000	_____	_____

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Run Name: 9235402I11

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	-0.03274	3.847	-0.0321	-0.0341	-0.0318	_____	_____
__Al	475.51550	0.629	474.111	473.482	478.952	_____	_____
__As	0.20417	7.132	0.20383	0.18978	0.21890	_____	_____
__B	0.28479	0.756	0.28612	0.28231	0.28596	_____	_____
__Ba	0.00659	20.80	0.00818	0.00577	0.00583	_____	_____
__Be	0.00130	0.651	0.00130	0.00130	0.00131	_____	_____
__Ca	474.51574	0.531	473.605	472.575	477.366	_____	_____
__Cd	0.02987	2.190	0.02921	0.03052	0.02989	_____	_____
__Co	0.00199	84.08	0.00142	0.00387	0.00067	_____	_____
__Cr	-0.01667	14.05	-0.0155	-0.0151	-0.0193	_____	_____
__Cu	0.00427	50.79	0.00677	0.00303	0.00300	_____	_____
__Fe	181.12896	0.575	180.633	180.427	182.326	_____	_____
__K	0.21836	0.036	0.21832	0.21831	0.21845	_____	_____
__Li	-0.00000	1.732	-0.0000	-0.0000	-0.0000	_____	_____
__Mg	489.92709	0.620	488.422	487.931	493.427	_____	_____
__Mn	-0.01281	1.047	-0.0127	-0.0127	-0.0129	_____	_____
__Mo	-0.04863	1.732	-0.0487	-0.0494	-0.0477	_____	_____
__Na	0.14296	11.75	0.15977	0.14296	0.12616	_____	_____
__Ni	-0.02545	8.519	-0.0229	-0.0266	-0.0268	_____	_____
__P	-1.72598	4.243	-1.6789	-1.8103	-1.6886	_____	_____
__Pb	0.02710	48.02	0.02285	0.04172	0.01674	_____	_____
__Sb	-0.00341	610.4	0.01908	-0.0221	-0.0072	_____	_____
__Se	-0.07799	36.69	-0.0623	-0.1110	-0.0605	_____	_____
__Si	0.00225	441.9	0.01375	-0.0038	-0.0031	_____	_____
__Sn	0.08762	13.03	0.07457	0.09242	0.09585	_____	_____
__Sr	0.01791	1.377	0.01805	0.01763	0.01805	_____	_____
__Ti	0.01222	3.948	0.01250	0.01166	0.01250	_____	_____
__Tl	-0.40034	40.44	-0.2145	-0.4750	-0.5114	_____	_____
__V	0.00427	66.81	0.00713	0.00425	0.00142	_____	_____
__Zn	-0.00842	17.09	-0.0073	-0.0100	-0.0078	_____	_____

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Run Name: 9235402I11

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INSTRUMENT ID: 02360

10 . ICSAB

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.90156	1.686	0.91844	0.88892	0.89732	_____	_____
__Al	479.31124	0.919	478.367	475.454	484.112	_____	_____
__As	0.22422	25.29	0.21272	0.17414	0.28581	_____	_____
__B	0.28968	0.437	0.29098	0.28959	0.28845	_____	_____
__Ba	0.48834	0.992	0.48834	0.48350	0.49319	_____	_____
__Be	0.46052	0.857	0.46052	0.45657	0.46447	_____	_____
__Ca	476.85308	0.779	476.735	473.195	480.628	_____	_____
__Cd	0.90317	1.295	0.90710	0.89001	0.91241	_____	_____
__Co	0.44859	1.088	0.44585	0.44570	0.45423	_____	_____
__Cr	0.44670	1.415	0.44599	0.44075	0.45334	_____	_____
__Cu	0.46880	0.667	0.46922	0.46548	0.47170	_____	_____
__Fe	182.20707	0.819	182.012	180.820	183.788	_____	_____
__K	0.18030	76.82	0.21873	0.29555	0.02663	_____	_____
__Li	-0.00000	4.572	-0.0000	-0.0000	-0.0000	_____	_____
__Mg	493.30447	0.843	492.547	489.576	497.789	_____	_____
__Mn	0.44139	0.931	0.44183	0.43708	0.44527	_____	_____
__Mo	-0.04666	4.572	-0.0442	-0.0475	-0.0482	_____	_____
__Na	0.14822	6.551	0.14261	0.15943	0.14262	_____	_____
__Ni	0.84522	0.807	0.84373	0.83926	0.85267	_____	_____
__P	-1.73421	4.069	-1.6527	-1.7747	-1.7751	_____	_____
__Pb	0.95757	1.551	0.96172	0.94108	0.96992	_____	_____
__Sb	0.00359	351.8	-0.0094	0.01576	0.00450	_____	_____
__Se	-0.04829	37.03	-0.0335	-0.0431	-0.0681	_____	_____
__Si	0.01049	101.0	0.02193	0.00856	0.00099	_____	_____
__Sn	0.08589	9.752	0.08057	0.09554	0.08154	_____	_____
__Sr	0.01831	1.346	0.01845	0.01803	0.01845	_____	_____
__Ti	0.01167	11.48	0.01014	0.01264	0.01223	_____	_____
__Tl	-0.50778	16.02	-0.4201	-0.5809	-0.5222	_____	_____
__V	0.47421	0.618	0.47421	0.47128	0.47714	_____	_____
__Zn	0.90761	0.776	0.90644	0.90121	0.91516	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.01818	12.38	0.01558	0.01948	0.01948	_____	_____
__Al	0.00518	254.7	0.02043	-0.0025	-0.0023	_____	_____
__As	0.01571	19.43	0.01571	0.01876	0.01265	_____	_____
__B	-0.00073	169.8	-0.0014	0.00070	-0.0014	_____	_____
__Ba	0.00080	173.1	0.00000	0.00240	-0.0000	_____	_____
__Be	0.00893	0.055	0.00893	0.00894	0.00894	_____	_____
__Ca	0.01198	143.7	0.03173	0.00423	0.00000	_____	_____
__Cd	0.01139	6.660	0.01095	0.01095	0.01226	_____	_____
__Co	0.09953	0.984	0.09867	0.09932	0.10060	_____	_____
__Cr	0.02065	2.991	0.01994	0.02101	0.02100	_____	_____
__Cu	0.04999	2.501	0.04874	0.04998	0.05124	_____	_____
__Fe	0.00464	153.6	0.01228	0.00346	-0.0018	_____	_____
__K	0.15380	76.36	0.05128	0.28196	0.12817	_____	_____
__Li	0.00101	173.2	0.00303	0.00000	-0.0000	_____	_____
__Mg	0.00264	864.3	0.02652	0.00046	-0.0190	_____	_____
__Mn	0.02975	4.739	0.03138	0.02894	0.02894	_____	_____
__Mo	-0.00048	609.8	-0.0014	0.00282	-0.0028	_____	_____
__Na	0.06437	15.07	0.05876	0.07557	0.05877	_____	_____
__Ni	0.07842	2.698	0.08087	0.07721	0.07719	_____	_____
__P	-0.06688	105.7	-0.1191	-0.0950	0.01360	_____	_____
__Pb	-0.00035	175.4	0.00001	-0.0000	-0.0010	_____	_____
__Sb	0.12497	7.937	0.13170	0.12964	0.11358	_____	_____
__Se	0.00072	1726.	-0.0109	0.01406	-0.0009	_____	_____
__Si	0.00885	43.58	0.00886	0.01269	0.00498	_____	_____
__Sn	-0.00683	75.11	-0.0016	-0.0068	-0.0119	_____	_____
__Sr	-0.00025	96.80	-0.0005	-0.0001	-0.0001	_____	_____
__Ti	0.00140	123.9	0.00001	0.00084	0.00334	_____	_____
__Tl	-0.00179	3445.	-0.0454	-0.0289	0.06902	_____	_____
__V	0.10071	1.645	0.10262	0.09976	0.09974	_____	_____
__Zn	0.04008	2.695	0.04070	0.04071	0.03883	_____	_____

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

12 CCV

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.47481	0.853	0.47935	0.47351	0.47156	_____	_____
__Al	24.14152	0.931	24.4006	24.0246	23.9992	_____	_____
__As	2.10576	0.711	2.12297	2.09868	2.09564	_____	_____
__B	0.99685	0.919	1.00651	0.99577	0.98827	_____	_____
__Ba	5.03667	1.151	5.10349	5.00747	4.99906	_____	_____
__Be	0.48524	1.237	0.49217	0.48176	0.48177	_____	_____
__Ca	49.63462	1.139	50.2862	49.3458	49.2718	_____	_____
__Cd	4.89986	0.968	4.95414	4.87930	4.86615	_____	_____
__Co	0.98982	0.679	0.99756	0.98652	0.98539	_____	_____
__Cr	5.19383	1.128	5.26087	5.16816	5.15246	_____	_____
__Cu	4.91104	1.031	4.96935	4.88596	4.87779	_____	_____
__Fe	4.98237	1.172	5.04984	4.94952	4.94775	_____	_____
__K	50.48028	0.891	50.9924	50.1473	50.3010	_____	_____
__Li	25.71655	1.162	26.0590	25.5831	25.5074	_____	_____
__Mg	24.00026	0.933	24.2589	23.8677	23.8740	_____	_____
__Mn	4.99658	1.047	5.05652	4.97332	4.95989	_____	_____
__Mo	24.90167	1.065	25.2064	24.7237	24.7747	_____	_____
__Na	52.39329	2.086	53.5082	52.3485	51.3230	_____	_____
__Ni	9.85656	1.204	9.99335	9.78030	9.79602	_____	_____
__P	25.29309	0.478	25.4095	25.1678	25.3018	_____	_____
__Pb	25.15381	0.906	25.4171	25.0226	25.0215	_____	_____
__Sb	5.11438	0.969	5.16442	5.06525	5.11347	_____	_____
__Se	2.06327	2.102	2.11318	2.04207	2.03457	_____	_____
__Si	1.93001	0.834	1.94678	1.91468	1.92855	_____	_____
__Sn	4.97253	0.725	5.01143	4.96594	4.94021	_____	_____
__Sr	1.03663	1.142	1.05031	1.03012	1.02948	_____	_____
__Ti	2.05713	1.209	2.08585	2.04266	2.04287	_____	_____
__Tl	5.36261	2.069	5.48516	5.26896	5.33373	_____	_____
__V	2.05852	1.381	2.09132	2.04348	2.04074	_____	_____
__Zn	5.00075	0.778	5.04560	4.97552	4.98113	_____	_____

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Run Name: 9235402I11

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INSTRUMENT ID: 02360

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ELEM	AVERAGE(ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	-0.00097	100.1	0.00000	-0.0009	-0.0019	_____	_____
__Al	-0.00126	867.8	-0.0076	0.01139	-0.0075	_____	_____
__As	-0.01065	8.254	-0.0111	-0.0111	-0.0096	_____	_____
__B	0.00179	59.68	0.00287	0.00179	0.00072	_____	_____
__Ba	0.00160	86.60	0.00240	0.00240	-0.0000	_____	_____
__Be	0.00001	1.341	0.00001	0.00001	0.00001	_____	_____
__Ca	0.00176	150.9	0.00423	0.00211	-0.0010	_____	_____
__Cd	0.00218	34.64	0.00306	0.00175	0.00175	_____	_____
__Co	0.00056	211.9	-0.0008	0.00137	0.00112	_____	_____
__Cr	-0.00184	81.52	-0.0010	-0.0035	-0.0009	_____	_____
__Cu	-0.00083	86.37	-0.0000	-0.0012	-0.0012	_____	_____
__Fe	-0.00117	86.63	0.00000	-0.0017	-0.0017	_____	_____
__K	0.12816	60.00	0.05126	0.20506	0.12816	_____	_____
__Li	0.00101	173.2	0.00303	-0.0000	0.00000	_____	_____
__Mg	-0.00325	172.8	0.00324	-0.0065	-0.0065	_____	_____
__Mn	-0.00040	0.088	-0.0004	-0.0004	-0.0004	_____	_____
__Mo	0.00236	91.66	0.00424	-0.0000	0.00283	_____	_____
__Na	0.04763	20.38	0.04201	0.04203	0.05893	_____	_____
__Ni	0.00092	115.6	0.00215	0.00030	0.00030	_____	_____
__P	-0.08612	63.97	-0.0824	-0.1429	-0.0329	_____	_____
__Pb	0.00159	722.4	-0.0047	0.01492	-0.0053	_____	_____
__Sb	0.01809	38.58	0.01406	0.02616	0.01406	_____	_____
__Se	-0.00916	173.2	0.00916	-0.0183	-0.0183	_____	_____
__Si	0.00536	195.2	0.00718	0.01483	-0.0059	_____	_____
__Sn	0.00512	208.3	-0.0068	0.00855	0.01367	_____	_____
__Sr	-0.00024	49.52	-0.0001	-0.0003	-0.0003	_____	_____
__Ti	0.00027	623.7	-0.0016	0.00166	0.00083	_____	_____
__Tl	-0.04895	101.5	0.00526	-0.0597	-0.0923	_____	_____
__V	-0.00383	0.284	-0.0038	-0.0038	-0.0038	_____	_____
__Zn	0.00156	34.98	0.00093	0.00187	0.00187	_____	_____

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Run Name: 9235402I11

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INSTRUMENT ID: 02360

*AlSb BaBeCdCaCrCo CuFe Mg Mn Ni K Ag Na V Zn*

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\*\*\*\*,100-100,DF1,923541848001.1.,.

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
✓Ag	-0.00064	174.7	-0.0019	0.00000	0.00000	_____	_____
✓Al	0.02682	21.84	0.02170	0.03321	0.02555	_____	_____
___As	-0.01721	30.68	-0.0202	-0.0111	-0.0202	_____	_____
___B	0.01001	12.37	0.00929	0.00930	0.01144	_____	_____
✓Ba	0.00240	0.004	0.00240	0.00240	0.00240	_____	_____
✓Be	0.00001	1.071	0.00001	0.00001	0.00001	_____	_____
✓Ca	0.00246	24.74	0.00211	0.00317	0.00211	_____	_____
___Cd	0.00087	173.2	0.00175	-0.0008	0.00175	<i>D</i>	_____
✓Co	-0.00288	22.48	-0.0022	-0.0028	-0.0035	_____	_____
✓Cr	-0.00256	82.14	-0.0003	-0.0045	-0.0028	_____	_____
✓Cu	-0.00104	242.7	-0.0006	-0.0037	0.00125	_____	_____
✓Fe	0.02265	12.52	0.01942	0.02383	0.02471	_____	_____
___K	0.07690	115.4	0.12816	-0.0256	0.12817	_____	_____
___Li	0.00101	173.2	0.00303	-0.0000	-0.0000	_____	_____
✓Mg	-0.00869	188.4	0.00649	-0.0260	-0.0065	_____	_____
✓Mn	-0.00000	36654	-0.0004	0.00081	-0.0004	_____	_____
___Mo	-0.00236	91.55	-0.0000	-0.0042	-0.0028	_____	_____
✓Na	0.09246	36.35	0.09245	0.12608	0.05884	_____	_____
✓Ni	-0.00031	680.1	-0.0015	-0.0015	0.00213	_____	_____
___P	-0.07763	48.22	-0.0347	-0.1038	-0.0943	_____	_____
✓Pb <i>ms 12-21-92/ps</i>	-0.01348	65.78	-0.0063	-0.0234	-0.0106	_____	_____
✓Sb	0.00134	374.2	0.00600	-0.0040	0.00203	_____	_____
___Se	0.00916	178.9	-0.0058	0.00665	0.02666	_____	_____
___Si	0.12395	0.011	0.12395	0.12395	0.12393	_____	_____
___Sn	0.00513	251.5	-0.0068	0.01881	0.00342	_____	_____
___Sr	-0.00017	183.5	-0.0001	-0.0005	0.00010	_____	_____
___Ti	0.00097	98.99	0.00041	0.00041	0.00208	_____	_____
___Tl	-0.02171	511.1	-0.0597	0.10331	-0.1087	_____	_____
✓V	-0.00384	0.308	-0.0038	-0.0038	-0.0038	_____	_____
✓Zn	0.00312	35.07	0.00374	0.00376	0.00185	_____	_____

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*A15b Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Pb Na V Zn*

15 LCSW *LCSW* 12/19/92 23:12

\*\*\*, 1-1, DF1, 923541848001, 1, ,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
✓Ag	0.04592	4.910	0.04462	0.04461	0.04852	_____	_____
✓Al	1.92062	0.535	1.91221	1.93209	1.91754	_____	_____
___As	2.09550	0.587	2.08230	2.10665	2.09754	_____	_____
___B	2.08356	0.671	2.06994	2.09790	2.08284	_____	_____
✓Ba	2.02409	0.707	2.01769	2.04049	2.01409	_____	_____
✓Be	0.05259	0.028	0.05260	0.05258	0.05260	_____	_____
✓Ca	4.07592	0.765	4.05124	4.11100	4.06552	_____	_____
___Cd	0.05198	1.458	0.05110	0.05242	0.05242	<i>D</i>	_____
✓Co	0.51108	1.153	0.50807	0.51787	0.50729	_____	_____
✓Cr	0.21652	0.929	0.21484	0.21875	0.21597	_____	_____
✓Cu	0.26088	0.134	0.26068	0.26129	0.26068	_____	_____
✓Fe	1.04067	0.514	1.03714	1.04683	1.03802	_____	_____
✓K	4.02045	1.104	4.04608	3.96917	4.04609	_____	_____
___Li	2.03267	0.688	2.02459	2.04883	2.02459	_____	_____
✓Mg	1.91667	0.856	1.89928	1.93190	1.91882	_____	_____
✓Mn	0.51894	0.719	0.51568	0.52302	0.51813	_____	_____
___Mo	2.05343	0.430	2.04942	2.06357	2.04730	_____	_____
✓Na	4.42179	2.878	4.33213	4.36578	4.56746	_____	_____
✓Ni	0.52462	2.138	0.51484	0.53686	0.52217	_____	_____
___P	2.01438	1.763	2.03143	2.03815	1.97356	_____	_____
___Pb	0.49401	1.619	0.48477	0.49864	0.49863	_____	_____
✓Sb	0.52137	4.090	0.52466	0.54086	0.49858	_____	_____
___Se	2.15630	0.241	2.16214	2.15463	2.15214	_____	_____
___Si	5.03867	0.725	5.00103	5.07398	5.04100	_____	_____
___Sn	4.07029	0.693	4.05149	4.10275	4.05662	_____	_____
___Sr	1.02030	0.710	1.01770	1.02850	1.01471	_____	_____
___Ti	1.04651	0.535	1.04414	1.05290	1.04248	_____	_____
___Tl	2.11171	1.602	2.10099	2.08452	2.14962	_____	_____
✓V	0.50661	0.989	0.50371	0.51239	0.50371	_____	_____
✓Zn	0.52894	0.403	0.52647	0.53015	0.53019	_____	_____

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AR318922



Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 16

INSTRUMENT ID: 02360

Al Sb Ba Be Cd Co Cr Cu Fe Mg Mn Ni K Ag Na V Zn

16 1908350 J Amnt 12/19/92 23:17  
J\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00284	79.04	-0.0015	-0.0015	-0.0054		
X Al	1.98903	0.320	1.99634	1.98454	1.98623		
As	-0.00948	103.3	-0.0166	0.00168	-0.0134		
B	0.05021	6.258	0.05383	0.04842	0.04836		
X Ba	0.06888	2.012	0.06728	0.06968	0.06968		
X Be	0.00000	324.8	-0.0000	-0.0000	0.00001		
X Ca	17.63702	0.872	17.4790	17.6456	17.7863		
Cd	0.00201	37.49	0.00158	0.00158	0.00289	D	
X Co	0.00175	84.63	0.00124	0.00059	0.00343		
X Cr	-0.00046	215.0	-0.0000	0.00023	-0.0015		
X Cu	0.00160	118.7	0.00369	-0.0000	0.00119		
Fe	2.22117	0.735	2.20441	2.22206	2.23706		
K	5.92142	1.499	5.97268	5.97269	5.81889		
Li	-0.00101	173.2	-0.0030	-0.0000	0.00000		
X Mg	7.13184	0.760	7.08844	7.11448	7.19260		
X Mn	0.11254	1.251	0.11172	0.11172	0.11416		
Mo	0.00064	127.4	0.00111	-0.0003	0.00111		
X Na	10.43650	1.219	10.3804	10.3468	10.5821		
X Ni	0.00071	644.6	0.00010	0.00560	-0.0035		
P	0.13549	25.81	0.17542	0.11034	0.12070		
Pb	-0.00966	101.0	-0.0181	0.00099	-0.0117		
X Sb	0.00504	23.11	0.00369	0.00574	0.00568		
Se	-0.01827	23.71	-0.0207	-0.0207	-0.0132		
Si	7.66735	0.405	7.63586	7.66813	7.69807		
Sn	0.00492	216.7	-0.0070	0.01347	0.00833		
Sr	0.08932	1.022	0.08847	0.08921	0.09028		
Ti	0.09256	1.351	0.09131	0.09257	0.09381		
Tl	-0.05100	129.0	-0.0891	0.02497	-0.0888		
X V	0.00005	5670.	0.00197	0.00197	-0.0037		
X Zn	0.07486	1.436	0.07423	0.07610	0.07425		

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Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 17

INSTRUMENT ID: 02360

*Al Sb Ba Be Cd Ca Co Cu Fe Mg Mn Ni K Ag Na V Zn*

17 1908350 *Santa* 12/19/92 23:21  
UP\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.04192	2.684	0.04321	0.04126	0.04127	_____	_____
__Al	4.11933	0.282	4.11143	4.11384	4.13271	_____	_____
__As	0.20218	7.970	0.21436	0.20826	0.18390	_____	_____
__B	0.14747	0.409	0.14784	0.14678	0.14780	_____	_____
__Ba	0.55858	0.496	0.55698	0.55698	0.56178	_____	_____
__Be	0.05080	0.007	0.05080	0.05081	0.05080	_____	_____
__Ca	20.64989	0.324	20.6407	20.5878	20.7211	_____	_____
__Cd	0.49583	0.305	0.49670	0.49408	0.49670	<u>Δ</u>	_____
__Co	0.09827	1.231	0.09950	0.09708	0.09823	_____	_____
__Cr	0.52252	0.440	0.52329	0.51994	0.52435	_____	_____
__Cu	0.49607	0.384	0.49440	0.49565	0.49815	_____	_____
__Fe	2.46555	0.472	2.46320	2.45525	2.47820	_____	_____
__K	10.22351	0.868	10.2747	10.1209	10.2747	_____	_____
__Li	2.54286	0.630	2.53073	2.53680	2.56104	_____	_____
__Mg	8.79067	0.272	8.77222	8.78200	8.81779	_____	_____
__Mn	0.59740	0.204	0.59618	0.59862	0.59740	_____	_____
__Mo	2.49351	0.182	2.48832	2.49681	2.49539	_____	_____
__Na	14.36657	0.722	14.3385	14.2797	14.4814	_____	_____
__Ni	0.99527	0.296	0.99403	0.99314	0.99863	_____	_____
__P	2.55089	0.359	2.56101	2.54850	2.54314	_____	_____
__Pb	2.48866	0.208	2.48990	2.48298	2.49311	_____	_____
__Sb	0.49804	2.409	0.49437	0.48831	0.51145	_____	_____
__Se	0.20839	0.599	0.20839	0.20714	0.20964	_____	_____
__Si	7.07451	0.332	7.09932	7.05251	7.07170	_____	_____
__Sn	0.48200	1.064	0.48201	0.47688	0.48713	_____	_____
__Sr	0.18202	0.432	0.18173	0.18141	0.18291	_____	_____
__Ti	0.28521	1.500	0.28993	0.28159	0.28409	_____	_____
__Tl	0.42445	39.49	0.60959	0.28297	0.38079	_____	_____
__V	0.20850	0.683	0.20993	0.20707	0.20852	_____	_____
__Zn	0.56704	0.576	0.56674	0.56393	0.57045	_____	_____

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AR318924

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 18

INSTRUMENT ID: 02360

*A136 Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*

18 1908353 *5 Ammt* 12/19/92 23:26  
D\*\*\*, 100-100, DF1, 923541848001, 1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00216	52.02	-0.0015	-0.0015	-0.0034		
X Al	2.12175	1.269	2.11207	2.15219	2.10100		
As	-0.00618	113.3	0.00191	-0.0102	-0.0102		
B	0.04740	2.524	0.04602	0.04805	0.04812		
X Ba	0.06969	0.001	0.06969	0.06969	0.06969		
X Be	0.00000	1932.	-0.0000	-0.0000	0.00000		
X Ca	18.09362	0.792	17.9645	18.2480	18.0682		
Cd	0.00069	108.8	0.00026	0.00157	0.00025	<i>D</i>	
X Co	0.00147	89.57	-0.0000	0.00213	0.00233		
X Cr	0.00093	358.2	-0.0024	0.00094	0.00426		
X Cu	0.00348	27.40	0.00244	0.00369	0.00431		
X Fe	2.37239	0.923	2.35445	2.39681	2.36592		
K	6.04959	1.271	5.97269	6.12650	6.04959		
Li	-0.00101	173.2	-0.0000	-0.0030	-0.0000		
X Mg	7.33144	0.889	7.26418	7.39436	7.33579		
X Mn	0.11660	0.002	0.11660	0.11660	0.11660		
Mo	-0.00079	103.4	-0.0003	-0.0017	-0.0003		
X Na	10.60180	1.093	10.5149	10.7334	10.5569		
Ni	0.00253	41.78	0.00192	0.00191	0.00375		
P	0.03331	242.3	0.12608	-0.0213	-0.0048		
Pb	-0.00888	86.72	-0.0000	-0.0127	-0.0138		
X Sb	0.00302	166.6	-0.0023	0.00369	0.00769		
Se	0.00337	561.2	0.01170	0.01670	-0.0182		
Si	7.94088	1.440	7.89250	8.07149	7.85865		
Sn	0.00321	159.5	-0.0019	0.00321	0.00833		
Sr	0.09139	0.994	0.09071	0.09242	0.09103		
Ti	0.09416	2.889	0.09110	0.09632	0.09507		
Tl	-0.02932	361.7	-0.0240	-0.1379	0.07399		
X V	0.00102	162.0	0.00197	0.00197	-0.0008		
X Zn	0.07856	0.675	0.07795	0.07887	0.07887		

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AR318925

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*Al Sb Ba Be Cd Ca Cr Co Cu Fe Mn Ni K Mg Na V Zn*

19 1908352 *J Am x S* 12/19/92 23:31  
R\*\*\*, 100-100, DF1, 923541848001, 1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	0.04367	2.586	0.04302	0.04302	0.04498	_____	_____
X Al	3.54015	0.414	3.52691	3.53762	3.55591	_____	_____
As	1.96960	0.267	1.96652	1.97569	1.96658	_____	_____
B	1.96004	0.712	1.94645	1.95934	1.97433	_____	_____
X Ba	1.96093	0.775	1.94933	1.95533	1.97814	_____	_____
X Be	0.04871	0.010	0.04872	0.04871	0.04871	_____	_____
X Ca	19.16196	0.682	19.0524	19.1265	19.3068	_____	_____
Cd	0.04705	5.576	0.04705	0.04443	0.04968	<i>a</i>	_____
X Co	0.48417	1.376	0.48942	0.47667	0.48641	_____	_____
X Cr	0.20536	1.952	0.20865	0.20089	0.20653	_____	_____
X Cu	0.24762	0.434	0.24824	0.24637	0.24823	_____	_____
X Fe	2.84128	0.786	2.82422	2.83305	2.86657	_____	_____
X K	8.86550	1.001	8.96804	8.81425	8.81422	_____	_____
Li	1.85688	0.753	1.84880	1.84880	1.87305	_____	_____
X Mg	8.02625	0.614	7.99152	8.00454	8.08270	_____	_____
X Mn	0.58181	0.737	0.57773	0.58140	0.58629	_____	_____
Mo	1.92791	0.430	1.92461	1.92178	1.93735	_____	_____
X Na	12.94166	1.134	12.7791	12.9808	13.0649	_____	_____
X Ni	0.49451	0.535	0.49602	0.49145	0.49606	_____	_____
P	1.93416	3.937	1.99903	1.95314	1.85032	_____	_____
Pb	0.47564	1.150	0.46960	0.48026	0.47707	_____	_____
X Sb	0.49670	1.066	0.49068	0.49872	0.50068	_____	_____
Se	2.04515	0.736	2.04348	2.06098	2.03098	_____	_____
Si	11.05332	0.583	10.9851	11.0613	11.1134	_____	_____
Sn	3.84726	0.581	3.84128	3.82847	3.87203	_____	_____
Sr	1.03829	0.719	1.03266	1.03544	1.04677	_____	_____
Ti	1.05568	0.570	1.05915	1.04873	1.05915	_____	_____
Tl	1.96766	1.857	1.92978	2.00271	1.97050	_____	_____
X V	0.48130	0.351	0.48033	0.48031	0.48325	_____	_____
X Zn	0.55854	0.510	0.55604	0.55793	0.56164	_____	_____

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*Al Sb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*

20 1908350 *5 Amv + L* 12/19/92 23:35  
UL\*\*, 100-100, DF5, 923541848001, 1, ,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	-0.00284	34.30	-0.0038	-0.0018	-0.0028		
Al	0.44507	0.844	0.44137	0.44496	0.44889		
As	-0.00432	282.0	-0.0043	-0.0165	0.00788		
B	0.01708	3.633	0.01672	0.01671	0.01779		
Ba	0.01441	0.000	0.01441	0.01441	0.01441		
Be	0.00000	78.05	0.00000	0.00000	0.00001		
Ca	3.51636	0.525	3.49591	3.52130	3.53188		
Cd	0.00084	238.0	0.00303	-0.0009	0.00040	<i>C</i>	
Co	0.00020	599.2	-0.0011	0.00037	0.00134		
Cr	-0.00021	696.6	0.00014	0.00105	-0.0018		
Cu	-0.00001	22349	0.00248	-0.0000	-0.0025		
Fe	0.44359	0.828	0.43946	0.44653	0.44476		
K	1.20479	6.382	1.20478	1.12789	1.28169		
Li	-0.00000	28546	0.00303	-0.0000	-0.0030		
Mg	1.40813	0.706	1.41899	1.39945	1.40596		
Mn	0.02193	3.219	0.02275	0.02153	0.02152		
Mo	-0.00100	214.7	0.00135	-0.0028	-0.0014		
Na	2.14894	0.451	2.14333	2.16015	2.14334		
Ni	-0.00126	233.2	0.00210	-0.0024	-0.0034		
P	-0.03478	146.3	-0.0767	-0.0494	0.02183		
Pb	-0.00119	802.0	-0.0104	0.00874	-0.0019		
Sb	-0.00744	102.3	-0.0040	-0.0161	-0.0020		
Se	0.00083	962.8	0.00666	0.00416	-0.0083		
Si	1.61013	0.856	1.59451	1.62063	1.61525		
Sn	-0.00515	151.9	-0.0119	0.00339	-0.0068		
Sr	0.01755	0.702	0.01763	0.01763	0.01741		
Ti	0.02001	3.606	0.01918	0.02043	0.02043		
Tl	-0.02098	441.4	0.05498	0.00625	-0.1242		
V	-0.00191	87.17	-0.0009	-0.0009	-0.0038		
Zn	0.02420	0.077	0.02418	0.02421	0.02422		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*A136BaBeCdCaCrCoCuFeMgMnNiKAgNaVZn*

21 1908351 *Y Amnt* 12/19/92 23:40  
\*\*\*, 100-100, DF1, 923541848001, 1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00126	88.81	-0.0019	-0.0019	0.00003	_____	_____
X Al	0.02135	36.26	0.01343	0.02890	0.02170	_____	_____
As	-0.00470	171.3	-0.0138	0.00138	-0.0016	_____	_____
B	0.05044	2.460	0.05113	0.04900	0.05118	_____	_____
X Ba	0.07322	1.639	0.07442	0.07322	0.07202	_____	_____
X Be	0.00000	57.54	0.00001	0.00000	0.00001	_____	_____
X Ca	18.28296	0.989	18.4548	18.2998	18.0941	_____	_____
Cd	0.00035	367.8	-0.0009	0.00035	0.00167	<i>5</i>	_____
X Co	-0.00069	344.8	-0.0024	0.00203	-0.0017	_____	_____
X Cr	-0.00305	35.92	-0.0031	-0.0041	-0.0019	_____	_____
X Cu	0.00145	194.1	-0.0012	0.00124	0.00437	_____	_____
X Fe	0.21662	1.627	0.22015	0.21662	0.21310	_____	_____
X K	6.07524	0.730	6.12651	6.04961	6.04961	_____	_____
Li	-0.00101	173.2	-0.0030	-0.0000	-0.0000	_____	_____
X Mg	7.27630	0.607	7.32296	7.27088	7.23506	_____	_____
X Mn	0.08492	2.876	0.08737	0.08492	0.08248	_____	_____
Mo	0.00045	474.3	0.00281	-0.0000	-0.0014	_____	_____
X Na	11.11404	0.698	11.2036	11.0692	11.0692	_____	_____
X Ni	-0.00215	49.29	-0.0015	-0.0033	-0.0015	_____	_____
P	-0.03611	67.27	-0.0081	-0.0521	-0.0479	_____	_____
Pb	-0.00265	265.5	0.00533	-0.0053	-0.0079	_____	_____
X Sb	0.01472	31.43	0.02007	0.01206	0.01204	_____	_____
Se	-0.00528	263.4	-0.0202	0.00721	-0.0027	_____	_____
Si	5.05740	0.537	5.08200	5.06202	5.02818	_____	_____
Sn	0.00409	180.6	0.00836	0.00837	-0.0044	_____	_____
Sr	0.09149	0.884	0.09242	0.09114	0.09092	_____	_____
Ti	0.00041	199.5	0.00041	-0.0004	0.00125	_____	_____
Tl	0.01064	88.29	0.02149	0.00520	0.00523	_____	_____
X V	-0.00285	57.95	-0.0038	-0.0009	-0.0038	_____	_____
X Zn	0.04835	0.022	0.04836	0.04835	0.04834	_____	_____

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AR318928

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 22

INSTRUMENT ID: 02360

*A I Sb Ba Be Cd Ca Cr Co Cu Fe Ni Mn Ni K Na V Zn*  
22 1908354 *AmFm* 12/19/92 23:44  
\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00225	66.04	-0.0019	-0.0009	-0.0038		
X Al	0.00628	65.10	0.00587	0.00241	0.01056		
As	-0.01040	59.19	-0.0032	-0.0139	-0.0139		
B	0.04931	0.070	0.04927	0.04931	0.04934		
X Ba	0.04961	2.793	0.05041	0.05041	0.04801		
X Be	0.00000	104.4	0.00000	0.00000	0.00001		
X Ca	16.96410	0.590	17.0596	16.9729	16.8597		
Cd	-0.00050	149.0	-0.0009	-0.0009	0.00036	<i>a</i>	
X Co	0.00125	10.42	0.00138	0.00112	0.00125		
X Cr	-0.00235	123.4	0.00068	-0.0026	-0.0051		
X Cu	0.00124	100.2	0.00249	0.00124	-0.0000		
Fe	0.15311	1.148	0.15486	0.15311	0.15135		
K	5.58820	1.376	5.51130	5.58821	5.66510		
Li	-0.00000	99.22	-0.0000	-0.0000	-0.0000		
X Mg	6.75233	1.162	6.83478	6.74365	6.67856		
X Mn	0.08046	0.874	0.08127	0.08005	0.08005		
Mo	-0.00142	99.22	-0.0000	-0.0028	-0.0014		
X Na	10.17829	0.165	10.1951	10.1782	10.1614		
X Ni	-0.00032	1174.	-0.0033	-0.0015	0.00395		
P	-0.04148	127.9	-0.0454	-0.0924	0.01345		
Pb	0.00160	734.0	0.00053	0.01385	-0.0095		
X Sb	0.00806	74.57	0.00801	0.01409	0.00207		
Se	0.00051	2668.	-0.0128	-0.0003	0.01467		
Si	4.68676	0.732	4.71930	4.69010	4.65088		
Sn	-0.01041	75.20	-0.0018	-0.0121	-0.0172		
Sr	0.08444	1.022	0.08537	0.08430	0.08366		
Ti	0.00027	311.0	0.00000	-0.0004	0.00125		
Tl	0.00246	503.0	-0.0110	0.01334	0.00509		
X V	-0.00238	104.5	-0.0009	-0.0009	-0.0052		
X Zn	0.04401	2.459	0.04463	0.04463	0.04276		

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AR318929

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*A ISb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K As Na V Zn*

23 1908355 **222222** 12/19/92 23:49  
\*\*\*\*, 100-100, DF1, 923541848001, 1.,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00195	0.059	-0.0019	-0.0019	-0.0019		
X Al	0.02367	32.27	0.03131	0.02367	0.01603		
As	-0.01421	42.97	-0.0203	-0.0142	-0.0081		
B	0.01218	10.17	0.01147	0.01362	0.01147		
X Ba	0.00240	0.002	0.00240	0.00240	0.00240		
X Be	0.00000	56.51	0.00000	0.00001	0.00001		
X Ca	0.15795	1.393	0.15866	0.15972	0.15549		
Cd	0.00043	599.1	0.00306	0.00043	-0.0021	<i>0</i>	
X Co	0.00156	25.76	0.00111	0.00188	0.00169		
X Cr	-0.00153	85.56	-0.0029	-0.0003	-0.0013		
X Cu	-0.00270	58.05	-0.0012	-0.0024	-0.0043		
X Fe	0.00000	25089	-0.0017	0.00176	0.00000		
X K	0.17943	24.74	0.20506	0.20506	0.12816		
Li	-0.00101	173.2	-0.0000	-0.0000	-0.0030		
X Mg	0.01301	0.007	0.01301	0.01301	0.01301		
X Mn	-0.00040	0.123	-0.0004	-0.0004	-0.0004		
Mo	-0.00094	86.41	-0.0000	-0.0014	-0.0014		
X Na	0.36141	9.303	0.39503	0.36141	0.32778		
X Ni	-0.00184	115.1	-0.0006	-0.0042	-0.0006		
P	-0.08179	90.55	-0.1672	-0.0359	-0.0421		
Pb	-0.00425	156.6	0.00321	-0.0095	-0.0063		
X Sb	0.00000	81925	0.00202	-0.0000	-0.0019		
Se	0.00166	1653.	0.02916	-0.0258	0.00166		
Si	0.66085	0.673	0.65571	0.66341	0.66342		
Sn	0.00000	23646	-0.0017	0.01624	-0.0145		
Sr	0.00078	20.81	0.00096	0.00074	0.00064		
Ti	0.00041	360.6	0.00208	-0.0000	-0.0008		
Tl	-0.00810	252.0	-0.0270	-0.0107	0.01353		
X V	-0.00288	57.58	-0.0009	-0.0038	-0.0038		
X Zn	0.00188	0.471	0.00187	0.00189	0.00189		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

24 CCV

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23:53

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.46669	1.269	0.47058	0.46961	0.45987	_____	_____
__Al	23.75483	1.323	24.0136	23.8460	23.4048	_____	_____
__As	2.05502	2.160	2.08650	2.07432	2.00424	_____	_____
__B	0.97538	1.588	0.98830	0.97964	0.95820	_____	_____
__Ba	4.93305	1.537	4.99906	4.94985	4.85023	_____	_____
__Be	0.47569	1.559	0.48178	0.47787	0.46743	_____	_____
__Ca	48.65549	1.363	49.1998	48.8497	47.9168	_____	_____
__Cd	4.82938	1.286	4.87928	4.84908	4.75979	_____	_____
__Co	0.96619	1.610	0.96953	0.97981	0.94924	_____	_____
__Cr	5.09544	1.415	5.15176	5.12041	5.01414	_____	_____
__Cu	4.81527	1.446	4.87526	4.83166	4.73890	_____	_____
__Fe	4.88320	1.451	4.94156	4.90372	4.80431	_____	_____
__K	49.32746	1.126	49.6857	49.6092	48.6873	_____	_____
__Li	25.44579	1.476	25.8014	25.4831	25.0527	_____	_____
__Mg	23.66529	1.463	23.9000	23.8282	23.2675	_____	_____
__Mn	4.90566	1.301	4.95623	4.92685	4.83388	_____	_____
__Mo	24.50979	1.497	24.8228	24.6006	24.1058	_____	_____
__Na	49.55537	1.686	50.2977	49.7178	48.6505	_____	_____
__Ni	9.68654	1.376	9.78883	9.73505	9.53575	_____	_____
__P	25.00031	1.560	25.2629	25.1861	24.5519	_____	_____
__Pb	24.98950	1.241	25.2379	25.0886	24.6419	_____	_____
__Sb	5.00971	1.089	5.04274	5.03966	4.94673	_____	_____
__Se	2.03343	1.605	2.01833	2.07090	2.01105	_____	_____
__Si	1.96752	0.810	1.97993	1.97309	1.94953	_____	_____
__Sn	4.88842	1.102	4.93243	4.90453	4.82828	_____	_____
__Sr	1.01032	1.611	1.02467	1.01366	0.99262	_____	_____
__Ti	2.03118	1.608	2.05705	2.04203	1.99447	_____	_____
__Tl	5.21679	0.602	5.23685	5.18060	5.23293	_____	_____
__V	2.01575	1.315	2.03802	2.02282	1.98642	_____	_____
__Zn	4.92499	1.134	4.96806	4.94503	4.86187	_____	_____

AR318931

Run Name: 9235402I11

LANCASTER LABORATORIES

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25 CCB

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23:58

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	-0.00130	86.64	-0.0019	0.00000	-0.0019	_____	_____
__Al	0.15662	6.425	0.16029	0.14524	0.16433	_____	_____
__As	-0.00710	98.85	0.00100	-0.0111	-0.0111	_____	_____
__B	-0.00035	305.0	0.00072	-0.0014	-0.0003	_____	_____
__Ba	0.00160	86.60	0.00240	-0.0000	0.00240	_____	_____
__Be	0.00000	175.7	-0.0000	0.00001	0.00001	_____	_____
__Ca	0.00458	35.25	0.00634	0.00423	0.00317	_____	_____
__Cd	-0.00021	532.7	0.00044	0.00044	-0.0015	_____	_____
__Co	0.00064	149.1	0.00176	0.00008	0.00009	_____	_____
__Cr	-0.00145	143.9	0.00091	-0.0030	-0.0022	_____	_____
__Cu	0.00041	571.5	0.00312	-0.0012	-0.0006	_____	_____
__Fe	-0.00206	89.06	-0.0000	-0.0035	-0.0026	_____	_____
__K	0.10252	43.30	0.05125	0.12816	0.12815	_____	_____
__Li	0.00202	86.60	0.00303	0.00303	0.00000	_____	_____
__Mg	-0.00434	173.1	0.00000	-0.0130	-0.0000	_____	_____
__Mn	-0.00040	0.205	-0.0004	-0.0004	-0.0004	_____	_____
__Mo	0.00400	62.07	0.00636	0.00140	0.00423	_____	_____
__Na	0.01401	138.5	0.02521	-0.0084	0.02522	_____	_____
__Ni	0.00092	413.7	0.00398	-0.0033	0.00214	_____	_____
__P	-0.03752	78.68	-0.0532	-0.0558	-0.0034	_____	_____
__Pb	-0.00382	167.7	0.00221	-0.0031	-0.0105	_____	_____
__Sb	0.00468	321.6	-0.0040	0.02210	-0.0040	_____	_____
__Se	-0.00336	128.6	-0.0058	0.00163	-0.0058	_____	_____
__Si	0.00636	55.35	0.01020	0.00560	0.00328	_____	_____
__Sn	-0.00167	529.9	-0.0068	-0.0068	0.00858	_____	_____
__Sr	-0.00003	918.7	0.00032	-0.0003	-0.0001	_____	_____
__Ti	0.00111	120.5	0.00208	-0.0004	0.00166	_____	_____
__Tl	-0.00280	2037.	0.06241	-0.0272	-0.0435	_____	_____
__V	-0.00190	174.6	0.00193	-0.0038	-0.0038	_____	_____
__Zn	0.01308	24.61	0.01681	0.01123	0.01121	_____	_____

AR318932-2003

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*Al Sb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*  
26 1908356 JAWLT 12/20/92 00:02  
\*\*\*\*,100-100,DF1,923541848001,1,.

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00291	38.51	-0.0035	-0.0016	-0.0035		
X Al	1.39524	0.658	1.40107	1.40000	1.38465		
As	-0.00403	265.4	0.00716	-0.0050	-0.0141		
B	0.03605	6.154	0.03385	0.03828	0.03603		
X Ba	0.06007	0.001	0.06007	0.06007	0.06007		
X Be	-0.00000	111.5	-0.0000	0.00000	-0.0000		
X Ca	17.76254	0.994	17.9127	17.5679	17.8069		
Cd	-0.00059	126.9	-0.0010	-0.0010	0.00027	D	
X Co	-0.00163	55.94	-0.0006	-0.0018	-0.0024		
X Cr	-0.00055	511.1	0.00196	0.00000	-0.0036		
X Cu	0.00204	93.60	0.00370	0.00245	-0.0000		
X Fe	1.83486	1.123	1.85310	1.81251	1.83898		
K	5.39595	0.712	5.43440	5.39594	5.35750		
Li	-0.00101	173.2	-0.0030	0.00000	-0.0000		
X Mg	7.09392	1.353	7.16335	6.98435	7.13405		
X Mn	0.10889	0.644	0.10929	0.10808	0.10930		
Mo	-0.00188	108.5	-0.0030	0.00047	-0.0030		
X Na	9.65750	1.058	9.70793	9.53983	9.72475		
X Ni	0.00075	141.5	0.00013	0.00198	0.00013		
P	0.08581	28.51	0.11402	0.07017	0.07326		
Pb	-0.00907	58.83	-0.0142	-0.0035	-0.0094		
X Sb	-0.00627	84.63	-0.0002	-0.0103	-0.0082		
Se	-0.00022	7003.	0.00560	0.01184	-0.0181		
Si	6.96614	0.621	7.01610	6.94002	6.94231		
Sn	-0.00793	130.6	-0.0173	-0.0096	0.00317		
Sr	0.08729	1.605	0.08857	0.08579	0.08750		
Ti	0.06372	2.178	0.06254	0.06338	0.06525		
Tl	-0.13642	43.27	-0.2044	-0.1065	-0.0982		
X V	0.00148	55.42	0.00196	0.00053	0.00195		
X Zn	0.07929	1.352	0.07991	0.07992	0.07805		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

Al Sb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag V Zn

27 1908357 J AMLP 12/20/92 00:07  
\*\*\*\*,100-100,DF1,923541848001.1,.

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00127	88.11	-0.0019	0.00002	-0.0019		
X Al	0.01747	76.06	0.02297	0.00231	0.02713		
As	0.00333	190.1	0.01045	-0.0017	0.00129		
B	0.08373	0.027	0.08370	0.08374	0.08374		
X Ba	0.04081	0.000	0.04081	0.04081	0.04081		
X Be	0.00000	87.62	0.00000	0.00001	0.00000		
X Ca	17.13140	0.457	17.2167	17.1146	17.0628		
Cd	0.00189	20.00	0.00167	0.00167	0.00233	D	
X Co	0.00224	63.01	0.00306	0.00061	0.00306		
X Cr	-0.00211	162.7	-0.0001	-0.0061	-0.0001		
X Cu	0.00499	25.00	0.00624	0.00374	0.00499		
X Fe	0.16546	1.845	0.16899	0.16370	0.16370		
X K	5.12681	1.499	5.04991	5.20370	5.12680		
Li	0.00101	346.4	-0.0030	0.00303	0.00303		
X Mg	6.75127	0.665	6.80227	6.73390	6.71764		
X Mn	0.08331	1.692	0.08494	0.08250	0.08250		
Mo	-0.00048	168.3	-0.0000	-0.0014	-0.0000		
X Na	9.44988	0.447	9.48910	9.45548	9.40505		
X Ni	0.00089	580.8	0.00670	-0.0033	-0.0006		
P	0.00880	185.8	0.02532	0.00845	-0.0073		
Pb	-0.01064	86.71	-0.0159	-0.0159	0.00001		
X Sb	0.01476	34.28	0.01412	0.02011	0.01005		
Se	-0.00323	726.1	0.00842	-0.0303	0.01217		
Si	4.89166	0.326	4.90985	4.88525	4.87987		
Sn	0.00326	157.3	0.00326	-0.0018	0.00839		
Sr	0.08263	0.583	0.08312	0.08259	0.08216		
Ti	0.00153	15.66	0.00125	0.00166	0.00166		
Tl	0.02696	303.8	0.10288	-0.0598	0.03788		
X V	-0.00190	87.75	-0.0009	-0.0038	-0.0009		
X Zn	0.04087	0.054	0.04084	0.04088	0.04087		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*A19bBeCdCaCoCuFeMgMnNiKAgNaVZn*

28 1908358 *CHWIX* 12/20/92 00:12

\*\*\*\*,100-100,DF1,923541848001,1..

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00214	138.9	-0.0053	-0.0014	0.00045	_____	_____
X Al	1.68506	0.458	1.67615	1.68910	1.68995	_____	_____
As	-0.00701	129.9	-0.0161	-0.0070	0.00210	_____	_____
B	0.11946	2.060	0.11801	0.12230	0.11806	_____	_____
X Ba	0.05289	0.001	0.05289	0.05289	0.05289	_____	_____
X Be	0.00000	222.7	0.00000	-0.0000	0.00000	_____	_____
X Ca	10.30687	0.546	10.3206	10.3550	10.2449	_____	_____
Cd	0.00026	491.2	0.00026	0.00157	-0.0010	<u>D</u> _____	_____
X Co	0.00140	250.6	-0.0011	-0.0000	0.00541	_____	_____
X Cr	0.00050	151.2	-0.0002	0.00050	0.00127	_____	_____
X Cu	0.00078	244.5	-0.0013	0.00244	0.00119	_____	_____
Fe	2.47669	0.689	2.48699	2.48611	2.45698	_____	_____
X K	3.02482	1.467	2.97355	3.05045	3.05045	_____	_____
Li	0.00101	173.2	-0.0000	0.00303	-0.0000	_____	_____
X Mg	4.50476	0.661	4.49825	4.53730	4.47874	_____	_____
X Mn	0.15375	0.458	0.15456	0.15334	0.15334	_____	_____
Mo	-0.00218	99.18	-0.0045	-0.0017	-0.0002	_____	_____
X Na	9.10840	0.910	9.06919	9.20368	9.05235	_____	_____
X Ni	0.00374	84.82	0.00007	0.00558	0.00558	_____	_____
P	0.03796	144.1	-0.0247	0.06292	0.07575	_____	_____
Pb	-0.00661	116.1	-0.0151	-0.0002	-0.0044	_____	_____
X Sb	0.00440	115.1	0.00370	-0.0002	0.00978	_____	_____
Se	-0.00803	85.61	-0.0084	-0.0147	-0.0009	_____	_____
Si	7.07873	0.512	7.08283	7.11276	7.04061	_____	_____
Sn	-0.00110	583.8	-0.0019	0.00572	-0.0070	_____	_____
Sr	0.06179	1.111	0.06207	0.06229	0.06101	_____	_____
Ti	0.06727	6.827	0.06755	0.07172	0.06254	_____	_____
Tl	-0.00325	2512.	-0.0901	0.00780	0.07253	_____	_____
X V	0.00007	2244.	-0.0008	0.00199	-0.0008	_____	_____
X Zn	0.03346	1.574	0.03316	0.03407	0.03314	_____	_____

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*Al Sb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*

29 1908359 *CU WLF* 12/20/92 00:16  
\*\*\*\*, 100-100, DF1, 923541848001, 1, ,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00222	66.89	-0.0038	-0.0009	-0.0019		
X Al	0.04276	13.52	0.04402	0.04782	0.03645		
As	-0.00148	356.6	0.00461	-0.0045	-0.0045		
B	0.03769	5.931	0.03518	0.03948	0.03840		
X Ba	0.03121	0.000	0.03121	0.03121	0.03121		
X Be	0.00000	0.890	0.00000	0.00000	0.00000		
X Ca	9.21279	0.261	9.19833	9.24064	9.19939		
Cd	-0.00005	1311.	-0.0009	0.00038	0.00038	<i>D</i>	
X Co	0.00120	256.7	0.00434	0.00111	-0.0018		
X Cr	-0.00104	200.9	-0.0010	0.00104	-0.0031		
X Cu	-0.00063	98.74	-0.0012	-0.0000	-0.0006		
X Fe	0.32507	0.313	0.32625	0.32448	0.32448		
X K	2.71722	1.633	2.74285	2.74285	2.66595		
Li	-0.00101	173.2	-0.0000	-0.0030	-0.0000		
X Mg	3.95383	0.342	3.93865	3.95817	3.96468		
X Mn	0.11598	0.608	0.11557	0.11557	0.11679		
Mo	-0.00096	84.27	-0.0000	-0.0014	-0.0014		
X Na	8.16114	0.000	8.16114	8.16114	8.16113		
X Ni	0.00180	77.70	0.00302	0.00027	0.00211		
P	-0.06979	75.31	-0.1222	-0.0171	-0.0699		
Pb	-0.01170	32.81	-0.0106	-0.0159	-0.0085		
X Sb	0.00067	685.9	-0.0019	-0.0020	0.00604		
Se	0.00068	1143.	-0.0080	0.00693	0.00318		
Si	4.05889	0.115	4.05992	4.06298	4.05378		
Sn	-0.00098	988.9	0.00585	-0.0120	0.00329		
Sr	0.05420	0.113	0.05427	0.05417	0.05417		
Ti	0.00306	28.35	0.00333	0.00375	0.00208		
Tl	-0.06531	112.7	-0.0598	0.00544	-0.1414		
X V	-0.00093	0.537	-0.0009	-0.0009	-0.0009		
X Zn	0.01602	6.742	0.01477	0.01665	0.01665		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*Al Sb Ba Be Cd Ca Ce Co Cu Fe Mg Mn Ni K Ag Na V Zn*  
30 1908981 *JSBHT* 12/20/92 00:21  
\*\*\*\*.100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00349	55.86	-0.0015	-0.0054	-0.0034		
X Al	2.09601	0.623	2.10742	2.08176	2.09886		
As	-0.00433	122.0	-0.0012	-0.0012	-0.0104		
B	0.04483	2.732	0.04411	0.04625	0.04414		
X Ba	0.06088	1.138	0.06128	0.06128	0.06008		
X Be	0.00000	134.6	-0.0000	0.00000	0.00000		
X Ca	17.76747	0.537	17.8180	17.8270	17.6572		
Cd	-0.00061	124.3	-0.0010	-0.0010	0.00026	D	
X Co	0.00157	162.2	-0.0013	0.00288	0.00321		
X Cr	0.00130	28.02	0.00154	0.00148	0.00088		
X Cu	0.00452	15.99	0.00368	0.00494	0.00494		
X Fe	2.25768	0.453	2.26709	2.25915	2.24679		
X K	5.26778	2.107	5.20369	5.39595	5.20369		
Li	0.00101	173.2	-0.0000	-0.0000	0.00303		
X Mg	6.98422	0.493	6.97120	7.02327	6.95819		
X Mn	0.10235	0.689	0.10317	0.10194	0.10195		
Mo	-0.00432	77.27	-0.0031	-0.0080	-0.0017		
X Na	9.71374	0.780	9.79221	9.70812	9.64090		
X Ni	-0.00052	204.3	0.00009	-0.0017	0.00009		
P	0.11803	36.64	0.16787	0.09583	0.09038		
Pb	-0.00570	224.6	0.00744	-0.0064	-0.0181		
X Sb	0.00335	105.8	-0.0003	0.00671	0.00368		
Se	-0.00580	310.6	-0.0008	0.00919	-0.0258		
Si	7.73612	0.673	7.79627	7.70414	7.70794		
Sn	-0.01215	0.046	-0.0121	-0.0121	-0.0121		
Sr	0.08857	0.638	0.08900	0.08879	0.08793		
Ti	0.10466	4.382	0.10924	0.10007	0.10466		
Tl	-0.08842	66.65	-0.0718	-0.1538	-0.0395		
X V	0.00004	3996.	0.00196	-0.0009	-0.0009		
X Zn	0.07797	0.001	0.07797	0.07797	0.07797		

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Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 31

INSTRUMENT ID: 02360

*Al Pb Ba Be Cd Ca Ce Co Cu Fe Mg Mn Ni K Ag Na V Zn*

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00128	175.6	0.00001	0.00001	-0.0038	_____	_____
X Al	-0.00354	103.0	-0.0033	0.00002	-0.0072	_____	_____
As	-0.01093	100.4	-0.0231	-0.0017	-0.0078	_____	_____
B	0.03501	3.536	0.03429	0.03644	0.03430	_____	_____
X Ba	0.04081	0.000	0.04081	0.04081	0.04081	_____	_____
X Be	0.00000	55.06	0.00000	0.00000	0.00000	_____	_____
X Ca	17.36940	0.503	17.3489	17.4653	17.2939	_____	_____
Cd	0.00058	323.2	0.00168	-0.0016	0.00168	_____	_____
X Co	-0.00106	198.9	-0.0022	-0.0023	0.00138	_____	_____
X Cr	-0.00403	27.02	-0.0052	-0.0037	-0.0031	_____	_____
X Cu	0.00083	114.8	0.00062	0.00187	-0.0000	_____	_____
X Fe	0.13841	0.737	0.13900	0.13723	0.13900	_____	_____
X K	5.15244	1.723	5.20371	5.20371	5.04991	_____	_____
Li	0.00101	173.2	0.00303	-0.0000	-0.0000	_____	_____
X Mg	6.68280	0.313	6.69147	6.69798	6.65894	_____	_____
X Mn	0.06783	0.000	0.06783	0.06783	0.06783	_____	_____
Mo	-0.00284	49.82	-0.0014	-0.0028	-0.0042	_____	_____
X Na	9.64039	0.628	9.62357	9.70763	9.58995	_____	_____
X Ni	-0.00154	119.0	0.00029	-0.0015	-0.0033	_____	_____
P	-0.02702	121.1	-0.0646	-0.0119	-0.0045	_____	_____
Pb	-0.01527	76.83	-0.0074	-0.0287	-0.0095	_____	_____
X Sb	0.00839	100.3	0.00405	0.00302	0.01810	_____	_____
Se	0.00468	423.5	-0.0178	0.01218	0.01968	_____	_____
Si	4.89603	0.431	4.87759	4.91906	4.89143	_____	_____
Sn	0.00155	761.0	0.00839	0.00839	-0.0121	_____	_____
Sr	0.08569	0.623	0.08569	0.08622	0.08515	_____	_____
Ti	0.00111	114.4	0.00083	0.00250	0.00000	_____	_____
Tl	-0.06811	141.2	-0.1741	-0.0435	0.01341	_____	_____
X V	-0.00144	57.77	-0.0009	-0.0009	-0.0024	_____	_____
X Zn	0.03466	1.546	0.03528	0.03434	0.03436	_____	_____

AR318938



Run Name: 9235402111

LANCASTER LABORATORIES

PAGE: 32

INSTRUMENT ID: 02360

*A19b Ba Bi Cd Ca Co Cu Fe Mg Mn Ni K Ag Na V Zn*

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00288	39.07	-0.0035	-0.0015	-0.0035		
X Al	1.47778	0.241	1.47814	1.48116	1.47404		
As	-0.00476	64.02	-0.0047	-0.0078	-0.0017		
B	0.03196	3.857	0.03054	0.03268	0.03267		
X Ba	0.04647	2.982	0.04807	0.04567	0.04567		
X Be	0.00000	1.399	0.00000	0.00000	0.00000		
X Ca	10.18752	0.317	10.1683	10.1693	10.2248		
Cd	-0.00014	539.2	-0.0010	0.00029	0.00029		
X Co	0.00161	229.8	-0.0021	0.00168	0.00528		
X Cr	-0.00009	778.3	0.00031	0.00032	-0.0009		
X Cu	0.00599	26.18	0.00433	0.00745	0.00620		
Fe	1.99715	0.192	1.99450	1.99538	2.00156		
K	2.92228	3.038	2.81975	2.97354	2.97355		
Li	-0.00000	170.5	-0.0000	0.00000	-0.0000		
X Mg	4.33749	0.439	4.31579	4.35159	4.34509		
X Mn	0.11507	0.612	0.11548	0.11426	0.11548		
Mo	-0.00166	170.5	-0.0044	0.00117	-0.0016		
X Na	10.59601	0.391	10.6156	10.5483	10.6240		
X Ni	0.00256	41.49	0.00195	0.00379	0.00194		
P	0.00754	547.4	-0.0343	0.00884	0.04819		
Pb	-0.00885	52.48	-0.0120	-0.0035	-0.0109		
X Sb	-0.00191	199.3	-0.0062	0.00076	-0.0002		
Se	0.00326	563.6	-0.0108	0.02410	-0.0033		
Si	6.15160	0.584	6.12010	6.19078	6.14392		
Sn	0.00066	384.3	-0.0018	0.00322	0.00066		
Sr	0.06336	0.337	0.06336	0.06314	0.06357		
Ti	0.05684	1.120	0.05670	0.05754	0.05629		
Tl	0.01265	74.31	0.00723	0.00722	0.02351		
X V	-0.00090	1.041	-0.0000	-0.0008	-0.0009		
X Zn	0.03008	3.592	0.02946	0.02944	0.03132		

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AR318939

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 33

INSTRUMENT ID: 02360

AlSb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00385	0.010	-0.0038	-0.0038	-0.0038		
X Al	0.04697	11.33	0.04113	0.04820	0.05157		
As	-0.00046	1007.	0.00462	-0.0045	-0.0014		
B	0.02752	10.29	0.02431	0.02861	0.02965		
X Ba	0.03361	0.000	0.03361	0.03361	0.03361		
X Be	0.00001	34.66	0.00002	0.00001	0.00001		
X Ca	10.21079	1.050	10.0984	10.2217	10.3121		
Cd	-0.00049	152.3	-0.0009	-0.0009	0.00037	0	
X Co	0.00000	5034.	0.00008	0.00022	-0.0002		
X Cr	-0.00355	30.91	-0.0046	-0.0024	-0.0035		
X Cu	0.00082	115.4	0.00061	0.00186	-0.0000		
X Fe	0.31388	1.123	0.31035	0.31388	0.31741		
X K	2.71722	1.633	2.74286	2.74285	2.66596		
Li	-0.00101	173.2	-0.0000	-0.0030	-0.0000		
X Mg	4.28569	0.749	4.27049	4.26399	4.32258		
X Mn	0.10537	1.338	0.10456	0.10456	0.10700		
Mo	-0.00049	329.0	-0.0014	0.00139	-0.0014		
X Na	10.54812	1.304	10.3968	10.5817	10.6657		
X Ni	-0.00002	6496.	0.00210	-0.0015	-0.0006		
P	-0.03520	107.2	-0.0686	0.00576	-0.0427		
Pb	-0.00388	192.6	0.00321	-0.0031	-0.0116		
X Sb	-0.00000	13645	0.00002	-0.0020	0.00201		
Se	0.01029	138.0	0.02196	-0.0055	0.01446		
Si	4.38727	1.024	4.34193	4.38803	4.43185		
Sn	0.00243	160.8	0.00328	0.00584	-0.0018		
Sr	0.06293	1.224	0.06207	0.06314	0.06357		
Ti	0.00236	36.69	0.00208	0.00333	0.00166		
Tl	-0.07621	36.94	-0.0599	-0.1087	-0.0599		
X V	-0.00477	34.87	-0.0066	-0.0038	-0.0038		
X Zn	0.01632	3.291	0.01663	0.01663	0.01570		

AR318940

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 34

INSTRUMENT ID: 02360

Al Sb Ba Be Cd Ca Co Cu Fe Mg Mn Ni K Ag Na V Zn  
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\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00130	86.57	-0.0000	-0.0019	-0.0019		
X Al	0.01905	41.22	0.02528	0.02165	0.01023		
As	-0.00151	379.3	0.00100	0.00254	-0.0081		
B	0.01291	9.597	0.01362	0.01363	0.01148		
X Ba	0.00240	0.001	0.00240	0.00240	0.00240		
X Be	0.00000	301.3	-0.0000	0.00000	0.00001		
X Ca	0.17065	6.451	0.18299	0.16183	0.16712		
Cd	0.00131	57.66	0.00175	0.00175	0.00043	Δ	
X Co	-0.00021	895.2	0.00124	0.00047	-0.0023		
X Cr	-0.00154	105.6	0.00008	-0.0015	-0.0031		
X Cu	-0.00083	172.9	-0.0000	0.00000	-0.0024		
X Fe	0.00029	620.6	0.00176	0.00088	-0.0017		
X K	0.20506	0.001	0.20505	0.20506	0.20506		
Li	0.00202	173.2	0.00000	0.00606	-0.0000		
X Mg	0.00432	313.3	0.01952	-0.0065	-0.0000		
X Mn	-0.00122	57.75	-0.0004	-0.0016	-0.0016		
Mo	0.00047	458.5	0.00282	-0.0000	-0.0014		
X Na	0.41743	2.325	0.42864	0.41183	0.41182		
X Ni	-0.00244	112.7	0.00031	-0.0024	-0.0051		
P	-0.02439	224.7	0.03692	-0.0687	-0.0413		
Pb	-0.00176	211.9	0.00214	-0.0053	-0.0021		
X Sb	0.00535	78.06	0.00401	0.00200	0.01003		
Se	0.00457	177.5	0.01291	0.00416	-0.0033		
Si	0.85246	0.540	0.85706	0.84784	0.85247		
Sn	-0.01025	76.37	-0.0017	-0.0170	-0.0119		
Sr	0.00096	22.20	0.00117	0.00096	0.00074		
Ti	-0.00076	253.3	0.00083	-0.0002	-0.0029		
Tl	0.04893	226.8	0.13593	-0.0760	0.08694		
X V	-0.00096	300.5	0.00192	-0.0009	-0.0038		
X Zn	0.00375	0.402	0.00373	0.00374	0.00376		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*AISB BaBeCdCaCrCoCuFe MgMnNiK AgNaVZn*

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\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00212	53.01	-0.0034	-0.0014	-0.0014		
X Al	1.49836	1.435	1.51074	1.51082	1.47352		
As	-0.00071	735.1	0.00233	-0.0067	0.00229		
B	0.03072	0.166	0.03070	0.03068	0.03078		
X Ba	0.06089	2.276	0.06009	0.06249	0.06009		
X Be	-0.00000	4.424	-0.0000	-0.0000	-0.0000		
X Ca	17.75707	0.668	17.8027	17.8461	17.6223		
Cd	0.00109	69.21	0.00153	0.00153	0.00021	<i>Δ</i>	
X Co	-0.00114	164.5	0.00096	-0.0017	-0.0026		
X Cr	0.00007	1885.	0.00055	-0.0014	0.00116		
X Cu	0.00327	29.21	0.00431	0.00243	0.00306		
X Fe	2.60573	0.785	2.60867	2.62456	2.58396		
X K	6.04959	1.271	5.97269	6.12649	6.04958		
Li	0.00202	86.60	0.00303	-0.0000	0.00303		
X Mg	6.97566	0.782	7.00388	7.01036	6.91273		
X Mn	0.12637	0.965	0.12760	0.12637	0.12516		
Mo	-0.00266	30.78	-0.0031	-0.0031	-0.0017		
X Na	9.23745	0.945	9.18701	9.33831	9.18701		
X Ni	0.00160	87.55	0.00190	0.00007	0.00283		
P	0.10887	30.68	0.14132	0.11072	0.07458		
Pb	-0.01488	29.83	-0.0184	-0.0099	-0.0163		
X Sb	-0.00137	935.4	0.00165	0.00968	-0.0154		
Se	-0.00361	369.5	-0.0107	0.01180	-0.0119		
Si	6.54029	0.788	6.57386	6.56615	6.48088		
Sn	-0.00725	70.77	-0.0021	-0.0072	-0.0123		
Sr	0.08718	0.765	0.08697	0.08793	0.08665		
Ti	0.10118	1.559	0.10007	0.10299	0.10049		
Tl	-0.10730	96.14	0.00949	-0.1859	-0.1454		
X V	0.00197	0.251	0.00197	0.00197	0.00198		
X Zn	0.08980	1.196	0.09104	0.08918	0.08918		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.46376	0.727	0.46570	0.46571	0.45986	_____	_____
__Al	23.82816	0.630	23.9607	23.8585	23.6651	_____	_____
__As	2.05655	0.740	2.06212	2.06822	2.03931	_____	_____
__B	0.97392	0.711	0.98182	0.97107	0.96887	_____	_____
__Ba	4.94625	0.718	4.97986	4.94985	4.90904	_____	_____
__Be	0.47744	0.686	0.48048	0.47786	0.47397	_____	_____
__Ca	48.78312	0.543	48.9872	48.8788	48.4832	_____	_____
__Cd	4.84404	0.574	4.86417	4.85564	4.81231	_____	_____
__Co	0.97061	0.349	0.96874	0.97453	0.96856	_____	_____
__Cr	5.11786	0.650	5.14119	5.13267	5.07972	_____	_____
__Cu	4.83376	0.642	4.86219	4.83850	4.80058	_____	_____
__Fe	4.90580	0.559	4.92925	4.91253	4.87562	_____	_____
__K	49.00690	0.353	49.1860	48.9939	48.8406	_____	_____
__Li	25.65088	0.827	25.8589	25.6589	25.4346	_____	_____
__Mg	23.76412	0.557	23.8901	23.7761	23.6260	_____	_____
__Mn	4.91667	0.560	4.93666	4.92809	4.88526	_____	_____
__Mo	24.58717	0.788	24.7428	24.6487	24.3698	_____	_____
__Na	50.17737	0.486	50.4154	50.1885	49.9280	_____	_____
__Ni	9.70111	0.668	9.74828	9.72785	9.62718	_____	_____
__P	25.25264	0.598	25.2130	25.4195	25.1252	_____	_____
__Pb	24.76503	0.596	24.9096	24.7710	24.6143	_____	_____
__Sb	5.03710	0.447	5.05093	5.04931	5.01106	_____	_____
__Se	2.02966	2.191	2.00586	2.00214	2.08096	_____	_____
__Si	1.99582	0.654	1.99675	2.00839	1.98231	_____	_____
__Sn	4.90283	0.988	4.95048	4.90445	4.85355	_____	_____
__Sr	1.01406	0.743	1.02072	1.01559	1.00587	_____	_____
__Ti	2.04779	0.806	2.06288	2.05037	2.03013	_____	_____
__Tl	5.28792	0.907	5.33623	5.28728	5.24025	_____	_____
__V	2.02085	0.708	2.03197	2.02589	2.00470	_____	_____
__Zn	4.93608	0.442	4.94952	4.94783	4.91088	_____	_____

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AR318943

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.00000	84.24	0.00000	0.00000	0.00000	_____	_____
__Al	0.02021	59.54	0.03394	0.01520	0.01149	_____	_____
__As	-0.00506	159.3	0.00408	-0.0081	-0.0111	_____	_____
__B	-0.00070	175.0	0.00072	-0.0014	-0.0014	_____	_____
__Ba	0.00400	69.28	0.00720	0.00240	0.00240	_____	_____
__Be	0.00044	168.8	0.00132	0.00001	0.00001	_____	_____
__Ca	0.04054	94.86	0.08462	0.02327	0.01375	_____	_____
__Cd	0.00481	87.64	0.00963	0.00175	0.00306	_____	_____
__Co	0.00159	124.8	0.00047	0.00390	0.00041	_____	_____
__Cr	0.00042	751.1	0.00409	-0.0011	-0.0016	_____	_____
__Cu	0.00040	991.7	0.00496	-0.0012	-0.0025	_____	_____
__Fe	0.00234	188.7	0.00703	0.00176	-0.0017	_____	_____
__K	0.12813	60.01	0.12808	0.20504	0.05125	_____	_____
__Li	0.01818	101.3	0.03940	0.00606	0.00909	_____	_____
__Mg	0.00218	690.5	0.01957	-0.0065	-0.0065	_____	_____
__Mn	0.00122	321.0	0.00571	-0.0004	-0.0016	_____	_____
__Mo	0.01863	114.5	0.04317	0.00849	0.00424	_____	_____
__Na	0.07003	90.86	0.14287	0.02521	0.04201	_____	_____
__Ni	0.00279	275.0	0.01142	-0.0033	0.00031	_____	_____
__P	-0.04942	194.3	-0.0411	-0.1493	0.04225	_____	_____
__Pb	0.01191	178.6	0.03625	-0.0031	0.00266	_____	_____
__Sb	-0.00040	1201.	0.00285	0.00196	-0.0060	_____	_____
__Se	0.00832	34.71	0.00665	0.00666	0.01166	_____	_____
__Si	0.00588	58.76	0.00561	0.00947	0.00257	_____	_____
__Sn	-0.00344	563.1	0.01874	-0.0171	-0.0119	_____	_____
__Sr	0.00035	261.9	0.00138	0.00010	-0.0004	_____	_____
__Ti	0.00041	624.0	0.00333	-0.0004	-0.0016	_____	_____
__Tl	-0.05173	152.0	0.00525	-0.0189	-0.1414	_____	_____
__V	-0.00281	61.81	-0.0008	-0.0038	-0.0038	_____	_____
__Zn	0.00497	77.44	0.00929	0.00375	0.00188	_____	_____

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AR318944

Run Name: 9235402I11.

LANCASTER LABORATORIES

PAGE: 38

INSTRUMENT ID: 02360

*AISb BaBe CdCa Co CuFeMg Mn Ni KAgNa VZn*

38 1908987 J BMTF 12/20/92 00:58

\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00062	180.1	-0.0019	0.00002	0.00002	_____	_____
X Al	0.01374	29.76	0.01791	0.01360	0.00973	_____	_____
As	-0.00884	155.4	0.00437	-0.0078	-0.0230	_____	_____
B	0.03614	4.597	0.03650	0.03759	0.03433	_____	_____
X Ba	0.03841	0.000	0.03841	0.03841	0.03841	_____	_____
X Be	0.00000	57.95	0.00001	0.00000	0.00001	_____	_____
X Ca	17.00306	0.585	16.9158	16.9819	17.1114	_____	_____
Cd	-0.00007	2856.	0.00036	0.00168	-0.0022	_____	_____
X Co	0.00123	138.1	-0.0004	0.00300	0.00112	_____	_____
X Cr	-0.00170	38.76	-0.0015	-0.0011	-0.0024	_____	_____
X Cu	0.00062	439.0	-0.0006	0.00374	-0.0012	_____	_____
Fe	0.17020	1.584	0.17079	0.16726	0.17255	_____	_____
X K	5.76762	1.539	5.81889	5.66509	5.81890	_____	_____
Li	-0.00101	173.2	0.00000	0.00000	-0.0030	_____	_____
X Mg	6.46044	0.485	6.44742	6.43766	6.49623	_____	_____
X Mn	0.07028	0.002	0.07028	0.07028	0.07028	_____	_____
Mo	0.00022	1198.	0.00211	0.00140	-0.0028	_____	_____
X Na	9.02403	0.918	8.96800	8.98480	9.11928	_____	_____
X Ni	-0.00215	48.82	-0.0033	-0.0015	-0.0015	_____	_____
P	-0.03197	171.6	-0.0949	0.00590	-0.0069	_____	_____
Pb	-0.01384	27.73	-0.0149	-0.0170	-0.0095	_____	_____
X Sb	0.01506	17.54	0.01604	0.01708	0.01207	_____	_____
Se	0.00049	1464.	0.00465	-0.0078	0.00466	_____	_____
Si	4.71109	0.602	4.67932	4.72005	4.73390	_____	_____
Sn	0.01181	45.21	0.00582	0.01352	0.01609	_____	_____
Sr	0.08252	0.651	0.08195	0.08259	0.08302	_____	_____
Ti	0.00069	138.3	0.00125	0.00125	-0.0004	_____	_____
Tl	-0.06269	146.2	0.03793	-0.1414	-0.0845	_____	_____
X V	-0.00286	58.17	-0.0038	-0.0009	-0.0038	_____	_____
X Zn	0.03342	0.038	0.03343	0.03340	0.03342	_____	_____

AR318945

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 39

INSTRUMENT ID: 02360

*Al Pb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*

39 1908988 *CU EDM* 12/20/92 01:03  
\*\*\*, 100-100, DF1.923541848001.1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00046	624.4	-0.0004	0.00245	-0.0033		
X Al	2.32638	0.907	2.30923	2.34997	2.31994		
As	-0.01013	114.9	-0.0203	-0.0126	0.00257		
B	0.02876	4.322	0.02733	0.02949	0.02947		
X Ba	0.05049	0.000	0.05049	0.05049	0.05049		
X Be	0.00000	1339.	-0.0000	-0.0000	0.00000		
X Ca	10.35077	0.389	10.3629	10.3058	10.3835		
Cd	0.00026	496.1	-0.0010	0.00158	0.00026	<i>Δ</i>	
X Co	0.00113	63.05	0.00031	0.00160	0.00148		
X Cr	0.00265	134.9	0.00066	0.00679	0.00051		
X Cu	0.00451	57.57	0.00243	0.00743	0.00368		
X Fe	2.74065	0.098	2.74301	2.73771	2.74124		
X K	2.84537	3.120	2.89664	2.89664	2.74284		
Li	-0.00000	17938	-0.0030	0.00303	-0.0000		
X Mg	4.36122	0.258	4.35471	4.35473	4.37424		
X Mn	0.11707	0.603	0.11667	0.11789	0.11666		
Mo	-0.00177	79.56	-0.0017	-0.0003	-0.0031		
X Na	9.72492	0.792	9.74175	9.64087	9.79213		
X Ni	0.00311	90.19	0.00372	0.00555	0.00004		
P	0.06270	196.4	0.18787	0.05861	-0.0583		
Pb	-0.00345	251.1	-0.0095	-0.0073	0.00648		
X Sb	0.00263	311.8	0.00968	0.00463	-0.0064		
Se	0.01807	62.35	0.00641	0.01890	0.02890		
Si	7.44640	0.840	7.37823	7.50121	7.45977		
Sn	0.00324	158.2	0.00323	0.00837	-0.0018		
Sr	0.06186	0.690	0.06229	0.06143	0.06186		
Ti	0.09854	5.324	0.10341	0.09924	0.09298		
Tl	-0.05089	80.38	-0.0886	-0.0074	-0.0565		
X V	0.00103	161.7	0.00198	0.00200	-0.0008		
X Zn	0.02934	0.060	0.02935	0.02932	0.02935		

AR318946



Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 40

INSTRUMENT ID: 02360

A1Sb Ba Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn

40 1908989 CHERP 12/20/92 01:07

\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00126	177.5	-0.0038	0.00003	0.00003		
X Al	0.01920	0.037	0.01921	0.01919	0.01920		
As	-0.00572	110.6	0.00137	-0.0077	-0.0107		
B	0.02658	4.054	0.02659	0.02549	0.02765		
X Ba	0.03121	0.000	0.03121	0.03121	0.03121		
X Be	0.00000	84.42	0.00000	0.00000	0.00001		
X Ca	10.55016	0.472	10.4941	10.5670	10.5892		
Cd	0.00038	342.0	-0.0009	0.00038	0.00169		
X Co	0.00051	281.8	-0.0006	0.00009	0.00214		
X Cr	-0.00400	40.41	-0.0041	-0.0055	-0.0022		
X Cu	0.00291	65.57	0.00124	0.00249	0.00499		
Fe	0.21474	0.855	0.21327	0.21415	0.21680		
X K	2.84539	1.560	2.81976	2.81976	2.89666		
Li	-0.00101	173.2	-0.0000	-0.0000	-0.0030		
X Mg	4.31051	0.455	4.28990	4.32895	4.31269		
X Mn	0.08745	0.000	0.08745	0.08745	0.08745		
Mo	-0.00143	0.039	-0.0014	-0.0014	-0.0014		
X Na	10.18951	0.381	10.2119	10.1446	10.2119		
X Ni	0.00028	1296.	-0.0033	0.00028	0.00394		
P	-0.02320	93.58	-0.0204	-0.0461	-0.0030		
Pb	-0.00958	38.52	-0.0138	-0.0074	-0.0074		
X Sb	0.01275	80.92	0.01004	0.00405	0.02416		
Se	0.00781	359.7	-0.0230	0.03197	0.01447		
Si	4.60090	0.072	4.59860	4.59938	4.60473		
Sn	-0.00353	83.69	-0.0018	-0.0069	-0.0018		
Sr	0.06165	0.600	0.06122	0.06186	0.06186		
Ti	0.00208	59.97	0.00208	0.00083	0.00333		
Tl	0.08143	144.9	0.21743	0.02157	0.00529		
X V	-0.00190	86.79	-0.0009	-0.0009	-0.0038		
X Zn	0.01601	3.470	0.01665	0.01570	0.01568		

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AR318947

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*Al Ba Sb Be Cd Ca Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*  
41 1908990 *SSBL* 12/20/92 01:12  
\*\*\*\*, 100-100, DF1, 923541848001, 1, ,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00273	41.19	-0.0014	-0.0033	-0.0033	_____	_____
X Al	2.28620	3.139	2.32003	2.33483	2.20376	_____	_____
As	-0.00438	106.4	-0.0003	-0.0033	-0.0094	_____	_____
B	0.04430	2.805	0.04360	0.04356	0.04573	_____	_____
X Ba	0.06010	0.000	0.06010	0.06010	0.06010	_____	_____
X Be	0.00000	193.1	0.00000	0.00000	-0.0000	_____	_____
X Ca	15.92290	0.425	15.8448	15.9659	15.9579	_____	_____
Cd	0.00132	28.72	0.00154	0.00154	0.00088	<u>Δ</u> _____	_____
X Co	0.00242	29.92	0.00203	0.00198	0.00326	_____	_____
X Cr	0.00275	48.15	0.00163	0.00421	0.00240	_____	_____
X Cu	0.01242	10.06	0.01117	0.01242	0.01368	_____	_____
X Fe	2.83761	0.342	2.83114	2.84879	2.83290	_____	_____
X K	5.44718	1.078	5.39592	5.43436	5.51126	_____	_____
Li	0.00404	114.5	-0.0000	0.00303	0.00909	_____	_____
X Mg	6.33783	0.330	6.31396	6.34652	6.35301	_____	_____
X Mn	0.13453	1.048	0.13372	0.13616	0.13372	_____	_____
Mo	0.00010	803.4	-0.0003	0.00104	-0.0003	_____	_____
X Na	9.51207	0.620	9.45605	9.57369	9.50646	_____	_____
X Ni	0.00127	166.3	0.00371	0.00005	0.00004	_____	_____
P	0.08999	63.32	0.03584	0.14945	0.08468	_____	_____
Pb	-0.00240	423.6	-0.0041	-0.0116	0.00856	_____	_____
X Sb	0.00024	1239.	-0.0003	-0.0024	0.00360	_____	_____
Se	0.00490	561.6	0.00656	0.03155	-0.0234	_____	_____
Si	7.70292	1.788	7.76079	7.80232	7.54567	_____	_____
Sn	-0.00368	383.0	0.00572	-0.0199	0.00313	_____	_____
Sr	0.08081	0.807	0.08024	0.08152	0.08067	_____	_____
Ti	0.11355	1.811	0.11591	0.11216	0.11258	_____	_____
Tl	-0.09354	116.1	-0.0228	-0.2186	-0.0391	_____	_____
X V	0.00055	257.2	-0.0008	0.00056	0.00199	_____	_____
X Zn	0.08162	0.000	0.08162	0.08162	0.08162	_____	_____

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AR318948

Run Name: 9235402I11

LANCASTER LABORATORIES

PAGE: 42

INSTRUMENT ID: 02360

*AISbBaBeCdCaCoCuFeMgMnNiKAgNaVZn*

42 1908991 J 53L 12/20/92 01:17  
\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00257	115.6	-0.0058	0.00002	-0.0019		
X Al	0.01720	43.91	0.00912	0.01840	0.02409		
As	0.00185	494.9	0.01050	-0.0077	0.00285		
B	0.03521	3.557	0.03666	0.03450	0.03448		
X Ba	0.03841	0.000	0.03841	0.03841	0.03841		
X Be	0.00001	74.52	0.00002	0.00001	0.00000		
X Ca	15.62144	0.416	15.5496	15.6380	15.6766		
Cd	-0.00006	4065.	-0.0022	0.00299	-0.0009	<i>D</i>	
X Co	0.00138	170.9	-0.0011	0.00344	0.00189		
X Cr	0.00037	259.1	0.00009	0.00146	-0.0004		
X Cu	0.00166	114.8	0.00124	0.00374	-0.0000		
Fe	0.18521	1.672	0.18227	0.18845	0.18491		
K	5.17806	0.857	5.12679	5.20369	5.20369		
Li	0.00101	173.2	-0.0000	-0.0000	0.00303		
X Mg	6.05489	0.543	6.03752	6.03429	6.09287		
X Mn	0.09148	1.542	0.08985	0.09229	0.09229		
Mo	-0.00190	43.00	-0.0014	-0.0014	-0.0028		
X Na	9.64039	0.174	9.64039	9.62358	9.65720		
X Ni	0.00089	427.6	0.00211	0.00394	-0.0033		
P	-0.03038	194.7	-0.0930	0.02454	-0.0226		
Pb	-0.00691	87.42	-0.0026	-0.0042	-0.0138		
X Sb	0.00034	617.6	-0.0020	0.00203	0.00099		
Se	0.01045	151.9	0.01962	-0.0078	0.01962		
Si	4.81584	0.217	4.80379	4.82300	4.82071		
Sn	-0.00014	7405.	0.00327	0.00840	-0.0121		
Sr	0.07864	0.407	0.07832	0.07864	0.07896		
Ti	0.00146	14.27	0.00125	0.00167	0.00146		
Tl	0.07045	166.7	0.03778	0.20085	-0.0272		
X V	-0.00381	75.23	-0.0066	-0.0038	-0.0009		
X Zn	0.02781	0.060	0.02781	0.02779	0.02782		

AR318949

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*A 136 Ca Be Cd Cu Cr Co Cu Fe Mg Mn Ni K Ag Na V Zn*

43 1908992 *CRHLT* 12/20/92 01:21

\*\*\*\*,100-100,DF1,923541848001,1,,

ELEM	AVERAGE(ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
X Ag	-0.00191	102.0	-0.0038	-0.0019	0.00003		
X Al	0.06511	24.26	0.04745	0.06998	0.07790		
As	-0.01633	35.24	-0.0229	-0.0138	-0.0122		
B	0.02981	8.359	0.02693	0.03125	0.03125		
X Ba	0.02441	2.838	0.02401	0.02401	0.02521		
X Be	0.00000	85.67	0.00001	0.00000	0.00000		
X Ca	8.38826	0.359	8.39496	8.41453	8.35529		
Cd	-0.00004	1673.	-0.0009	0.00039	0.00039	D	
X Co	0.00030	1079.	-0.0011	0.00408	-0.0019		
X Cr	-0.00424	47.64	-0.0057	-0.0019	-0.0050		
X Cu	0.00082	174.0	-0.0000	-0.0000	0.00249		
X Fe	0.24983	0.815	0.25218	0.24865	0.24865		
X K	2.56340	1.732	2.58904	2.51213	2.58903		
Li	-0.00101	173.2	-0.0030	-0.0000	-0.0000		
X Mg	3.32215	0.299	3.33301	3.31999	3.31346		
X Mn	0.07363	1.915	0.07526	0.07281	0.07281		
Mo	-0.00143	98.44	-0.0028	-0.0014	-0.0000		
X Na	6.84717	0.464	6.82475	6.88358	6.83317		
X Ni	-0.00094	112.9	-0.0015	-0.0015	0.00028		
P	-0.07955	48.45	-0.0993	-0.0351	-0.1041		
Pb	-0.00440	104.0	0.00055	-0.0052	-0.0084		
X Sb	0.00135	172.0	0.00403	0.00000	0.00000		
Se	0.00522	280.3	-0.0056	-0.0006	0.02188		
Si	3.41187	0.496	3.40061	3.43135	3.40365		
Sn	-0.00522	150.0	-0.0120	-0.0069	0.00332		
Sr	0.04754	0.000	0.04754	0.04754	0.04754		
Ti	0.00055	302.5	-0.0004	-0.0004	0.00250		
Tl	-0.10342	39.73	-0.1415	-0.1088	-0.0598		
X V	-0.00191	87.21	-0.0038	-0.0009	-0.0009		
X Zn	0.01107	0.085	0.01107	0.01107	0.01106		

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Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

*A19bBaBeCdCaClCoCuFeMgMnNiKAsNaVZn*  
44 1908993 *CKHLK* 12/20/92 01:26  
\*\*\*\*, 100-100, DF1, 923541848001, 1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
<input checked="" type="checkbox"/> Ag	-0.00265	85.04	-0.0013	-0.0013	-0.0052	_____	_____
<input checked="" type="checkbox"/> Al	3.00210	0.786	3.01548	3.01598	2.97484	_____	_____
<input type="checkbox"/> As	-0.00879	0.029	-0.0087	-0.0087	-0.0088	_____	_____
<input type="checkbox"/> B	0.02911	0.033	0.02912	0.02911	0.02910	_____	_____
<input checked="" type="checkbox"/> Ba	0.04571	0.000	0.04571	0.04571	0.04571	_____	_____
<input checked="" type="checkbox"/> Be	-0.00000	77.60	-0.0000	-0.0000	-0.0000	_____	_____
<input checked="" type="checkbox"/> Ca	8.65006	0.184	8.64512	8.63719	8.66786	_____	_____
<input type="checkbox"/> Cd	-0.00062	122.3	-0.0010	0.00025	-0.0010	<u>D</u>	_____
<input checked="" type="checkbox"/> Co	0.00105	289.4	-0.0021	0.00388	0.00143	_____	_____
<input checked="" type="checkbox"/> Cr	0.00299	53.62	0.00177	0.00239	0.00480	_____	_____
<input checked="" type="checkbox"/> Cu	0.00533	48.69	0.00242	0.00742	0.00617	_____	_____
<input checked="" type="checkbox"/> Fe	3.23942	0.041	3.23913	3.23824	3.24089	_____	_____
<input type="checkbox"/> K	2.92224	1.519	2.89662	2.97351	2.89661	_____	_____
<input type="checkbox"/> Li	0.00101	173.2	0.00303	-0.0000	-0.0000	_____	_____
<input checked="" type="checkbox"/> Mg	3.57565	0.689	3.54744	3.59301	3.58650	_____	_____
<input checked="" type="checkbox"/> Mn	0.10689	0.000	0.10689	0.10689	0.10689	_____	_____
<input type="checkbox"/> Mo	-0.00185	76.09	-0.0032	-0.0004	-0.0018	_____	_____
<input checked="" type="checkbox"/> Na	6.77773	0.715	6.83374	6.74972	6.74973	_____	_____
<input checked="" type="checkbox"/> Ni	0.00428	24.71	0.00550	0.00367	0.00367	_____	_____
<input type="checkbox"/> P	0.04343	34.69	0.03810	0.06044	0.03175	_____	_____
<input type="checkbox"/> Pb	0.00079	1597.	0.01536	-0.0059	-0.0070	_____	_____
<input checked="" type="checkbox"/> Sb	-0.00045	1784.	-0.0004	-0.0084	0.00757	_____	_____
<input type="checkbox"/> Se	0.00785	91.82	0.00368	0.01618	0.00369	_____	_____
<input type="checkbox"/> Si	7.40199	0.950	7.46556	7.41401	7.32640	_____	_____
<input type="checkbox"/> Sn	-0.01294	97.69	-0.0043	-0.0274	-0.0069	_____	_____
<input type="checkbox"/> Sr	0.05018	0.245	0.05011	0.05011	0.05032	_____	_____
<input type="checkbox"/> Ti	0.12300	3.439	0.11842	0.12384	0.12676	_____	_____
<input type="checkbox"/> Tl	-0.12069	94.78	-0.2514	-0.0391	-0.0715	_____	_____
<input checked="" type="checkbox"/> V	0.00247	33.65	0.00198	0.00199	0.00343	_____	_____
<input checked="" type="checkbox"/> Zn	0.03302	0.028	0.03303	0.03301	0.03302	_____	_____

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AR318951

Run Name: 9235402I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

45 ICSA 12/20/92 01:31

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	-0.03458	6.498	-0.0321	-0.0350	-0.0365	_____	_____
__Al	467.04864	0.529	465.178	466.114	469.853	_____	_____
__As	0.20143	16.26	0.18368	0.18138	0.23924	_____	_____
__B	0.27537	2.250	0.27030	0.27353	0.28228	_____	_____
__Ba	0.00565	0.663	0.00562	0.00564	0.00570	_____	_____
__Be	0.00108	35.66	0.00064	0.00131	0.00130	_____	_____
__Ca	461.27288	0.755	458.259	460.467	465.090	_____	_____
__Cd	0.03102	2.457	0.03059	0.03190	0.03057	_____	_____
__Co	0.00127	141.2	0.00036	0.00010	0.00334	_____	_____
__Cr	-0.01621	6.322	-0.0168	-0.0150	-0.0167	_____	_____
__Cu	0.00077	302.8	-0.0019	0.00182	0.00243	_____	_____
__Fe	176.77893	0.663	175.901	176.324	178.110	_____	_____
__K	0.24379	18.24	0.21810	0.21813	0.29515	_____	_____
__Li	-0.00202	173.1	-0.0060	-0.0000	-0.0000	_____	_____
__Mg	482.41149	0.558	480.316	481.468	485.448	_____	_____
__Mn	-0.01240	1.050	-0.0123	-0.0123	-0.0125	_____	_____
__Mo	-0.04901	4.816	-0.0464	-0.0494	-0.0511	_____	_____
__Na	0.10373	9.347	0.10933	0.09254	0.10934	_____	_____
__Ni	-0.02623	6.633	-0.0261	-0.0280	-0.0245	_____	_____
__P	-1.69193	11.18	-1.5375	-1.6352	-1.9030	_____	_____
__Pb	0.02358	17.19	0.02051	0.02205	0.02818	_____	_____
__Sb	0.00537	289.3	0.00646	-0.0106	0.02036	_____	_____
__Se	-0.05911	36.90	-0.0521	-0.0835	-0.0416	_____	_____
__Si	-0.00012	4168.	0.00226	0.00359	-0.0062	_____	_____
__Sn	0.09084	22.93	0.06837	0.10953	0.09462	_____	_____
__Sr	0.01763	0.000	0.01762	0.01763	0.01763	_____	_____
__Ti	0.01097	13.34	0.00958	0.01250	0.01083	_____	_____
__Tl	-0.44057	14.22	-0.5099	-0.3881	-0.4235	_____	_____
__V	0.00414	69.39	0.00699	0.00125	0.00417	_____	_____
__Zn	-0.00981	2.264	-0.0098	-0.0100	-0.0095	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.87996	1.210	0.89220	0.87491	0.87278	_____	_____
__Al	470.97653	0.329	469.226	472.191	471.511	_____	_____
__As	0.20806	9.376	0.22839	0.18949	0.20630	_____	_____
__B	0.28389	0.851	0.28341	0.28651	0.28175	_____	_____
__Ba	0.48022	0.292	0.47860	0.48104	0.48101	_____	_____
__Be	0.45086	0.445	0.44868	0.45262	0.45130	_____	_____
__Ca	464.76666	0.457	463.003	467.127	464.169	_____	_____
__Cd	0.88326	0.299	0.88085	0.88609	0.88285	_____	_____
__Co	0.42927	1.334	0.42312	0.43447	0.43021	_____	_____
__Cr	0.43870	1.202	0.43713	0.44459	0.43439	_____	_____
__Cu	0.45843	1.100	0.45302	0.46301	0.45926	_____	_____
__Fe	178.30604	0.388	177.691	179.055	178.171	_____	_____
__K	0.24419	18.18	0.21850	0.21860	0.29547	_____	_____
__Li	-0.00101	624.4	-0.0060	0.00606	-0.0030	_____	_____
__Mg	485.87545	0.361	483.946	487.386	486.293	_____	_____
__Mn	0.43241	0.546	0.43005	0.43478	0.43240	_____	_____
__Mo	-0.05085	7.273	-0.0469	-0.0542	-0.0513	_____	_____
__Na	0.10619	16.47	0.09218	0.10059	0.12581	_____	_____
__Ni	0.83005	0.254	0.83136	0.83118	0.82761	_____	_____
__P	-1.86569	6.756	-1.7276	-1.9746	-1.8947	_____	_____
__Pb	0.91539	0.967	0.92411	0.90641	0.91566	_____	_____
__Sb	0.01255	102.8	-0.0021	0.01785	0.02198	_____	_____
__Se	-0.05860	69.54	-0.0733	-0.0125	-0.0899	_____	_____
__Si	-0.00063	1324.	-0.0003	0.00760	-0.0091	_____	_____
__Sn	0.11042	4.466	0.11527	0.10541	0.11058	_____	_____
__Sr	0.01774	0.695	0.01781	0.01781	0.01760	_____	_____
__Ti	0.00993	6.289	0.00930	0.00993	0.01055	_____	_____
__Tl	-0.41729	10.99	-0.3645	-0.4399	-0.4474	_____	_____
__V	0.46639	0.713	0.46255	0.46833	0.46829	_____	_____
__Zn	0.89625	0.529	0.89273	0.90165	0.89436	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.09825	1.135	0.09762	0.09760	0.09954	_____	_____
__Al	0.57454	33.94	0.78838	0.52875	0.40650	_____	_____
__As	0.00899	71.82	0.01624	0.00693	0.00381	_____	_____
__B	0.00084	124.2	0.00206	0.00018	0.00029	_____	_____
__Ba	0.00240	0.106	0.00241	0.00240	0.00240	_____	_____
__Be	0.01004	3.745	0.01025	0.01026	0.00960	_____	_____
__Ca	0.58723	34.17	0.80972	0.53205	0.41993	_____	_____
__Cd	0.01095	11.99	0.01095	0.00963	0.01226	_____	_____
__Co	0.10075	3.540	0.09674	0.10356	0.10196	_____	_____
__Cr	0.02231	3.713	0.02268	0.02289	0.02136	_____	_____
__Cu	0.04748	2.632	0.04748	0.04873	0.04623	_____	_____
__Fe	0.23587	33.93	0.32471	0.21351	0.16938	_____	_____
__K	0.15382	28.85	0.12819	0.12819	0.20508	_____	_____
__Li	-0.00000	152.7	-0.0000	-0.0000	-0.0000	_____	_____
__Mg	0.59271	34.56	0.82049	0.53414	0.42350	_____	_____
__Mn	0.02891	0.030	0.02890	0.02891	0.02892	_____	_____
__Mo	-0.00053	152.7	-0.0000	-0.0014	-0.0000	_____	_____
__Na	0.03916	44.65	0.05876	0.02516	0.03356	_____	_____
__Ni	0.07962	5.791	0.07534	0.08450	0.07901	_____	_____
__P	-0.10809	48.18	-0.0624	-0.1648	-0.0969	_____	_____
__Pb	0.00668	155.2	0.01851	0.00239	-0.0008	_____	_____
__Sb	0.11088	5.798	0.11350	0.10355	0.11557	_____	_____
__Se	0.01898	94.83	0.03895	0.01398	0.00400	_____	_____
__Si	0.00464	50.05	0.00718	0.00412	0.00262	_____	_____
__Sn	-0.00845	92.92	-0.0015	-0.0067	-0.0170	_____	_____
__Sr	-0.00018	67.12	-0.0001	-0.0003	-0.0001	_____	_____
__Ti	0.00292	37.68	0.00209	0.00418	0.00251	_____	_____
__Tl	-0.01846	204.1	0.00322	-0.0620	0.00338	_____	_____
__V	0.09880	3.365	0.10264	0.09688	0.09688	_____	_____
__Zn	0.04064	0.059	0.04063	0.04063	0.04067	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.46441	0.484	0.46181	0.46571	0.46571	_____	_____
___Al	23.91110	0.367	23.9111	23.9989	23.8231	_____	_____
___As	2.06928	0.348	2.07742	2.06671	2.06371	_____	_____
___B	0.97421	0.482	0.97091	0.97959	0.97212	_____	_____
___Ba	4.95586	0.452	4.95946	4.97626	4.93185	_____	_____
___Be	0.47830	0.415	0.47786	0.48047	0.47657	_____	_____
___Ca	48.79493	0.318	48.7270	48.9729	48.6847	_____	_____
___Cd	4.85434	0.501	4.82937	4.87798	4.85565	_____	_____
___Co	0.96776	0.431	0.96483	0.97254	0.96592	_____	_____
___Cr	5.11542	0.167	5.11293	5.12498	5.10835	_____	_____
___Cu	4.83562	0.390	4.84045	4.85159	4.81481	_____	_____
___Fe	4.94020	0.364	4.94788	4.95309	4.91964	_____	_____
___K	49.14785	0.413	49.0710	49.3783	48.9941	_____	_____
___Li	25.78120	0.568	25.8014	25.9165	25.6256	_____	_____
___Mg	23.84337	0.458	23.8996	23.9129	23.7174	_____	_____
___Mn	4.92522	0.287	4.91584	4.94154	4.91829	_____	_____
___Mo	24.60817	0.317	24.5538	24.6975	24.5730	_____	_____
___Na	53.75790	0.945	54.0885	54.0128	53.1723	_____	_____
___Ni	9.71369	0.284	9.70102	9.74540	9.69465	_____	_____
___P	25.41547	1.110	25.1546	25.7150	25.3767	_____	_____
___Pb	24.76223	0.259	24.7727	24.8207	24.6932	_____	_____
___Sb	5.06257	0.444	5.04766	5.08846	5.05157	_____	_____
___Se	2.02839	0.647	2.02965	2.04085	2.01466	_____	_____
___Si	2.00963	0.922	1.99214	2.02907	2.00767	_____	_____
___Sn	4.88400	0.456	4.89433	4.89927	4.85840	_____	_____
___Sr	1.01441	0.395	1.01431	1.01847	1.01046	_____	_____
___Ti	2.05064	0.377	2.05286	2.05704	2.04202	_____	_____
___Tl	5.31213	1.189	5.28001	5.38491	5.27147	_____	_____
___V	2.02667	0.472	2.02696	2.03610	2.01695	_____	_____
___Zn	4.94132	0.329	4.92543	4.95799	4.94055	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.00000	24065	0.00390	0.00000	-0.0039	_____	_____
___Al	0.07335	36.18	0.07578	0.09859	0.04568	_____	_____
___As	-0.01114	72.34	-0.0080	-0.0050	-0.0202	_____	_____
___B	0.00069	307.7	0.00284	0.00069	-0.0014	_____	_____
___Ba	0.01040	48.03	0.01440	0.01200	0.00480	_____	_____
___Be	0.00066	98.39	0.00066	0.00131	0.00001	_____	_____
___Ca	0.11177	40.77	0.13539	0.14068	0.05923	_____	_____
___Cd	<u>0.00875</u>	43.30	0.01094	0.01094	0.00437	_____	_____
___Co	0.00307	67.30	0.00429	0.00068	0.00424	_____	_____
___Cr	0.00708	77.09	0.01167	0.00855	0.00104	_____	_____
___Cu	0.00788	74.73	0.01245	0.00995	0.00123	_____	_____
___Fe	0.01615	50.68	0.01850	0.02291	0.00705	_____	_____
___K	0.25625	17.31	0.28186	0.28187	0.20502	_____	_____
___Li	0.04445	51.62	0.06061	0.05455	0.01818	_____	_____
___Mg	0.05864	40.07	0.07819	0.06516	0.03256	_____	_____
___Mn	0.00693	61.12	0.00937	0.00937	0.00203	_____	_____
___Mo	0.04482	45.60	0.05732	0.05591	0.02123	_____	_____
___Na	0.09244	48.10	0.12606	0.10925	0.04202	_____	_____
___Ni	0.01692	84.96	0.02611	0.02428	0.00035	_____	_____
___P	0.02083	81.03	0.02070	0.00401	0.03778	_____	_____
___Pb	0.04159	38.28	0.04799	0.05333	0.02346	_____	_____
___Sb	0.01393	87.52	0.01994	0.02196	-0.0001	_____	_____
___Se	-0.00085	774.6	0.00664	-0.0033	-0.0058	_____	_____
___Si	0.01046	51.97	0.00943	0.01635	0.00561	_____	_____
___Sn	-0.00689	148.4	0.00334	-0.0069	-0.0171	_____	_____
___Sr	0.00160	69.27	0.00224	0.00224	0.00032	_____	_____
___Ti	0.00361	56.94	0.00459	0.00500	0.00125	_____	_____
___Tl	0.00508	1599.	0.00486	0.08647	-0.0760	_____	_____
___V	-0.00079	371.2	-0.0007	0.00212	-0.0037	_____	_____
___Zn	0.00926	52.68	0.01296	0.01110	0.00373	_____	_____

Data Reviewed By: *MSJ/42 12-20-92*  
Data Verified By: *M. J. Savely 12-21-92*

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Name: 9235601111  
 Data Reviewed By: *J. Davinger* 12/21/92  
 Data Verified By: *Max Swartz* 12-22-92

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	RELO	REDIG
___Ag	22.66666	5.094	22.0000	22.0000	24.0000		
___Al	577.33331	0.529	578.000	574.000	580.000		
___As	23.00000	15.67	26.0000	24.0000	19.0000		
___B	6.66666	17.32	6.00000	8.00000	6.00000		
___Ba	52.00000	0.000	52.0000	52.0000	52.0000		
___Be	22.00000	0.000	22.0000	22.0000	22.0000		
___Ca	600.66668	1.017	594.000	606.000	602.000		
___Cd	0.00000	0.000	0.00000	0.00000	0.00000		
___Co	3.18518	96.75	-0.2222	4.00000	5.77777		
___Cr	10.29628	13.18	9.11108	11.7777	10.0000		
___Cu	8.33333	24.97	9.00000	10.0000	6.00000		
___Fe	9.33333	32.73	12.0000	10.0000	6.00000		
___K	258.33334	1.117	255.000	260.000	260.000		
___Li	0.00000	0.000	0.00000	0.00000	0.00000		
___Mg	7.00000	14.28	7.00000	6.00000	8.00000		
___Mn	3.66666	15.74	3.00000	4.00000	4.00000		
___Mo	1.33333	86.60	2.00000	0.00000	2.00000		
___Na	152.66667	0.756	152.000	154.000	152.000		
___Ni	5.33333	86.60	0.00000	8.00000	8.00000		
___P	-0.87356	174.8	0.20689	-2.6206	-0.2068		
___Pb	2.66666	60.62	3.60000	3.60000	0.79998		
___Sb	6.66666	217.0	14.0000	16.0000	-10.000		
___Se	6.00000	145.2	0.00000	16.0000	2.00000		
___Si	41.00000	24.02	33.0000	52.0000	38.0000		
___Sn	-1.33333	229.1	2.00000	-4.0000	-2.0000		
___Sr	0.00000	0.000	-2.0000	0.00000	2.00000		
___Ti	67.33333	14.03	60.0000	78.0000	64.0000		
___Tl	21.66666	37.01	21.0000	30.0000	14.0000		
___V	0.00000	0.000	0.00000	0.00000	0.00000		
___Zn	43.66666	1.322	44.0000	43.0000	44.0000		

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ba	8620.33300	0.736	8622.00	8556.00	8683.00	_____	_____
___Cd	16200.00000	0.407	16191.0	16139.0	16270.0	_____	_____
___Cr	22612.96289	0.653	22587.5	22479.4	22771.8	_____	_____
___Cu	16429.00000	0.712	16425.0	16314.0	16548.0	_____	_____
___Fe	11747.66699	0.719	11744.0	11665.0	11834.0	_____	_____
___Mn	8524.33300	0.694	8514.00	8471.00	8588.00	_____	_____
___Mo	74180.33593	0.658	74146.0	73710.0	74685.0	_____	_____
___Ni	22877.00000	0.592	22874.0	22743.0	23014.0	_____	_____
___Pb	19857.80078	0.413	19858.8	19775.1	19939.4	_____	_____
___Zn	11370.33300	0.557	11358.0	11314.0	11439.0	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	RELOAD	REDIG
As	1806.33337	1.474	1777.00	1813.00	1829.00	---	---
Be	1622.33337	1.560	1595.00	1627.00	1645.00	---	---
Co	3663.51855	1.664	3596.66	3677.77	3716.11	---	---
Li	16614.00000	1.676	16326.0	16634.0	16882.0	---	---
P	5985.39062	1.558	5892.48	5984.68	6079.00	---	---
Sb	10583.33300	1.168	10442.0	10636.0	10672.0	---	---
Se	4340.33349	0.837	4329.00	4311.00	4381.00	---	---
Si	6792.66650	1.723	6665.00	6818.00	6895.00	---	---
Sn	4484.66650	1.046	4432.00	4500.00	4522.00	---	---
Sr	9759.00000	1.708	9572.00	9813.00	9892.00	---	---
Ti	25267.33398	1.596	24844.0	25311.0	25647.0	---	---
Tl	1323.33337	1.513	1304.00	1322.00	1344.00	---	---
V	3675.00000	1.558	3610.00	3697.00	3718.00	---	---

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Fun Name 235601111

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	1068.00000	0.374	1072.00	1068.00	1064.00	_____	_____
__B	1914.33337	0.030	1914.00	1914.00	1915.00	_____	_____

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Run Date 1235601111

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
K	13548.00000	0.472	13480.0	13557.0	13607.0	_____	_____
Na	13359.00000	0.736	57865.0	58566.0	58646.0	_____	_____

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Run Name 1235601111

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Al	7183.66601	0.531	27072.0	27347.0	27132.0	_____	_____
Ca	97571.32812	0.409	196943.	198484.	197287.	_____	_____
Mg	1405.66601	0.437	31316.0	31564.0	31337.0	_____	_____

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ELFM	CONCENTRATION RANGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	18267	4.118	0.50562	0.47120	0.47119	_____	_____
Al	86079	0.501	23.9986	23.7846	23.7990	_____	_____
As	7305	0.912	1.99356	1.96566	1.95991	_____	_____
B	7181	0.004	0.97176	0.97184	0.97183	_____	_____
Pa	7207	0.691	4.91097	4.85262	4.85262	_____	_____
Be	46108	0.459	0.46353	0.45989	0.45982	_____	_____
Ca	100273	0.474	49.2709	48.8566	48.8805	_____	_____
Cd	75882	0.339	4.77733	4.75142	4.74772	_____	_____
Co	94843	0.572	0.95443	0.94385	0.94700	_____	_____
Cr	94182	0.490	5.07033	5.02576	5.02938	_____	_____
Cu	74641	0.643	4.78146	4.72552	4.73225	_____	_____
Fe	85225	0.472	4.87858	4.84121	4.83695	_____	_____
K	24823	1.087	50.7748	49.6839	50.2859	_____	_____
Li	64915	0.634	24.8287	24.5428	24.5759	_____	_____
Mg	66769	0.536	23.8133	23.6091	23.5805	_____	_____
Mn	34966	0.497	4.87745	4.83400	4.83752	_____	_____
Mo	122146	0.305	24.3039	24.1994	24.1610	_____	_____
Na	97985	0.734	51.4093	50.7221	50.8080	_____	_____
Ni	55005	0.398	9.59282	9.53746	9.51987	_____	_____
P	126931	0.992	24.4224	24.3937	23.9917	_____	_____
Pb	152565	0.516	24.6719	24.4517	24.4532	_____	_____
Sb	90474	0.095	4.90450	4.90955	4.90018	_____	_____
Se	96019	0.579	1.94707	1.96676	1.96675	_____	_____
Si	04644	0.852	2.05079	2.02723	2.06130	_____	_____
Sn	79816	0.819	4.84338	4.77217	4.77892	_____	_____
Sr	98035	0.722	0.98851	0.97581	0.97673	_____	_____
Ti	97015	0.448	1.98027	1.96399	1.96617	_____	_____
Tl	00465	0.459	5.02953	4.98416	5.00026	_____	_____
V	96055	0.963	1.97722	1.94003	1.96440	_____	_____
Zn	83694	0.281	4.85225	4.82619	4.83239	_____	_____

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LANCASTER LABORATORIES

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.00255	86.60	0.00510	0.00127	0.00127	_____	_____
__Al	0.02624	29.49	0.03491	0.02382	0.02000	_____	_____
__As	0.00373	229.0	-0.0112	0.00560	-0.0056	_____	_____
__B	0.00139	173.6	0.00140	-0.0027	-0.0028	_____	_____
__Ba	0.00233	0.002	0.00233	0.00233	0.00233	_____	_____
__Be	0.00041	173.3	0.00124	-0.0000	-0.0000	_____	_____
__Ca	0.02504	28.08	0.03316	0.02098	0.02098	_____	_____
__Cd	0.00226	41.66	0.00308	0.00246	0.00123	_____	_____
__Co	0.00008	1757.	0.00101	0.00046	-0.0017	_____	_____
__Cr	0.00211	148.0	0.00461	-0.0013	0.00312	_____	_____
__Cu	0.00222	98.50	0.00465	0.00040	0.00161	_____	_____
__Fe	0.00000	18415	0.00055	-0.0011	0.00056	_____	_____
__K	0.13793	0.006	0.13792	0.13793	0.13793	_____	_____
__Li	0.00702	65.46	0.01203	0.00300	0.00601	_____	_____
__Mg	0.00743	275.2	0.01594	-0.0159	0.02229	_____	_____
__Mn	0.00078	86.49	0.00156	0.00039	0.00039	_____	_____
__Mo	0.01078	47.32	0.01662	0.00853	0.00718	_____	_____
__Na	0.00572	458.7	0.02862	-0.0229	0.01145	_____	_____
__Ni	0.00055	483.8	0.00237	-0.0028	-0.0011	_____	_____
__P	0.00385	1489.	-0.0190	-0.0520	0.05959	_____	_____
__Pb	0.01159	125.8	0.01596	-0.0046	0.02351	_____	_____
__Sb	0.01204	128.3	0.00495	-0.0158	-0.0252	_____	_____
__Se	0.01691	138.0	0.00229	0.00460	0.04383	_____	_____
__Si	0.00271	191.1	0.00221	-0.0081	-0.0022	_____	_____
__Sn	0.00742	103.9	0.01633	0.00296	0.00296	_____	_____
__Sr	0.00037	110.2	0.00081	-0.0000	0.00030	_____	_____
__Ti	0.00006	1549.	0.00033	-0.0010	0.00092	_____	_____
__Tl	0.01792	301.1	-0.0128	-0.0742	0.03336	_____	_____
__V	0.00004	53.58	0.00006	0.00002	0.00003	_____	_____
__Zn	0.00234	21.01	0.00291	0.00206	0.00205	_____	_____

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ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.03073	5.649	-0.0325	-0.0305	-0.0290		
Al	4.34030	0.856	465.827	467.361	459.832		
As	0.16836	31.15	0.22428	0.16052	0.12026		
B	0.28098	1.998	0.28746	0.27789	0.27758		
Ba	0.00637	21.36	0.00794	0.00562	0.00554		
Be	0.00122	0.203	0.00122	0.00122	0.00122		
Ca	4.39697	0.609	462.702	463.319	458.168		
Cd	0.02888	6.605	0.03095	0.02850	0.02719		
Co	0.00050	172.0	0.00007	-0.0014	-0.0000		
Cr	0.01461	16.18	-0.0156	-0.0162	-0.0118		
Cu	0.00214	85.67	0.00214	0.00031	0.00399		
Fe	4.78601	0.690	175.252	175.690	173.415		
K	0.17600	24.63	0.15095	0.15098	0.22607		
Li	0.00000	9.569	-0.0000	-0.0000	-0.0000		
Mg	7.95496	0.740	479.296	480.646	473.952		
Mn	0.01255	11.63	-0.0118	-0.0142	-0.0115		
Mo	0.04557	9.569	-0.0429	-0.0431	-0.0506		
Na	0.07738	27.94	0.05447	0.08024	0.09744		
Ni	0.02658	10.51	-0.0272	-0.0290	-0.0235		
P	0.60866	2.696	-1.5651	-1.6518	-1.6090		
Pb	0.04145	19.88	0.03884	0.05068	0.03483		
Sb	0.02595	53.30	-0.0408	-0.0134	-0.0236		
Se	0.06640	44.19	-0.0331	-0.0887	-0.0772		
Si	0.00247	259.4	0.00493	-0.0064	-0.0059		
Sn	0.08650	18.61	0.09566	0.09593	0.06791		
Sr	0.01694	0.698	0.01700	0.01680	0.01700		
Ti	0.01176	19.78	0.01084	0.01004	0.01441		
Tl	0.35012	27.61	-0.3716	-0.4342	-0.2444		
V	0.00822	9.891	0.00779	0.00916	0.00772		
Zn	0.00952	8.608	-0.0102	-0.0086	-0.0096		

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LANCASTER LABORATORIES

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.89022	2.403	0.91269	0.87009	0.88788	_____	_____
___Al	166.80548	1.010	468.691	461.438	470.286	_____	_____
___As	0.25473	26.38	0.33073	0.20312	0.23035	_____	_____
___B	0.28801	0.588	0.28619	0.28954	0.28831	_____	_____
___Ba	0.46896	1.303	0.47248	0.46190	0.47249	_____	_____
___Be	0.43229	0.997	0.43478	0.42732	0.43478	_____	_____
___Ca	163.77499	0.795	465.357	459.556	466.411	_____	_____
___Cd	0.86925	0.822	0.87172	0.86119	0.87483	_____	_____
___Co	0.42134	1.099	0.42373	0.41599	0.42428	_____	_____
___Cr	0.43286	1.465	0.43757	0.42565	0.43535	_____	_____
___Cu	0.45164	0.618	0.45326	0.44842	0.45325	_____	_____
___Fe	175.92738	0.900	176.671	174.107	177.002	_____	_____
___K	0.07503	0.153	0.07608	0.07590	0.07611	_____	_____
___Li	0.00100	173.2	-0.0000	0.00300	-0.0000	_____	_____
___Mg	180.51742	0.925	482.393	475.437	483.721	_____	_____
___Mn	0.42713	0.906	0.42939	0.42266	0.42934	_____	_____
___Mo	0.04138	5.850	-0.0406	-0.0440	-0.0394	_____	_____
___Na	0.05129	19.34	0.04556	0.06275	0.04556	_____	_____
___Ni	0.81582	0.790	0.82040	0.80844	0.81861	_____	_____
___P	1.60671	3.170	-1.5480	-1.6393	-1.6328	_____	_____
___Pb	0.93145	3.063	0.95295	0.92407	0.90734	_____	_____
___Sh	0.00132	955.6	-0.0023	-0.0134	0.01183	_____	_____
___Se	-0.04922	51.75	-0.0249	-0.0757	-0.0470	_____	_____
___Si	0.00918	41.91	-0.0055	-0.0088	-0.0132	_____	_____
___Sn	0.09294	1.975	0.09173	0.09505	0.09203	_____	_____
___Sr	0.01725	0.684	0.01739	0.01718	0.01718	_____	_____
___Ti	0.01216	3.267	0.01217	0.01177	0.01256	_____	_____
___Tl	0.45116	21.02	-0.5576	-0.3755	-0.4203	_____	_____
___V	0.45424	1.398	0.45791	0.44691	0.45792	_____	_____
___Zn	0.87687	0.815	0.88016	0.86867	0.88178	_____	_____

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	01815	8.027	0.01847	0.01656	0.01942		
Al	12425	27.53	0.11940	0.16064	0.09272		
As	01449	10.92	0.01357	0.01358	0.01632		
R	0.00082	5.425	-0.0008	-0.0008	-0.0007		
Ba	00039	172.4	0.00000	0.00000	0.00116		
Be	00949	3.662	0.00909	0.00970	0.00969		
Ca	12692	37.09	0.11643	0.17836	0.08596		
Cd	0.00987	12.48	0.00864	0.00987	0.01111		
Co	09533	2.087	0.09373	0.09756	0.09470		
Cr	02249	5.960	0.02244	0.02117	0.02385		
Cu	04890	3.800	0.04728	0.04849	0.05093		
Fe	04735	39.45	0.03968	0.06864	0.03372		
K	11288	38.48	0.06272	0.13796	0.13796		
Li	00000	315.4	-0.0000	0.00000	0.00000		
Mg	12678	35.64	0.11828	0.17561	0.08644		
Mn	02857	0.008	0.02857	0.02856	0.02857		
Mo	00042	315.4	-0.0009	0.00042	0.00177		
Na	02868	34.60	-0.0229	-0.0401	-0.0229		
Ni	07626	3.510	0.07392	0.07567	0.07918		
P	04217	157.5	-0.1185	0.00204	-0.0099		
Pb	00128	685.8	-0.0036	-0.0086	0.00844		
Sb	10745	10.32	0.09482	0.11188	0.11565		
Se	00219	557.4	-0.0024	-0.0070	0.01603		
Si	00034	2879.	-0.0021	-0.0080	0.01118		
Sn	00295	174.2	-0.0059	-0.0059	0.00298		
Sr	00021	97.36	-0.0002	-0.0004	-0.0000		
Ti	00384	59.57	0.00252	0.00252	0.00649		
Tl	00937	499.8	0.03157	0.00079	-0.0604		
V	09756	4.487	0.09256	0.09937	0.10074		
Zn	03926	2.566	0.03869	0.03867	0.04043		

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LANCASTER LABORATORIES

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ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	PEDIG
Al	47320	1.282	0.47121	0.48074	0.48265		
As	91098	1.818	23.4016	24.1937	24.1076		
Ar	01352	1.786	1.97686	2.04813	2.02156		
B	97397	2.243	0.94885	0.98861	0.98444		
Ba	88763	2.144	4.76742	4.95999	4.93548		
Bb	46270	1.921	0.45245	0.46842	0.46722		
Ca	07770	1.791	48.0626	49.5745	49.5958		
Cd	79399	1.894	4.68912	4.84766	4.84519		
Co	94942	2.280	0.92464	0.95893	0.96468		
Cr	65539	1.986	4.94933	5.12804	5.11882		
Cu	75705	1.911	4.05271	4.81956	4.79887		
Fe	87431	1.797	4.77379	4.92950	4.92014		
K	111000	2.048	48.9270	50.5860	50.8118		
Li	172941	2.148	24.1175	25.1326	24.9280		
Mn	163695	1.896	23.1689	23.9698	23.9220		
Pb	86308	1.839	4.76470	4.92211	4.91741		
Mg	138794	1.897	22.9537	24.6631	24.6469		
Na	54455	1.950	49.4226	51.3147	50.8852		
Ni	62307	1.985	9.10278	9.74331	9.72314		
P	157641	1.196	24.2292	24.7104	24.7795		
Pb	468483	1.720	24.1962	24.9641	24.8941		
Sb	91661	2.101	4.79914	4.95738	4.99330		
Se	96747	2.267	1.91612	1.98967	1.99662		
Si	03513	2.240	1.98295	2.05448	2.06786		
Sn	80534	1.482	4.72359	4.83841	4.85402		
Sp	78325	2.140	0.95910	0.99773	0.99291		
Ti	07942	2.231	1.92846	2.00688	2.00291		
Zn	01585	1.807	5.06218	4.91133	5.07303		
Zr	97658	2.405	1.92238	2.01120	1.99616		
Ag	86081	1.712	4.76514	4.90017	4.91711		

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LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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ELEMENT	CONCENTRATION (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REF.FAD	REF.DIG
Ag	00318	59.98	0.00510	0.00127	0.00318		
Al	00360	51.08	0.00096	0.02366	0.03118		
As	00701	121.6	-0.0112	0.00280	-0.0126		
C	00211	57.46	-0.0028	-0.0028	-0.0007		
Ca	00466	49.99	0.00700	0.00466	0.00233		
Co	00124	0.591	0.00123	0.00124	0.00124		
Cr	05076	51.58	0.07987	0.04332	0.02910		
Cd	00328	86.64	0.00493	0.00493	-0.0000		
Cu	00057	250.4	-0.0019	-0.0007	0.00093		
Ge	00332	19.47	0.00265	0.00258	0.00374		
Ga	00526	41.54	0.00768	0.00465	0.00344		
Fe	00736	61.05	0.01246	0.00566	0.00396		
K	00807	46.20	0.13783	0.13791	0.28842		
Mg	01805	66.66	0.03000	0.01805	0.00601		
Mn	04355	47.06	0.05693	0.03505	0.02867		
Ni	00313	94.34	0.00626	0.00274	0.00039		
Pb	02201	62.14	0.02684	0.01932	0.00988		
Na	00286	964.4	0.02863	-0.0143	-0.0228		
P	00822	32.96	0.01117	0.00763	0.00585		
S	03555	60.23	0.02282	0.02356	0.06028		
Sb	02587	63.09	0.04468	0.01545	0.01747		
Se	00434	204.7	0.01437	0.00120	-0.0025		
Si	01306	71.35	0.01844	0.00230	0.01845		
Te	00323	114.6	-0.0027	-0.0066	0.00070		
Tl	00888	104.2	0.01629	0.01186	-0.0014		
Zn	00038	58.07	0.00142	0.00081	0.00040		
Bi	00304	83.83	0.00180	0.00013	0.00410		
Br	00623	46.38	-0.0589	-0.1052	-0.0434		
V	00280	85.66	0.00557	0.00143	0.00140		
Zn	00495	73.82	0.00004	0.00378	0.00202		

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LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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ELEMENT	FRAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	PEREAD	REDIG
Ag	00000	44598	0.00128	-0.0025	0.00128		
Al	04134	24.07	0.02759	0.03380	0.05262		
Ar	000658	49.15	0.00845	0.00284	0.00844		
P	00869	31.87	0.01183	0.00660	0.00764		
Ba	00233	0.002	0.00233	0.00233	0.00233		
Ba	000000	168.4	-0.0000	-0.0000	-0.0000		
Ca	01421	4.123	0.01489	0.01387	0.01387		
✓ Cd	000082	86.70	0.00123	-0.0000	0.00123		
Ce	000286	9.704	-0.0027	-0.0031	-0.0027		
Cr	000040	495.9	-0.0002	-0.0024	0.00153		
Cu	000020	349.9	-0.0002	0.00101	-0.0002		
Fe	02697	5.468	0.02782	0.02527	0.02782		
K	013794	0.001	0.13794	0.13794	0.13794		
Li	00200	173.2	0.00000	0.00000	0.00601		
Mn	01167	83.27	0.00956	0.00318	0.02228		
Mn	000156	75.03	0.00273	0.00156	0.00039		
Mn	00314	42.92	0.00179	0.00449	0.00313		
Nb	000000	64168	0.01144	-0.0229	0.01145		
Nb	000115	151.5	0.0011	0.00059	-0.0029		
P	005656	79.01	-0.0154	-0.0501	-0.1041		
PE	000971	112.1	0.0127	-0.0187	0.00237		
SH	000129	553.6	0.00190	-0.0063	-0.0044		
SO	01498	78.11	0.02267	0.01268	0.00460		
Si	011601	3.149	0.11274	0.11848	0.11181		
Sn	00297	259.8	0.00743	0.00742	-0.0059		
Sr	00003	756.1	0.00030	-0.0002	-0.0000		
Ti	000013	457.0	-0.0006	-0.0002	0.00052		
Tl	003841	197.5	0.0096	-0.0743	0.04874		
V	00091	171.5	0.00000	0.00001	0.00273		
Zr	00235	21.76	0.00094	0.00204	0.00206		

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Name: 60111

LANCASTER LABORATORIES

ABC: 15

INSTRUMENT ID: 02360

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LEM	WAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	PEREAD	REDIG
As	4884	3.914	0.05076	0.04885	0.04693		
Al	1084	0.202	1.91307	1.91307	1.90638		
Ar	9342	0.773	2.00929	1.99249	1.97848		
B	3142	0.595	2.03841	2.03841	2.01745		
Br	5254	0.431	1.95955	1.95488	1.94321		
Bs	5041	1.214	0.05102	0.05041	0.04980		
Ca	40601	0.400	4.01650	4.01396	3.98756		
✓ Cl	4779	3.251	0.04635	0.04944	0.04759		
Co	3541	1.109	0.49043	0.48608	0.47973		
Cr	11064	1.280	0.21319	0.21090	0.20782		
Cu	25174	0.738	0.25376	0.25011	0.25134		
Fe	31403	0.629	1.01771	1.01771	1.00666		
	2220	1.824	4.17719	4.19743	4.04697		
	26021	0.177	1.96222	1.96222	1.95620		
Mn	29159	0.389	1.99011	1.88737	1.88730		
Mn	20458	0.711	0.50533	0.50771	0.50066		
Mo	20537	0.611	1.99098	1.99368	1.97144		
Ni	2572	0.480	4.13819	4.13815	4.10381		
Ni	20948	0.719	0.51066	0.51242	0.50537		
P	21354	1.783	2.04972	1.97789	2.01302		
Pb	19318	2.780	0.49783	0.50393	0.47774		
Pb	18671	1.166	0.49269	0.48607	0.48139		
Pb	24646	0.850	2.06181	2.05030	2.02724		
Pt	23094	0.518	4.94200	4.94826	4.90156		
Sb	20990	0.484	3.89121	3.92921	3.90918		
Se	26540	0.467	0.96822	0.96697	0.96031		
Si	20972	0.421	1.00455	0.99681	0.99781		
Si	22086	4.207	1.96192	1.99207	1.83868		
Sr	19491	0.865	0.48853	0.48584	0.48032		
Sr	21228	0.523	0.51462	0.51286	0.50935		

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AR318971

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Run Name: 3560111

LANCASTER LABORATORIES

PAGE: 16

INSTRUMENT ID: 02360

16 1908 JAMMT 12/21/92 15:35  
U\*\*\*, 100 DF1, 923541848001, 1,,

ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00039	280.4	-0.0002	-0.0002	0.00167		
Al	82650	0.961	1.80676	1.84036	1.83238		
As	0.00013	5126.	-0.0076	0.00078	0.00641		
B	0.05483	2.225	0.05624	0.05414	0.05411		
Ba	0.06620	2.035	0.06542	0.06776	0.06542		
Be	0.00000	113.6	0.00000	-0.0000	-0.0000		
Ca	41562	0.424	17.3636	17.3829	17.5002		
X Cd	0.00017	362.4	0.00044	-0.0007	-0.0001		
Co	0.00185	148.5	0.00106	-0.0044	-0.0022		
Cr	0.00048	433.3	0.00021	0.00118	-0.0028		
Cu	0.00420	16.73	0.00461	0.00339	0.00461		
Fe	15535	0.474	2.14513	2.15535	2.16557		
K	90701	1.470	5.85685	5.85684	6.00733		
Li	0.00000	146.4	0.00000	0.00000	0.00000		
Mg	0.04638	0.333	7.05488	7.01984	7.06441		
Mn	0.10923	1.074	0.10923	0.11041	0.10806		
Mo	0.00106	146.4	0.00016	0.00016	0.00285		
Na	83610	0.220	9.81317	9.85617	9.83896		
Ni	0.00076	132.0	-0.0013	-0.0013	0.00040		
P	0.16364	12.81	0.14898	0.18766	0.15429		
Pb	0.00091	414.2	-0.0012	-0.0012	0.00528		
Sb	0.00946	55.40	-0.0103	-0.0038	-0.0141		
Se	0.00337	978.2	0.00008	-0.0379	0.02777		
Si	26504	0.379	7.24459	7.25412	7.29640		
Sn	0.00022	4183.	0.00275	0.00720	-0.0106		
Sr	0.08511	0.367	0.08484	0.08504	0.08545		
Ti	0.08293	6.971	0.07751	0.08902	0.08227		
Tl	0.01491	312.7	0.03602	-0.0555	-0.0252		
V	0.00368	85.17	0.00006	0.00550	0.00550		
Zn	0.07297	1.201	0.07297	0.07209	0.07384		

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AR318972

Sample: 601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 17

17 1908 JAMMT A 12/21/92 15:39  
100-100 DF1.923541848001,1,,

LEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.05321	6.229	0.05512	0.05512	0.04938		
Al	4.4554	1.113	4.06783	4.07511	3.99367		
As	0.0578	11.10	0.22166	0.21607	0.17960		
B	0.15511	1.336	0.15511	0.15718	0.15304		
Ba	0.54935	0.649	0.54858	0.55324	0.54624		
Be	0.04933	0.009	0.04933	0.04933	0.04934		
Ca	20.68396	0.484	20.6910	20.7804	20.5803		
Cd	0.49049	0.645	0.48967	0.49399	0.48782		
Co	0.09547	1.259	0.09478	0.09686	0.09478		
Cr	0.51608	0.522	0.51507	0.51914	0.51404		
Cu	0.49034	1.032	0.48872	0.49602	0.48629		
Fe	2.24313	0.475	2.44512	2.45362	2.43064		
	10.29215	0.730	10.2921	10.3673	10.2169		
	2.47384	0.643	2.46782	2.49190	2.46180		
Mg	8.74947	0.373	8.74097	8.78560	8.72184		
Mn	0.59283	0.604	0.59205	0.59674	0.58970		
Mo	2.46933	0.397	2.46619	2.48034	2.46147		
Na	14.13629	0.530	14.1162	14.2193	14.0733		
Ni	0.98273	0.778	0.97923	0.99150	0.97747		
P	2.63229	1.610	2.68102	2.60391	2.61195		
Pb	2.49054	0.471	2.48535	2.50399	2.48229		
Sb	0.48817	1.231	0.48470	0.48470	0.49511		
Se	0.21842	12.18	0.19304	0.21611	0.24612		
Si	6.93024	0.775	6.93040	6.93777	6.84155		
Sn	0.49136	1.383	0.48542	0.49878	0.48988		
Sr	0.17589	0.597	0.17562	0.17705	0.17500		
Ti	0.27335	0.866	0.27229	0.27606	0.27170		
Tl	0.54469	5.356	0.53192	0.52408	0.57808		
V	0.20450	0.781	0.20539	0.20545	0.20265		
Zn	0.56070	0.176	0.56131	0.56124	0.55956		

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Run Name: 135601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 18

18 100000 JAMMT D 12/21/92 15:44  
0\*\*\*.100 .DF1,923541848001,1,,

ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.00021	1.446	-0.0002	-0.0002	-0.0002	_____	_____
___Al	1.94023	1.335	1.95357	1.95676	1.91038	_____	_____
___As	0.00435	145.4	-0.0017	0.01092	0.00386	_____	_____
___B	0.04538	0.111	0.04535	0.04535	0.04544	_____	_____
___Ba	0.06698	2.012	0.06776	0.06776	0.06543	_____	_____
___Be	0.00081	88.90	-0.0000	0.00123	0.00124	_____	_____
___Ca	18.10709	0.812	18.1851	18.1988	17.9373	_____	_____
X___Cd	0.00084	41.94	0.00105	0.00104	0.00043	_____	_____
___Co	0.00105	164.0	-0.0029	-0.0006	0.00044	_____	_____
___Cr	0.00338	22.05	0.00310	0.00423	0.00281	_____	_____
___Cu	0.00521	34.99	0.00521	0.00704	0.00339	_____	_____
___Fe	2.33252	0.959	2.34189	2.34871	2.30697	_____	_____
___K	6.08258	1.237	6.08258	6.00734	6.15783	_____	_____
___Li	0.00501	34.64	0.00300	0.00601	0.00601	_____	_____
___Mg	7.31711	0.676	7.35746	7.33197	7.26191	_____	_____
___Mn	0.11587	1.169	0.11743	0.11508	0.11509	_____	_____
___Mo	0.00373	75.11	0.00688	0.00148	0.00284	_____	_____
___Na	10.34867	1.506	10.3715	10.4918	10.1825	_____	_____
___Ni	0.00097	103.5	0.00040	0.00038	0.00213	_____	_____
___P	0.011465	63.58	0.19846	0.06599	0.07948	_____	_____
___Pb	0.00876	100.2	-0.0148	0.00131	-0.0128	_____	_____
___Sb	0.00089	369.0	-0.0029	0.00277	0.00280	_____	_____
___Se	0.00261	226.2	0.00238	-0.0010	-0.0091	_____	_____
___Si	7.51897	1.571	7.55333	7.61616	7.38743	_____	_____
___Sn	0.00024	2088.	0.00272	-0.0061	0.00272	_____	_____
___Sr	0.08805	0.940	0.08853	0.08853	0.08709	_____	_____
___Ti	0.08941	6.974	0.08505	0.09656	0.08664	_____	_____
___Tl	0.00444	1212.	-0.0558	-0.0091	0.05171	_____	_____
___V	0.00552	49.39	0.00825	0.00551	0.00279	_____	_____
___Zn	0.07793	1.305	0.07910	0.07733	0.07735	_____	_____

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Name: 9 001111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 19

190825 JAMMT S 12/21/92 15:48  
100-100 1,923541848001,1,.

ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.05568	3.198	0.04536	0.04728	0.04441		
Al	3.36295	0.360	3.34911	3.37166	3.36808		
As	1.96631	0.624	1.94230	1.96193	1.96471		
B	1.96789	0.186	1.96406	1.96824	1.97138		
Ba	1.96077	0.000	1.96077	1.96077	1.96077		
Be	0.041814	1.488	0.04732	0.04857	0.04855		
Ca	19.45162	0.219	19.4040	19.4639	19.4868		
X Cd	0.04705	1.515	0.04746	0.04746	0.04622		
Co	0.47232	1.514	0.47562	0.46411	0.47723		
Cr	0.20620	0.820	0.20426	0.20703	0.20732		
Cu	0.24890	0.002	0.24890	0.24890	0.24889		
Fe	2.81851	0.136	2.81482	2.81822	2.82248		
	8.08329	1.747	8.78774	9.08870	9.01345		
	1.83582	0.327	1.83582	1.82980	1.84184		
Mg	8.12566	0.239	8.10442	8.14264	8.12993		
Mn	0.58646	0.231	0.58489	0.58724	0.58724		
Mo	1.92819	0.423	1.92876	1.94223	1.94358		
Na	12.78063	0.387	12.7800	12.7800	12.8658		
Ni	0.49406	0.412	0.49286	0.49641	0.49290		
P	2.05186	4.045	1.89990	2.02551	2.05016		
Pb	0.47746	0.920	0.47443	0.47545	0.48250		
Sb	0.46295	1.423	0.45670	0.46984	0.46230		
Se	1.98313	1.629	1.98236	2.01582	1.95121		
Si	10.59793	0.198	10.6151	10.6040	10.5745		
Sn	3.83401	0.146	3.83997	3.82881	3.83327		
Sr	1.01903	0.078	1.01862	1.01852	1.01995		
Ti	1.02419	0.232	1.02658	1.02419	1.02181		
Tl	1.74432	5.022	1.85473	1.93130	1.74692		
V	0.47664	0.663	0.47479	0.47484	0.48029		
Zn	0.55893	0.181	0.55834	0.56010	0.55834		

AR318975

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 21

20 1908 JAMMT L 12/21/92 15:53  
 11 \* , 100 : .DF1,923541848001,1,,

ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00055	0.101	-0.0005	-0.0005	-0.0005		
Al	48814	1.951	0.48723	0.49809	0.47910		
As	00029	3247.	0.00355	-0.0104	0.00777		
B	01379	7.638	0.01484	0.01274	0.01377		
Ba	01479	9.106	0.01635	0.01401	0.01401		
Be	00000	18.54	0.00000	0.00000	0.00000		
Ca	55484	0.934	3.51693	3.56872	3.57887		
Cd	00078	180.5	-0.0000	-0.0000	0.00243		
Co	00023	342.3	0.00017	-0.0011	0.00028		
Cr	00191	51.26	0.00185	0.00096	0.00292		
Cu	00099	121.9	-0.0002	0.00099	0.00221		
Fe	45310	0.868	0.44855	0.45537	0.45537		
K	21651	9.448	1.11617	1.19142	1.34193		
Li	00000	118.5	0.00000	0.00000	-0.0000		
Mg	43858	1.022	1.43009	1.43008	1.45557		
Mn	02341	2.892	0.02380	0.02262	0.02380		
Mo	00262	118.5	0.00442	0.00442	-0.0009		
Na	02166	0.850	2.00447	2.02166	2.03885		
Ni	00054	317.3	-0.0011	0.00055	0.00228		
P	00337	1047.	-0.0228	-0.0247	0.03747		
Pb	00460	236.4	0.00763	0.01367	-0.0074		
Sb	00305	215.0	-0.0007	-0.0007	0.01064		
Se	00883	208.0	0.01383	0.02421	-0.0115		
Si	58643	1.848	1.65263	1.69260	1.71406		
Sn	00151	294.0	0.00294	-0.0059	-0.0015		
Sr	01796	0.658	0.01803	0.01803	0.01782		
Ti	02447	7.313	0.02275	0.02433	0.02632		
Tl	00348	440.9	-0.0119	0.01883	0.00354		
V	00002	38.55	0.00002	0.00002	0.00001		
Zn	01605	0.066	0.01606	0.01605	0.01604		

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name: 901111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

AGE: 21

190835 JAMMF 12/21/92 15:58  
100-100 1.923541848001.1.,

LEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00003	7132.	-0.0025	0.00130	0.00130	_____	_____
Al	0.00606	59.45	0.00265	0.00984	0.00570	_____	_____
As	-0.00198	334.7	0.00036	0.00315	-0.0094	_____	_____
B	0.04692	2.568	0.04625	0.04832	0.04621	_____	_____
Ba	0.07392	1.823	0.07236	0.07470	0.07470	_____	_____
Be	-0.00000	86.99	0.00000	-0.0000	-0.0000	_____	_____
Ca	18.13126	0.596	18.3754	18.4729	18.5953	_____	_____
X Cd	0.00032	216.6	-0.0000	-0.0000	0.00115	_____	_____
Co	-0.00031	542.0	0.00155	-0.0007	-0.0017	_____	_____
Cr	0.00117	43.22	-0.0017	-0.0009	-0.0008	_____	_____
Cu	0.00445	20.90	0.00344	0.00527	0.00466	_____	_____
Fe	0.01813	0.001	0.21814	0.21813	0.21813	_____	_____
Ga	0.01277	1.874	6.00736	6.15786	6.23310	_____	_____
Ge	0.01200	173.2	0.00000	-0.0000	0.00601	_____	_____
Hg	0.0127	0.680	7.29713	7.36082	7.39587	_____	_____
Mn	0.02545	1.585	0.08467	0.08467	0.08702	_____	_____
Mo	0.00133	233.8	0.00312	-0.0022	0.00312	_____	_____
Na	11.18436	2.386	10.8865	11.2645	11.4019	_____	_____
Ni	0.00001	15823	-0.0011	-0.0011	0.00232	_____	_____
P	0.02191	334.4	-0.0288	0.10591	-0.0113	_____	_____
Pb	0.00805	151.2	-0.0218	-0.0036	0.00134	_____	_____
Sb	0.00063	1478.	0.00880	-0.0100	-0.0006	_____	_____
Se	0.00171	793.9	-0.0017	-0.0098	0.01671	_____	_____
Si	0.00963	0.584	5.04024	5.06912	5.09951	_____	_____
Sn	0.00129	524.4	0.00723	0.00278	-0.0061	_____	_____
Sr	0.00989	0.732	0.08914	0.09017	0.09037	_____	_____
Ti	0.00277	45.88	0.00370	0.00330	0.00132	_____	_____
Tl	0.003853	184.0	0.00251	-0.1204	0.00228	_____	_____
V	0.00183	85.32	0.00002	0.00273	0.00275	_____	_____
Zn	0.04823	2.096	0.04765	0.04764	0.04940	_____	_____

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Run Name: 035601111

LANCASTER LABORATORIES

PAGE: 22

INSTRUMENT ID: 02360

22 1909351 JAMFM 12/21/92 16:02  
\*\*\*, 100 .DF1,923541848001,1,,

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.04434	7.778	0.04721	0.04530	0.04051		
Al	0.00681	142.6	0.00220	-0.0171	-0.0055		
As	0.01095	76.81	-0.0109	-0.0193	-0.0025		
B	0.05069	0.009	0.05068	0.05068	0.05069		
Ba	0.04902	0.000	0.04902	0.04902	0.04902		
Be	0.00000	270.7	-0.0000	0.00000	0.00000		
Ca	17.34606	0.222	17.3159	17.3895	17.3327		
X Cd	0.00048	146.6	-0.0000	-0.0000	-0.0013		
Co	0.00124	164.8	-0.0005	0.00034	-0.0035		
Cr	0.00212	144.8	0.00128	-0.0047	-0.0029		
Cu	0.00303	46.33	0.00466	0.00222	0.00222		
Fe	0.15626	0.629	0.15683	0.15512	0.15683		
K	63112	2.672	5.78161	5.48062	5.63112		
Li	0.00000	75.51	0.00000	0.00000	0.00000		
Mg	6.92447	0.200	6.93084	6.93402	6.90854		
Mn	0.07999	0.000	0.07999	0.07999	0.07999		
Mo	0.00178	75.51	0.00043	0.00313	0.00178		
Na	10.69185	0.334	10.7319	10.6632	10.6804		
Ni	0.00116	174.4	-0.0011	0.00232	0.00232		
P	0.01383	211.3	0.02560	-0.0194	0.03535		
Pb	0.00235	150.3	0.00134	-0.0026	-0.0057		
Sb	0.00062	1885.	-0.0101	-0.0043	0.01261		
Se	0.00976	108.3	0.01206	0.01899	-0.0017		
Si	4.76008	0.490	4.73737	4.78403	4.75883		
Sn	0.01023	25.16	0.01172	0.01171	0.00725		
Sr	0.08395	0.508	0.08361	0.08443	0.08382		
Ti	0.00238	63.07	0.00132	0.00172	0.00410		
Tl	0.06418	136.1	0.03313	-0.0898	-0.1358		
V	0.00001	16.38	0.00002	0.00001	0.00001		
Zn	0.04414	0.002	0.04414	0.04414	0.04414		

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AR318978





Sample Name 35601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 21

12/21/92 16:11

ELEMENT	CONCENTRATION (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	47437	0.930	0.46927	0.47692	0.47692		
Al	78264	0.296	23.7271	23.8620	23.7587		
As	91223	0.928	2.02442	2.02154	1.99072		
B	97192	0.215	0.96983	0.97402	0.97189		
Ba	86312	0.386	4.85729	4.88413	4.84795		
Be	46146	0.406	0.45982	0.46350	0.46104		
Ca	88037	0.382	48.6855	49.0582	48.8973		
Cd	90262	0.610	4.77299	4.83162	4.80325		
Co	93978	0.923	0.93685	0.93294	0.94954		
Cr	95818	0.360	5.03894	5.07522	5.06039		
Cu	74220	0.440	4.73330	4.76607	4.72723		
Fe	85386	0.323	4.84197	4.87169	4.84793		
K	49541	0.075	49.4578	49.5328	49.4955		
Li	84477	0.430	24.8497	24.9491	24.7354		
Mg	70277	0.252	23.6665	23.7719	23.6698		
Mn	95595	0.328	4.84108	4.87280	4.85398		
Mo	42637	0.390	24.3875	24.5351	24.3565		
Na	14303	0.197	51.1689	51.2289	51.0313		
Ni	60133	0.324	9.56771	9.62932	9.60696		
P	66125	0.575	24.4983	24.7271	24.7583		
Pb	66882	0.237	24.6305	24.7363	24.6396		
Sb	90491	0.639	4.86904	4.92714	4.91856		
Se	96751	0.339	1.97137	1.95979	1.97136		
Si	11806	1.049	2.09279	2.13084	2.13094		
Ti	79336	0.907	4.75179	4.83853	4.78975		
Zn	97761	0.346	0.97642	0.98144	0.97498		
Bi	28788	0.430	1.98344	1.99774	1.98246		
Br	96069	0.799	4.93826	5.00649	4.93720		
C	97351	0.566	1.96245	1.98480	1.97328		
Zn	95829	0.326	4.84371	4.87516	4.85599		

Sample: 011111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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CCB

12/21/92

16:16

EL.EM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00318	60.04	0.00510	0.00127	0.00318		
Al	0.02846	54.24	0.04575	0.02354	0.01608		
As	-0.00468	105.2	-0.0098	-0.0042	0.00000		
B	0.00279	43.01	0.00349	0.00140	0.00348		
Ba	0.00427	78.73	0.00816	0.00233	0.00233		
Be	0.00082	86.62	0.00123	0.00123	-0.0000		
Ca	0.01704	79.48	0.09003	0.02910	0.02199		
Cd	0.00452	103.2	0.00987	0.00123	0.00246		
Co	-0.00000	30270	0.00112	-0.0020	0.00093		
Cr	0.00485	71.57	0.00819	0.00126	0.00509		
Cu	0.00546	33.90	0.00707	0.00343	0.00587		
Fe	0.00339	153.1	0.00906	-0.0011	0.00226		
	0.00807	23.09	0.21312	0.13792	0.21318		
	0.002006	96.43	0.04213	0.01203	0.00601		
Mg	0.01808	73.35	0.02236	0.00320	0.02867		
Mn	0.00352	101.8	0.00744	0.00274	0.00039		
Mo	0.02336	76.32	0.04358	0.01662	0.00988		
Na	0.02290	229.1	0.08015	-0.0229	0.01147		
Ni	0.00880	50.29	0.01294	0.00413	0.00935		
P	0.006547	61.69	0.05588	0.03074	0.10981		
Pb	0.02284	70.34	0.04065	0.01847	0.00940		
Sb	0.00007	2733.	0.00109	-0.0025	0.00124		
Se	0.01460	134.3	0.01382	-0.0046	0.03460		
Si	0.00541	100.4	0.00741	-0.0007	0.00957		
Sn	0.00145	467.7	0.00291	-0.0059	0.00741		
Sr	0.00068	96.44	0.00143	0.00040	0.00020		
Ti	0.00244	86.66	0.00132	0.00112	0.00489		
Tl	0.00781	1502.	0.01760	-0.1357	0.09473		
V	0.00371	85.61	0.00560	0.00550	0.00004		
Zn	0.00436	93.06	0.00904	0.00203	0.00200		

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Run Name 135601111

LANCASTER LABORATORIES

PAGE: 26

INSTRUMENT ID: 02360

26 1008 JAMLT 12/21/92 16:20  
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ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00095	230.8	0.00159	-0.0022	-0.0022		
Al	0.91832	0.588	0.91777	0.92398	0.91321		
As	0.00832	58.41	-0.0111	-0.0111	-0.0027		
B	0.03726	3.357	0.03803	0.03581	0.03793		
Ba	0.05607	0.001	0.05607	0.05607	0.05607		
Be	0.00040	179.6	-0.0000	0.00124	-0.0000		
Ca	17.55151	1.014	17.3464	17.6667	17.6413		
X Cd	0.00045	136.4	0.00107	-0.0001	0.00045		
Co	0.00190	131.7	0.00040	-0.0045	-0.0015		
Cr	0.00022	1299.	-0.0018	-0.0011	0.00365		
Cu	0.00361	9.699	0.00401	0.00341	0.00341		
Fe	1.73253	1.184	1.70897	1.74644	1.74218		
K	5.35520	0.811	5.33012	5.33013	5.40537		
Li	0.00000	40.41	0.00000	0.00000	0.00000		
Mg	7.02522	1.081	6.94028	7.08679	7.04858		
Mn	0.10730	1.259	0.10574	0.10808	0.10808		
Mo	0.00385	40.41	0.00565	0.00295	0.00295		
Na	9.83303	0.825	9.77004	9.92466	9.80440		
Ni	0.00161	62.33	0.00045	0.00219	0.00219		
P	0.08489	65.67	0.10693	0.12626	0.02149		
Pb	0.00264	177.1	0.00784	-0.0012	0.00129		
Sb	0.00543	80.45	0.01049	0.00292	0.00290		
Se	0.00566	338.9	0.02103	0.01182	-0.0158		
Si	6.02983	1.073	5.96170	6.09055	6.03724		
Sn	0.00859	29.92	0.00711	0.00710	0.01156		
Sr	0.08340	0.885	0.08259	0.08402	0.08361		
Ti	0.04180	0.948	0.04219	0.04140	0.04180		
Tl	0.08830	79.74	-0.1036	-0.1498	-0.0114		
V	0.00460	34.20	0.00551	0.00278	0.00551		
Zn	0.07746	0.008	0.07747	0.07746	0.07746		

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Name: 9115601111

LANCASTER LABORATORIES

PAGE: 27

INSTRUMENT ID: 02360

17 190825 JAMLF 12/21/92 16:25  
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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.0002	10532	0.00129	0.00129	-0.0025		
Al	0.02351	32.12	0.02345	0.03108	0.01598		
As	0.00066	245.8	-0.0025	0.00025	0.00030		
B	0.08325	1.254	0.08221	0.08430	0.08325		
Ba	0.03968	0.000	0.03968	0.03968	0.03968		
Be	0.00000	616.1	-0.0000	-0.0000	0.00001		
Ca	0.07648	0.561	16.9661	17.1245	17.1387		
X Cd	0.00075	94.85	0.00116	-0.0000	0.00116		
Co	0.00085	232.4	-0.0029	0.00101	-0.0006		
Cr	0.00109	293.4	0.00166	-0.0003	-0.0045		
Cu	0.00547	12.83	0.00588	0.00587	0.00466		
Fe	0.01251	0.505	0.16365	0.16194	0.16195		
Hg	0.01726	1.249	5.17964	5.17963	5.29251		
K	0.00000	108.8	-0.0000	0.00000	0.00000		
Mg	0.04932	0.249	6.73021	6.76207	6.75569		
Mn	0.08234	0.001	0.08234	0.08234	0.08234		
Mo	0.00155	108.8	-0.0002	0.00313	0.00178		
Na	0.07249	0.570	9.63241	9.73547	9.64958		
Ni	0.00232	0.100	0.00232	0.00232	0.00232		
P	0.06703	57.02	0.04790	0.11106	0.04215		
Pb	0.00569	98.52	-0.0067	0.00035	-0.0107		
Sb	0.00410	265.2	0.00314	0.01545	-0.0062		
Se	0.00973	185.0	0.03050	-0.0017	0.00051		
Si	0.05783	0.266	4.85436	4.84698	4.87215		
Sn	0.00132	968.8	-0.0061	0.01618	-0.0061		
Sr	0.07978	0.535	0.07931	0.07992	0.08013		
Ti	0.00105	184.7	0.00330	0.00013	-0.0002		
Tl	0.01038	62.87	-0.0436	-0.1053	-0.1821		
V	0.00092	610.1	0.00546	0.00275	-0.0054		
Zn	0.04060	0.011	0.04060	0.04059	0.04060		

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AR318983

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Run Name: 0235601I11

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 26

28 1902200 CHULT 12/21/92 16:30  
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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
__Ag	0.00018	1022.	-0.0020	0.00172	-0.0001	_____	_____
__Al	0.49558	0.398	1.48898	1.50058	1.49718	_____	_____
__As	0.00217	260.2	0.00125	-0.0029	0.00826	_____	_____
__B	0.11457	0.922	0.11350	0.11458	0.11562	_____	_____
__Ba	0.05104	1.319	0.05026	0.05142	0.05142	_____	_____
__Be	0.00001	26.64	-0.0000	-0.0000	-0.0000	_____	_____
__Ca	0.28190	0.300	10.3022	10.2463	10.2971	_____	_____
*__Cd	0.00037	339.8	0.00106	-0.0014	-0.0007	_____	_____
__Co	0.00014	197.5	0.00000	-0.0000	0.00048	_____	_____
__Cr	0.00162	121.9	0.00070	0.00027	0.00390	_____	_____
__Cu	0.00238	64.21	0.00218	0.00400	0.00096	_____	_____
__Fe	2.43121	0.368	2.44001	2.42212	2.43149	_____	_____
__K	0.04758	1.425	3.07266	2.99741	3.07267	_____	_____
__Li	0.00401	86.60	0.00000	0.00601	0.00601	_____	_____
__Mg	0.50408	0.186	4.51043	4.50726	4.49453	_____	_____
__Mn	0.14920	0.786	0.14802	0.14920	0.15037	_____	_____
__Mo	0.00052	330.6	0.00017	0.00287	-0.0011	_____	_____
__Na	9.46036	1.271	9.58112	9.46085	9.34060	_____	_____
__Ni	0.00079	255.6	-0.0031	0.00038	0.00036	_____	_____
__P	0.12808	32.15	0.16572	0.13441	0.08409	_____	_____
__Pb	0.00242	145.8	0.00208	0.00612	-0.0009	_____	_____
__Sb	0.00788	113.3	-0.0047	-0.0009	-0.0179	_____	_____
__Se	0.00145	1078.	0.01376	0.00683	-0.0162	_____	_____
__Si	6.72424	0.429	6.75238	6.72573	6.69461	_____	_____
__Sn	0.00556	120.1	0.01160	-0.0017	0.00715	_____	_____
__Sr	0.05953	0.620	0.05994	0.05922	0.05943	_____	_____
__Ti	0.05449	3.173	0.05568	0.05251	0.05529	_____	_____
__Tl	0.03152	225.1	-0.0723	-0.0726	0.05043	_____	_____
__V	0.00643	24.35	0.00824	0.00553	0.00552	_____	_____
__Zn	0.03450	2.946	0.03509	0.03508	0.03333	_____	_____

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name: 011 601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

AGE: 29

1908350 CHULF 12/21/92 16:34  
100-100 101.923541848001,1..

ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	265.1	0.00132	-0.0034	-0.0005			
Al	23.11	0.03965	0.03548	0.02474			
As	186.3	0.00194	-0.0022	-0.0064			
B	7.319	0.03910	0.03490	0.04017			
Ba	0.000	0.03035	0.03035	0.03035			
Be	64.73	-0.0090	-0.0000	-0.0000			
Ca	0.789	9.30206	9.38786	9.24164			
X Cd	1050.	0.00179	-0.0000	-0.0012			
Co	1352.	0.00251	-0.0026	-0.0003			
Cr	104.4	-0.0009	-0.0029	-0.0002			
Cu	99.46	0.00222	-0.0002	0.00222			
Fe	1.090	0.32394	0.32905	0.32224			
Ga	2.790	2.77168	2.69643	2.62119			
Ge	317.1	0.00000	-0.0000	0.00000			
Hg	0.533	3.98831	3.99151	3.95326			
Mn	1.994	0.11762	0.11997	0.11527			
Mo	317.1	0.00177	-0.0009	0.00042			
Na	1.370	8.75621	8.75619	8.55004			
Ni	829.4	0.00405	-0.0046	0.00230			
P	110.0	0.00529	-0.0466	-0.0941			
Pb	178.3	0.01445	-0.0046	0.00639			
Sb	389.5	0.00884	-0.0082	-0.0081			
Se	1566.	0.01641	-0.0228	0.00257			
Si	0.675	4.09748	4.14048	4.08862			
Sn	1991.	-0.0016	-0.0016	0.00284			
Sr	0.221	0.05328	0.05348	0.05328			
Ti	448.3	0.00291	-0.0018	0.00053			
Tl	49.84	-0.0283	-0.0897	-0.0744			
V	20.79	0.00003	0.00002	0.00003			
Zn	0.113	0.01597	0.01601	0.01598			

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Run Name: 9235601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 20

NO 1008981 JSBHT 12/21/92 16:39  
PART 100-100.DF1.923541848001.1.,.

ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	-0.00087	335.3	-0.0002	-0.0040	0.00168	_____	_____
Al	1.41060	0.139	1.40833	1.41181	1.41166	_____	_____
As	0.00083	1346.	0.01203	-0.0103	0.00083	_____	_____
B	0.04570	0.060	0.04573	0.04567	0.04571	_____	_____
Ba	0.05842	0.000	0.05842	0.05842	0.05842	_____	_____
Be	0.00040	180.1	0.00123	-0.0000	-0.0000	_____	_____
Ca	17.96731	0.202	17.9287	18.0008	17.9723	_____	_____
X Cd	-0.00100	70.80	-0.0014	-0.0014	-0.0001	_____	_____
Co	-0.00187	147.6	-0.0035	0.00131	-0.0034	_____	_____
Cr	0.00115	69.64	0.00128	0.00188	0.00029	_____	_____
Cu	0.00603	25.36	0.00766	0.00461	0.00583	_____	_____
Fe	2.18376	0.390	2.17495	2.19199	2.18433	_____	_____
K	5.27995	0.822	5.25487	5.25488	5.33012	_____	_____
Li	0.00000	103.6	0.00000	0.00000	0.00000	_____	_____
Mn	7.04632	0.514	7.01660	7.08666	7.03569	_____	_____
Mg	0.10219	1.149	0.10337	0.10219	0.10102	_____	_____
Mu	0.00198	103.6	0.00423	0.00018	0.00153	_____	_____
Na	9.95343	1.395	9.80453	10.0794	9.97632	_____	_____
Ni	0.00098	271.3	0.00041	-0.0013	0.00390	_____	_____
P	0.15714	9.629	0.17437	0.15102	0.14603	_____	_____
Pb	-0.00634	92.99	-0.0019	-0.0130	-0.0039	_____	_____
Sb	0.00283	176.6	-0.0009	-0.0085	0.00097	_____	_____
Se	0.00632	242.9	0.00247	-0.0067	0.02324	_____	_____
Si	6.52764	0.330	6.50493	6.53010	6.54790	_____	_____
Sn	0.00413	164.5	0.01156	-0.0018	0.00265	_____	_____
St	0.08641	0.362	0.08607	0.08668	0.08648	_____	_____
Ti	0.06878	2.642	0.06918	0.07037	0.06680	_____	_____
Tl	0.04874	78.67	-0.0102	-0.0870	-0.0489	_____	_____
V	0.00596	13.09	0.00552	0.00686	0.00551	_____	_____
Zn	0.07738	0.011	0.07738	0.07739	0.07737	_____	_____

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Name: 0015601111

LANCASTER LABORATORIES

PAGE: 31

INSTRUMENT ID: 02360

11 190800 JSBFL 12/21/92 16:43  
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ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0001	6328.	0.00129	-0.0006	-0.0006		
Al	00876	67.52	-0.0037	-0.0071	-0.0153		
As	00351	121.6	0.00020	-0.0081	-0.0025		
B	003678	3.305	0.03818	0.03610	0.03606		
Ba	004201	0.000	0.04201	0.04201	0.04201		
Be	000000	102.2	-0.0000	-0.0000	0.00000		
Ca	0054865	0.418	17.6601	17.5697	17.7160		
X Cd	000007	0.448	-0.0000	-0.0000	-0.0000		
Co	000072	267.5	0.00045	0.00032	-0.0029		
Cr	000114	285.2	0.00076	0.00072	-0.0049		
Cu	000324	75.80	0.00466	0.00466	0.00040		
Fe	001009	1.265	0.14151	0.13810	0.14066		
	002948	0.846	5.10439	5.17964	5.10440		
	00200	173.2	-0.0000	0.00000	-0.0060		
Mg	00017	0.655	6.78107	6.76833	6.85112		
Mn	005865	0.988	0.06943	0.06826	0.06825		
Mo	000135	151.4	-0.0009	0.00043	-0.0036		
Na	002403	0.713	9.73548	9.64960	9.78702		
Ni	000030	864.2	-0.0003	0.00232	-0.0029		
P	001681	338.5	0.07867	0.00508	-0.0333		
Pb	000101	1905.	0.01947	-0.0036	-0.0188		
Sb	000314	308.4	0.00504	-0.0006	-0.0138		
Se	00591	340.9	0.00052	0.02821	-0.0110		
Si	004571	0.667	4.94399	4.91360	4.97955		
Sn	000016	1597.	-0.0016	0.00280	-0.0016		
Sr	008429	0.853	0.08422	0.08361	0.08504		
Ti	00238	100.4	0.00211	0.00489	0.00013		
Tl	004107	167.7	-0.0052	0.00251	-0.1205		
V	00272	100.0	0.00545	0.00273	-0.0000		
Zn	003591	2.809	0.03531	0.03707	0.03534		

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AR318987

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LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 2

CRCH- 12/21/92 16:48  
OF 1,923541848001,1,.

ITEM	RANGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REPEAT	REDIG
Aa	00004	3131.	0.00164	-0.0012	-0.0002		
Ab	5893	0.689	0.95134	0.96202	0.96343		
Ac	00048	1765.	0.00895	-0.0023	-0.0079		
Ba	3244	6.417	0.03455	0.03240	0.03038		
Bb	4596	2.932	0.04674	0.04674	0.04441		
Bc	00001	16.73	-0.0000	-0.0000	-0.0000		
Ca	45451	0.737	10.4601	10.5286	10.3748		
X Cb	0108	113.7	0.00108	0.00231	-0.0001		
Cc	00315	37.00	-0.0042	-0.0033	-0.0018		
Cd	00097	84.12	-0.0000	-0.0018	-0.0001		
Ca	00808	8.692	0.00889	0.00767	0.00767		
Ca	5276	1.093	1.95106	1.97490	1.93231		
Ca	2184	1.539	2.84692	2.84693	2.77168		
Ca	0000	126.7	0.00000	0.00000	-0.0000		
Ca	3597	0.529	4.42747	4.46252	4.41793		
Ca	1832	1.144	0.11753	0.11988	0.11753		
Ca	0092	126.7	0.00159	0.00159	-0.0004		
Ca	05256	0.993	10.9124	11.0756	10.8695		
Ca	0042	0.970	0.00042	0.00042	0.00042		
Ca	8828	72.81	0.10193	0.01667	0.10715		
Ca	00119	1211.	-0.0052	0.01491	-0.0132		
Ca	01284	22.53	-0.0160	-0.0103	-0.0122		
Ca	00610	121.4	-0.0114	0.00235	-0.0091		
Ca	2932	1.204	5.32449	5.39079	5.26267		
Ca	0416	61.64	0.00267	0.00713	0.00269		
Ca	6318	1.138	0.06312	0.06394	0.06250		
Ca	1062	2.973	0.03187	0.03029	0.03079		
Ca	04273	36.06	-0.0273	-0.0581	-0.0427		
Ca	0505	15.58	0.00551	0.00551	0.00414		
Ca	02984	0.014	0.02984	0.02984	0.02985		

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Name: 05601111

LANCASTER LABORATORIES

AGE: 33

INSTRUMENT ID: 02360

13 1908001 CRCHF 12/21/92 16:52  
\*\*\*\*.100-1 DF1,923541848001.1,,

ELEM	CONCENTRATION (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.00961	22.97	0.00706	0.01089	0.01088	_____	_____
___Al	0.04974	21.02	0.03838	0.05897	0.05186	_____	_____
___As	0.00228	212.7	0.00052	-0.0078	0.00051	_____	_____
___B	0.02709	4.493	0.02638	0.02639	0.02849	_____	_____
___Ba	0.03268	0.000	0.03268	0.03268	0.03268	_____	_____
___Be	0.00000	577.9	0.00000	0.00000	-0.0000	_____	_____
___Ca	10.31134	0.706	10.3656	10.3397	10.2285	_____	_____
X ___Cd	0.00014	645.0	-0.0006	-0.0000	0.00117	_____	_____
___Co	0.00426	59.47	-0.0071	-0.0033	-0.0023	_____	_____
___Cr	0.00222	183.8	-0.0053	-0.0037	0.00240	_____	_____
___Cu	0.00060	421.2	-0.0014	-0.0002	0.00344	_____	_____
___Fe	0.31144	0.835	0.31201	0.31371	0.30860	_____	_____
___F	0.00000	164.0	-0.0000	-0.0000	0.00000	_____	_____
___Mg	0.03960	0.235	4.35127	4.33536	4.33216	_____	_____
___Mn	0.00509	1.288	0.10587	0.10587	0.10353	_____	_____
___Mo	0.00047	164.0	-0.0009	-0.0009	0.00042	_____	_____
___Na	0.099537	0.786	11.0068	11.0755	10.9037	_____	_____
___Ni	0.00118	0.267	-0.0011	-0.0011	-0.0011	_____	_____
___P	0.06487	67.18	0.06134	0.11011	0.02315	_____	_____
___Pb	0.00702	125.3	-0.0167	-0.0046	0.00036	_____	_____
___Sb	0.00443	112.9	-0.0082	0.00125	-0.0063	_____	_____
___Se	0.02106	47.74	0.02568	0.02798	0.00952	_____	_____
___Si	0.08583	0.469	4.39300	4.40187	4.36262	_____	_____
___Sn	0.01324	19.43	0.01175	0.01176	0.01621	_____	_____
___Sr	0.06165	0.583	0.06168	0.06199	0.06127	_____	_____
___Ti	0.00092	74.08	0.00013	0.00132	0.00132	_____	_____
___Tl	0.013073	52.97	-0.0590	-0.1972	-0.1358	_____	_____
___V	0.00002	54.03	0.00001	0.00001	0.00003	_____	_____
___Zn	0.01598	0.068	0.01599	0.01598	0.01597	_____	_____

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Run Name: 035601I11

LANCASTER LABORATORIES

PAGE: 34

INSTRUMENT ID: 02360

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ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00255	43.26	0.00318	0.00127	0.00318		
Al	0.03118	30.63	0.04130	0.02232	0.02993		
As	0.00187	228.7	0.00561	-0.0027	0.00280		
B	0.01187	17.65	0.01396	0.00977	0.01187		
Ba	0.00077	173.1	0.00233	0.00000	0.00000		
Be	0.00000	517.8	0.00000	-0.0000	0.00000		
Ca	0.16855	1.840	0.16922	0.16516	0.17126		
X Cd	0.00000	51.79	0.00000	0.00000	0.00000		
Co	0.00133	336.3	0.00262	-0.0062	-0.0004		
Cr	0.00013	537.2	-0.0007	0.00065	-0.0003		
Cu	0.00162	135.2	0.00223	-0.0008	0.00345		
Fe	0.00198	24.77	0.00227	0.00227	0.00141		
K	0.18811	23.09	0.21319	0.21319	0.13795		
Li	0.00000	456.1	-0.0000	0.00000	-0.0000		
Mg	0.01485	24.82	0.01272	0.01272	0.01911		
Mn	0.00078	149.8	-0.0019	-0.0007	0.00039		
Mo	0.00045	456.1	-0.0009	0.00179	-0.0022		
Na	0.37224	4.616	0.38943	0.37222	0.35506		
Ni	0.00058	601.2	0.00057	0.00409	-0.0029		
P	0.01704	83.35	-0.0253	-0.0006	-0.0250		
Pb	0.01207	91.88	-0.0228	-0.0127	-0.0006		
Sb	0.01008	67.71	-0.0043	-0.0176	-0.0082		
Se	0.01537	97.59	0.02998	-0.0000	0.01614		
Si	0.84619	0.971	0.83752	0.85388	0.84717		
Sn	0.00075	1361.	-0.0014	-0.0081	0.01189		
Sr	0.00119	13.09	0.00133	0.00102	0.00122		
Ti	0.00039	650.5	0.00290	-0.0022	0.00052		
Tl	0.02050	209.5	-0.0126	-0.0668	0.01801		
V	0.00000	446.8	-0.0000	0.00000	-0.0000		
Zn	0.00293	30.11	0.00292	0.00205	0.00381		

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Sample Name: 1005601111

LANCASTER LABORATORIES

PAGE: 35

INSTRUMENT ID: 02360

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ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00207	0.179	-0.0020	-0.0020	-0.0020		
Al	0.04292	0.270	1.34033	1.34136	1.34707		
As	0.00971	76.72	-0.0153	-0.0012	-0.0125		
B	0.02941	3.569	0.02947	0.03044	0.02834		
Ba	0.05033	1.115	0.06077	0.05960	0.06077		
Be	0.00001	61.61	-0.0000	-0.0000	-0.0000		
Ca	0.090358	0.757	17.7566	18.0236	17.9307		
X Cd	0.00039	155.7	-0.0002	0.00039	0.00101		
Co	0.00183	115.6	-0.0000	-0.0012	-0.0041		
Cr	0.00111	335.8	-0.0030	0.00233	0.00409		
Cu	0.00338	35.91	0.00217	0.00460	0.00338		
Fe	0.008072	0.781	2.55744	2.59321	2.59151		
	0.03242	0.720	6.08250	6.00734	6.00733		
Li	0.00000	278.1	-0.0000	-0.0000	0.00000		
Mg	0.005811	0.709	7.00077	7.08041	7.09314		
Mn	0.012642	1.416	0.12447	0.12799	0.12682		
Mo	0.00073	278.1	-0.0025	-0.0011	0.00150		
Na	0.0058131	0.948	9.47822	9.65003	9.61567		
Ni	0.00051	452.4	-0.0013	0.00210	-0.0022		
P	0.016435	20.44	0.16279	0.19871	0.13156		
Pb	0.000738	77.52	-0.0090	-0.0010	-0.0120		
Sb	0.000794	83.39	-0.0142	-0.0010	-0.0086		
Se	0.00555	145.8	0.00478	-0.0021	0.01401		
Si	0.0072430	0.693	6.17592	6.25885	6.23812		
Zn	0.00550	123.6	-0.0019	0.01144	0.00698		
Sr	0.008532	0.909	0.08443	0.08586	0.08566		
Ti	0.009206	1.316	0.09100	0.09180	0.09338		
Tl	0.006019	102.1	-0.00551	-0.0013	-0.1240		
V	0.00551	49.46	0.00540	0.00279	0.00824		
Zn	0.008971	0.015	0.08972	0.08970	0.08971		

AR318991

Run Name: 0135601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.47310	1.212	0.46736	0.47311	0.47884	_____	_____
___Al	23.71615	0.265	23.6445	23.7414	23.7624	_____	_____
___As	0.01046	0.738	1.99363	2.02170	2.01606	_____	_____
___B	0.96074	0.763	0.95307	0.96144	0.96770	_____	_____
___Ba	4.83317	0.310	4.82227	4.82694	4.85028	_____	_____
___Be	0.45384	0.340	0.45240	0.45364	0.45547	_____	_____
___Ca	48.53108	0.522	48.2540	48.5881	48.7510	_____	_____
___Cd	4.78864	0.492	4.76807	4.78350	4.81434	_____	_____
___Co	0.92786	0.492	0.92265	0.92975	0.93118	_____	_____
___Cr	5.02548	0.471	5.00083	5.02752	5.04808	_____	_____
___Cu	4.72260	0.301	4.71698	4.71205	4.73877	_____	_____
___Fe	4.82045	0.556	4.79268	4.82244	4.84622	_____	_____
___K	49.09427	0.711	48.7056	49.1946	49.3825	_____	_____
___Li	24.65116	0.325	24.6421	24.5759	24.7354	_____	_____
___Mg	23.65675	0.411	23.5769	23.6280	23.7652	_____	_____
___Mn	4.81603	0.426	4.79528	4.81642	4.83639	_____	_____
___Mo	24.31562	0.371	24.2304	24.3059	24.4104	_____	_____
___Na	51.81883	0.528	51.7444	51.5897	52.1223	_____	_____
___Ni	9.52001	0.437	9.47287	9.53514	9.55203	_____	_____
___P	24.69293	0.475	24.6292	24.6212	24.8283	_____	_____
___Pb	24.60784	0.373	24.5030	24.6451	24.6753	_____	_____
___Sb	4.88735	0.990	4.83903	4.88718	4.93583	_____	_____
___Se	1.94217	1.431	1.91605	1.93909	1.97138	_____	_____
___Si	2.11062	0.848	2.09677	2.10425	2.13084	_____	_____
___Sn	4.84701	0.775	4.80551	4.85670	4.87882	_____	_____
___Sr	0.96972	0.405	0.96638	0.96873	0.97406	_____	_____
___Ti	1.97960	0.350	1.97569	1.97550	1.98760	_____	_____
___Tl	4.99840	0.946	5.01824	4.95416	4.99278	_____	_____
___V	1.94449	0.442	1.93871	1.94038	1.95438	_____	_____
___Zn	4.85744	0.507	4.83171	4.85980	4.88081	_____	_____

AR318992 173

LANCASTER LABORATORIES

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FLEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	00254	43.35	0.00318	0.00127	0.00318		
Al	02741	35.90	0.03486	0.03111	0.01625		
As	00512	16.14	0.00560	0.00417	0.00560		
B	00105	207.2	0.00350	0.00035	-0.0006		
Ba	00155	86.60	0.00233	0.00233	-0.0000		
Be	00041	176.7	0.00124	-0.0000	-0.0000		
Ca	01827	41.69	0.02707	0.01387	0.01387		
Cd	00123	100.0	0.00246	0.00123	-0.0000		
Co	000160	138.0	-0.0026	-0.0030	0.00094		
Cr	00240	39.91	0.00343	0.00153	0.00224		
Cu	00060	153.8	0.00161	-0.0002	0.00040		
Fe	00000	13461	0.00055	-0.0011	0.00056		
K	01317	93.38	0.43890	0.13793	0.06269		
Li	00601	86.60	0.01203	0.00300	0.00300		
Mg	00108	338.4	0.00321	0.00320	-0.0031		
Mn	00313	21.66	0.00391	0.00274	0.00273		
Mo	01010	56.70	0.01662	0.00583	0.00786		
Na	04008	24.73	0.04580	0.04580	0.02863		
Ni	000026	1460.	0.00237	-0.0046	0.00147		
P	02906	167.9	0.03010	0.07734	-0.0202		
Pb	00471	238.1	0.00035	-0.0036	0.01746		
Sb	000780	11.74	0.00872	0.00780	0.00689		
Se	00153	1170.	0.01614	0.00691	-0.0184		
Si	00222	240.1	0.00666	0.00372	-0.0037		
Sn	000000	60776	0.00295	0.00297	-0.0059		
Sr	00020	173.3	0.00061	-0.0000	-0.0000		
Ti	00026	312.7	0.00052	-0.0006	0.00092		
Tl	000766	1362.	0.11005	-0.0895	-0.0435		
V	00185	168.7	0.00005	0.00546	0.00003		
Zn	00146	69.64	0.00204	0.00207	0.00028		

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AR318993

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Run Name: 335601I11

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

PAGE: 39

38 100000 JBMTF 12/21/92 17:16  
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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	00056	166.9	0.00129	0.00129	-0.0006		
Al	0.01500	57.43	0.00965	0.01041	0.02495		
As	0.00682	62.78	0.01149	0.00588	0.00308		
B	0.03756	3.259	0.03615	0.03828	0.03825		
Ba	0.03735	0.000	0.03735	0.03735	0.03735		
Be	0.00000	170.9	0.00000	-0.0000	-0.0000		
Ca	0.98087	0.524	17.0458	16.8793	17.0174		
X Cd	0.00095	37.21	0.00116	0.00116	0.00054		
Co	0.00174	137.5	-0.0041	-0.0017	0.00064		
Cr	0.00265	19.64	-0.0030	-0.0028	-0.0020		
Cu	0.00283	56.88	0.00405	0.00344	0.00100		
Fe	0.16765	0.585	0.16708	0.16708	0.16878		
K	0.76906	0.376	5.78161	5.74397	5.78160		
Li	0.00200	173.2	-0.0000	0.00000	0.00601		
Mg	0.51567	0.720	6.55176	6.46259	6.53266		
Mn	0.07061	0.002	0.07061	0.07061	0.07061		
Mo	0.00178	151.0	-0.0009	0.00178	0.00448		
Na	0.66676	0.640	9.71830	9.59804	9.68394		
Ni	0.00292	59.92	-0.0029	-0.0046	-0.0011		
P	0.05989	72.06	0.01032	0.08915	0.08021		
Pb	0.00536	39.10	-0.0036	-0.0077	-0.0046		
Sb	0.00569	50.51	-0.0082	-0.0025	-0.0063		
Se	0.01664	63.48	0.00511	0.02587	0.01895		
Si	0.72083	0.815	4.75589	4.67959	4.72700		
Sn	0.00281	158.4	0.00281	0.00726	-0.0016		
Sr	0.08040	0.778	0.08095	0.07972	0.08054		
Ti	0.00125	102.6	-0.0000	0.00251	0.00132		
Tl	0.08461	27.72	-0.1051	-0.0896	-0.0590		
V	0.00047	166.6	0.00000	0.00137	0.00002		
Zn	0.03357	0.015	0.03356	0.03357	0.03357		

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Name: 35601111

LANCASTER LABORATORIES

PAGE: 39

INSTRUMENT ID: 02360

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ELEMENT	CONCENTRATION (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00047	647.7	0.00079	0.00175	-0.0039		
Al	1.37691	0.312	1.37196	1.37977	1.37901		
As	0.00147	953.5	0.01548	-0.0125	0.00150		
B	0.02394	5.062	0.02534	0.02328	0.02321		
Ba	0.04637	1.453	0.04676	0.04559	0.04676		
Be	0.00001	1.001	-0.0000	-0.0000	-0.0000		
Ca	10.40070	0.593	10.4001	10.3392	10.4626		
Cd	0.00038	91.53	-0.0008	-0.0001	-0.0001		
Co	0.00130	184.1	0.00146	-0.0027	-0.0025		
Cr	0.00007	1776.	0.00111	0.00043	-0.0013		
Cu	0.00339	71.65	0.00583	0.00339	0.00096		
Fe	2.56273	0.674	2.55932	2.54740	2.58147		
K	2.78421	2.064	2.84692	2.73404	2.77167		
Li	0.00000	116.0	0.00000	0.00000	0.00000		
Mg	4.34347	0.593	4.34772	4.31585	4.36683		
Mn	0.11516	2.036	0.11516	0.11281	0.11751		
Mo	0.00241	116.0	0.00017	0.00556	0.00151		
Na	10.47448	0.751	10.4057	10.4572	10.5603		
Ni	0.00095	104.7	0.00211	0.00038	0.00037		
P	0.11569	26.65	0.12680	0.08083	0.13944		
Pb	0.00334	304.9	0.00202	0.00304	-0.0150		
Sb	0.00316	168.9	-0.0075	0.00279	-0.0047		
Se	0.00531	275.5	0.01377	0.01377	-0.0116		
Si	5.74353	0.648	5.73856	5.70898	5.78303		
Sr	0.0263	447.9	0.01600	-0.0062	-0.0018		
Sn	0.05991	0.197	0.05984	0.05984	0.06004		
Ti	0.05225	4.450	0.05489	0.05053	0.05132		
Tl	0.12126	91.08	0.00433	-0.2032	-0.1648		
V	0.00553	0.172	0.00552	0.00554	0.00552		
Zn	0.02830	4.722	0.02976	0.02801	0.02714		

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Order No: 25631111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

CASE: 40

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17:25

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ELEM	CRAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REFEAD	REDIG
Ag	00034	724.0	0.00721	-0.0015	-0.0006		
Al	02708	47.07	0.04174	0.01863	0.02086		
As	00619	113.7	0.00033	-0.0052	-0.0136		
P	02652	0.056	0.02653	0.02650	0.02652		
Br	03035	0.000	0.03035	0.03035	0.03035		
Ca	00000	85.99	-0.0000	-0.0000	-0.0000		
Co	068568	0.638	10.6073	10.7317	10.7180		
X Cd	00067	159.2	0.00056	-0.0012	-0.0012		
Cr	00075	104.9	-0.0006	-0.0000	-0.0016		
Fe	00028	589.9	0.00061	0.00074	-0.0022		
Cu	00384	18.27	0.00314	0.00466	0.00344		
Se	01717	0.453	0.21831	0.21660	0.21661		
F	03472	1.958	2.92742	2.88456	2.92218		
Li	00000	19.34	0.00000	0.00000	0.00000		
Mg	05116	0.887	4.30976	4.38621	4.35750		
Mn	08710	2.694	0.08710	0.08945	0.08475		
Mo	00200	19.34	0.00245	0.00178	0.00178		
Nb	096101	0.478	10.9037	11.0068	10.9724		
Ni	00144	159.8	0.00219	0.00231	-0.0011		
P	03263	232.6	-0.0751	-0.0777	0.05500		
Pb	00569	127.6	0.00237	-0.0077	-0.0117		
Sb	00378	208.0	0.00501	-0.0063	-0.0101		
Se	00108	537.5	-0.0043	0.00723	0.00031		
Si	02576	0.648	4.59719	4.65738	4.62552		
Ta	00285	270.9	0.00211	0.00730	-0.0060		
Te	06045	0.897	0.06031	0.06086	0.06066		
Tl	00158	62.85	0.00211	0.00053	0.00172		
U	07952	117.9	0.00247	-0.0591	-0.1818		
V	00274	85.83	0.00547	0.00139	0.00138		
Zn	01715	5.895	0.11773	0.01773	0.01598		

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Sample Name: 135601111

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

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ELEM	CONCENTRATION (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00141	78.27	-0.0020	-0.0001	-0.0020		
Al	53250	0.383	1.53745	1.52602	1.53404		
As	0.00204	439.6	0.00450	-0.0123	0.00165		
B	0.03750	3.146	0.03687	0.03897	0.03697		
Ba	0.05844	0.001	0.05844	0.05844	0.05843		
Be	0.00081	88.06	0.00123	0.00122	-0.0000		
Ca	8.87055	0.607	15.9294	15.9228	15.7593		
X Cd	0.00143	24.98	0.00163	0.00101	0.00164		
Co	0.00126	178.5	-0.0021	-0.0029	0.00130		
Cr	0.00425	62.76	0.00732	0.00282	0.00259		
Cu	0.01597	8.806	0.01678	0.01435	0.01678		
Fe	6.9804	0.746	2.70656	2.71252	2.67504		
K	43043	0.799	5.40535	5.40534	5.48059		
Li	0.00401	43.30	0.00300	0.00300	0.00601		
Hg	6.31500	0.949	6.35428	6.34472	6.24600		
Mn	0.13153	0.002	0.13153	0.13153	0.13153		
Mo	0.00104	197.8	-0.0012	0.00149	0.00284		
Na	10.01076	0.748	10.0451	10.0623	9.92485		
Ni	0.00152	66.09	0.00210	0.00036	0.00210		
P	0.11694	35.47	0.11433	0.15967	0.07683		
Pb	0.00309	73.39	-0.0009	-0.0029	-0.0054		
Sb	0.00165	173.7	-0.0010	0.00085	-0.0047		
Se	0.01236	149.7	0.03005	0.01390	-0.0068		
Si	38651	0.333	6.39367	6.40330	6.36257		
Sn	0.00485	140.2	-0.0107	0.00257	-0.0063		
Sr	0.07746	0.825	0.07767	0.07797	0.07674		
Ti	0.08154	0.921	0.08187	0.08207	0.08068		
Tl	0.00971	0.720	-0.0097	-0.0096	-0.0097		
V	0.00689	19.70	0.00689	0.00825	0.00553		
Zn	0.07965	1.280	0.07906	0.07907	0.08083		

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Run Name: 25601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	00002	4624.	0.00129	-0.0006	-0.0006		
Al	001780	48.71	0.01292	0.01266	0.02781		
As	000670	55.21	-0.0081	-0.0095	-0.0025		
P	003980	3.049	0.03840	0.04051	0.04050		
Ba	003813	3.534	0.03735	0.03735	0.03968		
Be	000000	88.67	-0.0000	0.00000	-0.0000		
Cd	0068473	0.122	15.6674	15.7055	15.6811		
X Cd	000006	0.412	-0.0000	-0.0000	-0.0000		
Co	000197	60.22	-0.0006	-0.0023	-0.0029		
Cr	000106	217.9	0.00093	-0.0036	-0.0005		
Cu	00344	35.37	0.00466	0.00222	0.00344		
Fe	0018526	0.530	0.18413	0.18583	0.18583		
K	005487	1.431	5.25487	5.17962	5.33011		
Li	000000	295.1	-0.0000	-0.0000	0.00000		
Mn	00604	0.270	6.11558	6.08694	6.11560		
Mn	009057	2.244	0.08823	0.09175	0.09175		
Mo	000091	295.1	-0.0036	-0.0009	0.00178		
Na	0036543	0.834	10.4570	10.3539	10.2852		
Ni	000321	15.91	-0.0038	-0.0029	-0.0029		
P	000433	993.5	0.04321	-0.0420	0.01181		
Pb	000068	519.8	-0.0026	0.00437	0.00034		
Pb	000754	126.0	0.00880	-0.0025	0.01634		
Se	002775	120.1	0.02127	-0.0018	0.06390		
Si	001808	0.296	4.80548	4.83363	4.81513		
Sr	000579	88.84	0.01174	0.00282	0.00282		
Sr	007661	0.278	0.07654	0.07644	0.07685		
Ti	000211	56.22	0.00330	0.00211	0.00092		
Ti	007685	56.79	-0.1126	-0.0282	-0.0897		
V	000182	86.12	0.00273	0.00001	0.00274		
Zn	002740	3.207	0.02740	0.02652	0.02828		

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Run No. 0235601111

LANCASTER LABORATORIES

PAGE: 1

INSTRUMENT ID: 02360

43 12/21/92 CRHLT 17:39  
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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.00057	163.2	0.00131	0.00131	-0.0005		
___Al	0.06889	13.54	0.07047	0.07734	0.05887		
___As	0.00240	364.2	0.00037	-0.0121	0.00461		
___B	0.02901	7.162	0.02694	0.03109	0.02901		
___Ba	0.02529	2.664	0.02568	0.02568	0.02451		
___Be	0.00000	173.4	-0.0000	-0.0000	0.00000		
___Ca	8.30394	0.997	8.22271	8.38822	8.30089		
X___Cd	-0.00004	2.270	-0.0000	-0.0000	-0.0000		
___Ce	-0.00238	63.29	-0.0006	-0.0033	-0.0031		
___Cr	-0.00191	116.6	-0.0027	0.00061	-0.0036		
___Cu	0.00344	35.33	0.00344	0.00466	0.00222		
___Fe	0.24565	1.200	0.24395	0.24905	0.24394		
___K	2.69641	2.790	2.69641	2.62116	2.77166		
___Li	0.00000	315.0	-0.0000	0.00000	0.00000		
___Mn	3.31171	1.236	3.26500	3.34143	3.32869		
___Mo	0.07305	0.002	0.07305	0.07304	0.07305		
___Ni	0.00042	315.0	-0.0009	0.00177	0.00042		
___Na	6.99809	0.567	6.95227	7.02101	7.02100		
___Ni	-0.00001	6777.	0.00056	-0.0011	0.00056		
___P	0.00708	225.5	0.02019	0.01175	-0.0107		
___Pb	-0.01003	110.0	-0.0227	-0.0036	-0.0036		
___Sb	0.00377	252.5	0.01262	0.00498	-0.0063		
___Se	-0.01054	63.21	-0.0182	-0.0066	-0.0066		
___Si	3.36409	1.026	3.32807	3.39690	3.36731		
___Sr	0.00510	226.8	0.0015	-0.0015	0.01847		
___S	0.04566	1.151	0.04508	0.04611	0.04580		
___Ti	0.00132	130.6	0.00053	0.00330	0.00013		
___Tl	0.07181	72.80	-0.0129	-0.0896	-0.1128		
___V	0.00183	171.2	0.00545	0.00002	0.00001		
___Zn	0.01248	0.032	0.01248	0.01247	0.01248		

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Run Name 235601I11

LANCASTER LABORATORIES

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INSTRUMENT ID: 02360

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
___Ag	0.00070	156.2	-0.0000	-0.0019	-0.0000	_____	_____
___Al	1.85279	0.940	1.85778	1.86718	1.83340	_____	_____
___As	0.00526	201.8	-0.0174	0.00223	-0.0005	_____	_____
___B	0.02924	7.233	0.03135	0.02712	0.02926	_____	_____
___Ba	0.04211	0.000	0.04211	0.04211	0.04211	_____	_____
___Be	0.00001	27.19	-0.0000	-0.0000	-0.0000	_____	_____
___Ca	8.60263	0.399	8.62734	8.61718	8.56337	_____	_____
X ___Cd	0.00021	865.5	0.00227	-0.0014	-0.0001	_____	_____
___Co	0.00057	303.3	0.00144	-0.0015	-0.0015	_____	_____
___Cr	0.00046	191.5	0.00055	-0.0004	0.00129	_____	_____
___Cu	0.00481	36.49	0.00582	0.00278	0.00582	_____	_____
___Fe	0.00805	0.256	3.00919	3.01515	2.99982	_____	_____
___K	0.79673	1.553	2.77165	2.84690	2.77165	_____	_____
___Li	0.00000	139.0	0.00000	0.00000	0.00000	_____	_____
___Mg	0.55343	1.050	3.52582	3.59590	3.53856	_____	_____
___Mn	0.10186	1.328	0.10108	0.10342	0.10108	_____	_____
___Mo	0.00055	139.0	0.00145	0.00010	0.00011	_____	_____
___Na	7.34487	0.472	7.36493	7.36490	7.30479	_____	_____
___Ni	0.00032	1417.	0.00557	-0.0031	-0.0014	_____	_____
___P	0.06471	92.04	0.07544	0.11818	0.00051	_____	_____
___Pb	0.00008	9979.	0.00630	0.00378	-0.0098	_____	_____
___Sb	0.00165	728.5	0.01225	-0.0086	-0.0086	_____	_____
___Se	0.00206	193.6	-0.0002	0.00667	-0.0002	_____	_____
___Si	0.32440	0.074	5.32141	5.32888	5.32291	_____	_____
___Sn	0.00711	62.56	0.01157	0.00266	0.00711	_____	_____
___Sr	0.04822	0.648	0.04857	0.04816	0.04795	_____	_____
___Ti	0.06481	5.231	0.06799	0.06124	0.06521	_____	_____
___Tl	0.04659	75.99	-0.0260	-0.0262	-0.0874	_____	_____
___V	0.00644	24.42	0.00825	0.00553	0.00553	_____	_____
___Zn	0.03091	1.693	0.03060	0.03151	0.03062	_____	_____

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LANCASTER LABORATORIES

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ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.03423	12.21	-0.0364	-0.0294	-0.0368		
Al	162.89083	1.070	468.123	458.270	462.278		
As	0.21061	48.25	0.32631	0.13583	0.16968		
B	0.26814	1.561	0.26332	0.27087	0.27023		
Ba	0.00554	0.960	0.00560	0.00549	0.00553		
Be	0.00163	44.09	0.00122	0.00122	0.00247		
Ca	155.22958	0.858	459.583	452.031	454.073		
Cd	0.02894	6.617	0.03102	0.02725	0.02855		
Co	0.00282	68.91	-0.0029	-0.0008	-0.0046		
Cr	0.01335	27.34	-0.0165	-0.0093	-0.0141		
Cu	0.00216	101.5	0.00153	0.00461	0.00034		
Fe	173.24012	0.959	175.079	171.841	172.799		
K	0.22514	33.24	0.22679	0.30127	0.15088		
Li	0.00100	173.1	-0.0000	-0.0000	-0.0030		
Mg	177.04806	1.036	482.420	472.694	476.028		
Mn	0.01167	1.854	-0.0119	-0.0114	-0.0116		
Mo	0.04852	10.03	-0.0485	-0.0436	-0.0534		
Na	0.13466	20.50	0.12320	0.16616	0.11461		
Ni	0.02702	11.76	-0.0289	-0.0233	-0.0287		
P	1.70644	10.23	-1.5251	-1.8735	-1.7207		
Pb	0.02562	49.55	0.03998	0.02096	0.01591		
Sb	0.01160	317.7	0.02353	-0.0083	-0.0499		
Se	0.06802	26.00	-0.0541	-0.0619	-0.0879		
Si	0.00296	257.2	0.00531	0.00914	-0.0055		
Sn	0.09318	25.67	0.10068	0.11245	0.06640		
Sr	0.01683	1.531	0.01711	0.01680	0.01659		
Ti	0.01322	7.959	0.01282	0.01441	0.01242		
Tl	0.039504	5.305	-0.4191	-0.3815	-0.3843		
V	0.01044	0.405	0.01049	0.01042	0.01041		
Zn	0.00984	5.486	-0.0104	-0.0093	-0.0097		

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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ELEMENT	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	87375	0.736	0.88118	0.86997	0.87009	_____	_____
Al	294210	0.595	460.295	462.731	465.799	_____	_____
As	23303	21.49	0.22232	0.28762	0.18916	_____	_____
B	27405	1.347	0.27512	0.27708	0.26994	_____	_____
Ba	46265	0.641	0.45950	0.46305	0.46540	_____	_____
Be	42273	0.612	0.41983	0.42354	0.42481	_____	_____
Ca	496691	0.613	451.773	456.204	456.923	_____	_____
Cd	86026	0.831	0.85204	0.86497	0.86379	_____	_____
Co	40978	1.789	0.40178	0.41137	0.41618	_____	_____
Cr	42635	1.569	0.41932	0.43264	0.42708	_____	_____
Cu	44924	0.154	0.44844	0.44965	0.44964	_____	_____
Fe	328697	0.582	172.178	173.531	174.150	_____	_____
K	27659	15.73	0.22634	0.30169	0.30175	_____	_____
Li	0.00000	1355	-0.0000	-0.0030	0.00300	_____	_____
Mg	677355	0.610	473.734	477.052	479.533	_____	_____
Mn	42110	0.615	0.41811	0.42265	0.42255	_____	_____
Mo	404637	4.787	-0.0438	-0.0481	-0.0470	_____	_____
Na	16297	10.96	0.14865	0.15725	0.18300	_____	_____
Ni	80878	0.532	0.80688	0.81372	0.80576	_____	_____
P	173846	5.853	-1.6383	-1.7351	-1.8418	_____	_____
Pb	92415	1.602	0.91040	0.93983	0.92222	_____	_____
Sb	0.01779	7.711	-0.0189	-0.0181	-0.0162	_____	_____
Se	0.06589	53.83	-0.0259	-0.0781	-0.0936	_____	_____
Si	90183	601.4	-0.0100	0.01173	0.00385	_____	_____
Sr	08592	7.884	0.08852	0.09101	0.07823	_____	_____
Sr	01695	1.256	0.01677	0.01718	0.01688	_____	_____
Ti	01230	16.56	0.01177	0.01455	0.01058	_____	_____
Tl	41233	17.74	-0.4360	-0.3302	-0.4706	_____	_____
V	44960	1.216	0.44411	0.45505	0.44962	_____	_____
Zn	87336	0.804	0.85547	0.87567	0.87895	_____	_____



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LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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	CPAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REFREAD	REDIG
A	02165	5.103	0.02229	0.02229	0.02037		
A	04909	49.32	0.06668	0.05912	0.02147		
A	01350	41.58	0.01912	0.00789	0.01348		
B	000354	33.89	-0.0028	-0.0028	-0.0049		
B	00000	26.58	0.00000	0.00000	0.00000		
B	00866	4.192	0.00908	0.00845	0.00844		
C	04332	30.73	0.05753	0.04129	0.03113		
C	00005	15.74	0.00740	0.00987	0.00987		
C	09557	1.084	0.09506	0.09676	0.09489		
C	02155	6.690	0.02213	0.02262	0.01991		
C	04829	3.174	0.04849	0.04971	0.04667		
E	01611	26.06	0.02002	0.01327	0.01413		
E	01796	0.002	0.13796	0.13796	0.13795		
E	00000	167.8	0.0000	-0.0000	0.00000		
M	04185	45.65	0.04186	0.04186	0.02274		
M	02357	0.003	0.02857	0.02857	0.02857		
M	000046	167.8	0.0009	-0.0009	0.00043		
M	04576	0.016	0.04576	0.04576	0.04575		
N	07247	4.238	0.07567	0.06955	0.07218		
O	01714	180.0	0.0251	-0.0432	0.01692		
O	00786	46.16	0.0102	-0.0097	-0.0036		
O	10555	5.742	0.00863	0.10994	0.10808		
O	02065	40.28	0.01373	0.01834	0.02989		
O	01408	55.55	0.0065	-0.0021	-0.0035		
O	00701	21792	0.00298	-0.0014	-0.0014		
O	00011	83.13	0.0002	-0.0002	-0.0000		
P	00384	31.53	0.00190	0.00410	0.00252		
P	02054	87.81	0.01171	0.00112	0.04709		
P	09391	1.587	0.09901	0.09801	0.10073		
P	03370	0.027	0.03863	0.03870	0.03871		

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LANCASTER LABORATORIES

INSTRUMENT ID: 02360

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18:02

ELEM	AVERAGE (ppm )	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.46482	0.627	0.46546	0.46737	0.46164	_____	_____
Al	23.34699	0.894	23.4892	23.4443	23.1072	_____	_____
As	1.95629	1.576	1.98803	1.95443	1.92642	_____	_____
B	0.94118	0.645	0.94465	0.94472	0.93416	_____	_____
Ba	4.74019	1.087	4.77559	4.76392	4.68106	_____	_____
Be	0.44501	0.959	0.44745	0.44749	0.44008	_____	_____
Cd	47.39250	0.720	47.5590	47.6189	46.9995	_____	_____
Cd	4.66237	0.775	4.67676	4.68910	4.62126	_____	_____
Co	0.90927	1.388	0.91938	0.91331	0.89512	_____	_____
Cr	4.91870	1.015	4.94867	4.94641	4.86104	_____	_____
Cu	4.64100	0.982	4.66971	4.66484	4.58844	_____	_____
Fe	4.71714	0.906	4.74515	4.73835	4.66791	_____	_____
K	48.31766	0.468	48.5556	48.2923	48.1050	_____	_____
Li	24.46256	1.305	24.6902	24.5999	24.0974	_____	_____
Mg	23.20896	0.799	23.3695	23.2515	23.0057	_____	_____
Mn	4.72439	0.861	4.75297	4.74241	4.67778	_____	_____
Mo	23.75880	1.105	23.9197	23.9211	23.4655	_____	_____
Nb	53.43265	1.422	54.0896	53.7288	52.6294	_____	_____
Ni	9.32358	0.808	9.38110	9.35138	9.23826	_____	_____
P	24.00597	1.636	24.4221	23.9542	23.6415	_____	_____
Pb	24.06859	0.482	24.1640	24.1025	23.9392	_____	_____
Sb	4.76348	1.052	4.75513	4.81728	4.71802	_____	_____
Se	1.90617	2.352	1.93919	1.92420	1.85512	_____	_____
Si	2.15961	0.341	2.16057	2.16646	2.15181	_____	_____
Sn	4.72592	1.055	4.72795	4.77474	4.67507	_____	_____
Sr	0.95135	1.077	0.95869	0.95572	0.93964	_____	_____
Ti	1.93982	1.024	1.94988	1.95265	1.91693	_____	_____
V	4.95624	2.077	5.04957	4.85084	4.99830	_____	_____
V	1.90659	1.000	1.92259	1.91170	1.88549	_____	_____
Zn	4.75425	0.643	4.78101	4.78289	4.72886	_____	_____

Lab Name: 1235601111

LANCASTER LABORATORIES

INSTRUMENT ID: 02360

CASE: 40

10 CIP 12/21/92 18:06

ELEM	AVERAGE (ppm)	%RSD	BURN#1	BURN#2	BURN#3	REREAD	REDIG
Ag	0.00063	173.0	0.00127	0.00127	-0.0006		
Al	0.02121	40.41	0.03111	0.01611	0.01641		
As	0.00653	24.79	-0.0055	-0.0084	-0.0055		
B	0.00174	103.2	-0.0007	-0.0007	-0.0038		
Ba	0.00311	86.60	0.00466	0.00466	-0.0000		
Be	0.00083	85.77	0.00124	0.00124	0.00000		
Ca	0.03384	61.79	0.05347	0.03621	0.01184		
Cd	0.00370	33.30	0.00493	0.00370	0.00246		
Co	0.00292	90.61	0.00011	-0.0047	-0.0041		
Cr	0.00014	2493.	0.00364	-0.0002	-0.0037		
Cu	0.00242	210.4	0.00830	-0.0002	-0.0008		
Fe	0.00339	115.5	0.00566	0.00567	-0.0011		
K	0.12538	45.82	0.17553	0.13792	0.06269		
Li	0.01504	52.91	0.02106	0.01805	0.00601		
Mg	0.01805	146.9	0.04779	0.00956	-0.0031		
Mn	0.00195	69.24	0.00274	0.00274	0.00039		
Mo	0.01662	48.64	0.02471	0.01662	0.00853		
Na	0.07444	48.04	0.11453	0.06298	0.04581		
Ni	0.00471	93.79	0.00939	0.00413	0.00061		
P	0.02793	45.51	-0.0419	-0.0245	-0.0172		
Pb	0.00269	714.9	0.00840	0.01847	-0.0187		
Sb	0.01109	112.5	-0.0016	-0.0063	-0.0252		
Se	0.00845	87.68	0.01383	-0.0000	0.01153		
Si	0.00421	180.4	-0.0022	0.00222	-0.0125		
Sn	0.00295	399.4	0.00739	0.01186	-0.0104		
Sr	0.00020	199.9	0.00061	0.00020	-0.0002		
Ti	0.00145	113.5	0.00330	0.00092	0.00013		
Tl	0.08458	37.84	-0.1204	-0.0589	-0.0742		
V	0.00085	188.0	0.00009	0.00005	-0.0027		
Zn	0.00291	89.61	0.00552	0.00293	0.00029		

Date Rec:   
 Date ...

By:   
 By:

*Max Druech* R-22-42  
*12/21/92*