Data Package

Contract Lab Program Data Package
for
DERS/DuPont Env Remed Services

TYPE IV INORGANICS DATA PACKAGE

DuPont Fort Madison GW Monitoring-1996 Annual
Water Samples
Collected on 09/19/96 - 09/20/96
Sample No. 2585287-2585295

DATE RECEIVED
OCT 2 1 1996
SAM _____ BY _____
CED _____ BY _____

PA Cert. # 36-037
NY Cert. # 10670
NJ Cert. # 77011

Prepared by Olivia Rosengren

Quality Assurance Review

Date 10/17/96

Delivery Date 10/21/96

Lancaster Laboratories
A Thermo Analytical Laboratory

N36818

Lancaster Laboratories • 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
A division of Thermo Analytical Inc.
Where quality is a science

Sample Reference List for SDG # FMD04 with a Package Type of IV-I

Lab Sample Number	Sample Code	Client Sample Description
2585287	ISDIS	FMN-MRA-1S-DIS Filtered Water Sample
2585288	IDDIS	FMN-MRA-1D-DIS Filtered Water Sample
2585289	DIS2D	FMN-MRA-2D-DIS Filtered Water Sample
2585290	DIS2S	FMN-MRA-2S-DIS Unspiked Filtered Water Sample
2585291	DIS4S	FMN-MRA-4S-DIS Filtered Water Sample
2585292	DIS3S	FMN-MRA-3S-DIS Filtered Water Sample
2585293	DIS3D	FMN-MRA-3D-DIS Filtered Water Sample
2585294	3DDUP	FMN-MRA-3D-DUP-DIS Filtered Water Sample
2585295	FBK2D	FMN-MRA-FBLK-2-DIS Filtered Water Sample

Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax 717-656-2681

Shipping Address:
Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601
717-656-2300 Fax 717-656-2681

TABLE OF CONTENTS

Case Narrative
Conformance/Nonconformance Summary

CASE NARRATIVE FOR INORGANICS

Laboratory Name: Lancaster Laboratories

SDG Number: FMD04

Date Received: 09/21/96

Analysis:
The following run logs are included to demonstrate the need for dilution into calibration range:

Method	Analyte	Date
GFAA	Pb	09/25/96

Calibration Standards:
Instrument calibration standards are prepared monthly from stock solutions purchased from Spex Industries Inc., JT Baker, Aldrich Chemical, VWR Scientific, EM Science, or VHG Laboratories.

Case Narrative reviewed and approved by:

Betty L. Umble Date 10/10/96

Betty L. Umble, Administrator III
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.: FMD04

SOW No.: ILM04.0

EPA SAMPLE No.	Lab Sample ID.
_3DDUP____	_2585294__
_DIS2D____	_2585289__
_DIS2S____	_2585290__
_DIS3D____	_2585293__
_DIS3S____	_2585292__
_DIS4S____	_2585291__
_FBK2D____	_2585295__
_IDDIS____	_2585288__
_ISDIS____	_2585287__
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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:

_____

_____

_____

_____

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 diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Betty L Umble Name: _Betty L. Umble_____

Date: 10/10/96 Title: _Administrator III_____

Inorganic Data Packages

Sample Data

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

3DDUP

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585294

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.1	U		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	6.3	B	W	F
7440-39-3	Barium	140	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	90400			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	150			P
7439-92-1	Lead	0.84	B	WN	F
7439-95-4	Magnesium	28000			P
7439-96-5	Manganese	527			P
7439-97-6	Mercury	0.059	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	3260	B		P
7782-49-2	Selenium	0.70	U	W*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	51200			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.6	B		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIS2D

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585289

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.1	U		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.3	U		F
7440-39-3	Barium	98.4	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	80000			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	15.5	U		P
7439-92-1	Lead	0.84	U	WN	F
7439-95-4	Magnesium	27900			P
7439-96-5	Manganese	102			P
7439-97-6	Mercury	0.062	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	3730	B		P
7782-49-2	Selenium	0.70	U	*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	64000			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.6	U		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIS2S

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585290

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.5	B		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.3	U		F
7440-39-3	Barium	68.6	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	149000			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	15.5	U		P
7439-92-1	Lead	0.92	B	WN	F
7439-95-4	Magnesium	50100			P
7439-96-5	Manganese	14.3	B		P
7439-97-6	Mercury	0.061	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	1540	B		P
7782-49-2	Selenium	97.0		*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	53400			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.6	U		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIS3D

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585293

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30.8	B		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.5	B	W	F
7440-39-3	Barium	142	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	91600			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	5.3	B		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	158			P
7439-92-1	Lead	0.84	U	WN	F
7439-95-4	Magnesium	28400			P
7439-96-5	Manganese	532			P
7439-97-6	Mercury	0.060	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	3340	B		P
7782-49-2	Selenium	0.70	U	*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	52100			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	10.3	B		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIS3S

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585292

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.1	U		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.3	U		F
7440-39-3	Barium	230			P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	140000			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	15.5	U		P
7439-92-1	Lead	0.84	U	WN	F
7439-95-4	Magnesium	43000			P
7439-96-5	Manganese	5.1	B		P
7439-97-6	Mercury	0.057	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	1780	B		P
7782-49-2	Selenium	163		S*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	26800			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	13.7	B		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIS4S

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585291

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.6	B		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.3	U	W	F
7440-39-3	Barium	18.2	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	431000			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	15.5	U		P
7439-92-1	Lead	8.6	B	WN	F
7439-95-4	Magnesium	134000			P
7439-96-5	Manganese	392			P
7439-97-6	Mercury	0.058	B		CV
7440-02-0	Nickel	15.4	B		P
7440-09-7	Potassium	4880	B		P
7782-49-2	Selenium	21.1		*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	92700			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.6	U		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

FBK2D

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585295

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.1	U		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.5	B		F
7440-39-3	Barium	1.6	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	104	B		P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	15.5	U		P
7439-92-1	Lead	1.1	B	N	F
7439-95-4	Magnesium	29.1	U		P
7439-96-5	Manganese	1.9	U		P
7439-97-6	Mercury	0.055	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	233	U		P
7782-49-2	Selenium	0.70	U	W*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	237	B		P
7440-28-0	Thallium	1.1	U	W	F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.6	U		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

IDDIS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585288

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.1	U		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.3	U	S	F
7440-39-3	Barium	60.7	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	155000			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	5.8	B		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	138			P
7439-92-1	Lead	0.84	U	WN	F
7439-95-4	Magnesium	38200			P
7439-96-5	Manganese	1800			P
7439-97-6	Mercury	0.061	B		CV
7440-02-0	Nickel	7.7	B		P
7440-09-7	Potassium	4620	B		P
7782-49-2	Selenium	0.70	U	*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	78700			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.6	U		P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ISDIS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER Lab Sample ID: 2585287

Level (low/med): LOW Date Received: 09/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.1	U		P
7440-36-0	Antimony	11.5	U		P
7440-38-2	Arsenic	1.3	U		F
7440-39-3	Barium	84.5	B		P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.38	U		P
7440-70-2	Calcium	103000			P
7440-47-3	Chromium	2.9	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	9.4	U		P
7439-89-6	Iron	15.5	U		P
7439-92-1	Lead	0.84	U	WN	F
7439-95-4	Magnesium	37600			P
7439-96-5	Manganese	5.2	B		P
7439-97-6	Mercury	0.057	B		CV
7440-02-0	Nickel	2.6	U		P
7440-09-7	Potassium	672	B		P
7782-49-2	Selenium	0.89	B	*	F
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	29400			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	32.4			P

Color Before: COLORLESS_ Clarity Before: CLEAR_____ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_____ Artifacts: _____

Comments:

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Quality Control Data

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	30000.0	30684.78	102.3	25000.0	25990.57	104.0	25824.41	103.3	P
Antimony	6000.0	5891.79	98.2	5000.0	5070.27	101.4	5004.59	100.1	P
Arsenic	50.0	50.52	101.0	40.0	42.60	106.5	42.16	105.4	F
Barium	6000.0	5836.84	97.3	5000.0	4888.21	97.8	4915.69	98.3	P
Beryllium	600.0	585.94	97.7	500.0	497.59	99.5	487.74	97.5	P
Cadmium	600.0	594.13	99.0	500.0	502.33	100.5	500.89	100.2	P
Calcium	60000.0	62586.42	104.3	50000.0	53267.01	106.5	51937.91	103.9	P
Chromium	6000.0	5867.06	97.8	5000.0	5081.98	101.6	4956.49	99.1	P
Cobalt	1200.0	1139.68	95.0	1000.0	989.86	99.0	968.62	96.9	P
Copper	6000.0	5909.62	98.5	5000.0	5061.77	101.2	5036.41	100.7	P
Iron	6000.0	5894.70	98.2	5000.0	5074.60	101.5	4935.31	98.7	P
Lead	20.0	19.90	99.5	25.0	26.11	104.4	26.29	105.2	F
Magnesium	30000.0	30948.50	103.2	25000.0	26070.51	104.3	25685.48	102.7	P
Manganese	6000.0	5842.69	97.4	5000.0	4977.46	99.5	4883.00	97.7	P
Mercury	2.0	2.06	103.0	1.0	1.03	103.0	0.98	98.0	CV
Nickel	12000.0	11605.25	96.7	10000.0	9862.19	98.6	9640.30	96.4	P
Potassium	60000.0	61524.47	102.5	50000.0	50084.95	100.2	50598.64	101.2	P
Selenium	20.0	19.58	97.9	25.0	24.85	99.4	24.76	99.0	F
Silver	600.0	570.14	95.0	500.0	483.17	96.6	480.76	96.2	P
Sodium	60000.0	61937.01	103.2	50000.0	51831.14	103.7	51796.00	103.6	P
Thallium	50.0	46.77	93.5	40.0	40.16	100.4	38.49	96.2	F
Vanadium	2400.0	2365.81	98.6	2000.0	1985.81	99.3	1958.59	97.9	P
Zinc	6000.0	5870.96	97.8	5000.0	5023.85	100.5	4927.94	98.6	P

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

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				25000.0	25407.36	101.6			P
Antimony				5000.0	4901.69	98.0			P
Arsenic				40.0	41.65	104.1	39.39	98.5	F
Barium				5000.0	4706.17	94.1			P
Beryllium				500.0	476.24	95.2			P
Cadmium				500.0	497.42	99.5			P
Calcium				50000.0	51021.68	102.0			P
Chromium				5000.0	4861.62	97.2			P
Cobalt				1000.0	950.31	95.0			P
Copper				5000.0	4898.29	98.0			P
Iron				5000.0	4879.64	97.6			P
Lead				25.0	26.22	104.9	26.64	106.6	F
Magnesium				25000.0	25173.38	100.7			P
Manganese				5000.0	4779.55	95.6			P
Mercury				1.0	1.07	107.0			CV
Nickel				10000.0	9459.83	94.6			P
Potassium				50000.0	48741.45	97.5			P
Selenium				25.0	24.18	96.7	24.67	98.7	F
Silver				500.0	469.03	93.8			P
Sodium				50000.0	50645.45	101.3			P
Thallium				40.0	43.11	107.8	42.07	105.2	F
Vanadium				2000.0	1906.56	95.3			P
Zinc				5000.0	4851.26	97.0			P

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

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic				40.0	37.39	93.5			F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				25.0	26.24	105.0			F
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium				25.0	23.45	93.8	24.66	98.6	F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR

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

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic	50.0	49.15	98.3	40.0	41.04	102.6	40.10	100.2	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium				25.0	24.24	97.0			F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR

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

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic	50.0	48.75	97.5	40.0	41.75	104.4	43.58	109.0	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	20.0	19.08	95.4	25.0	24.26	97.0	23.80	95.2	F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR

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

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic	50.0	46.49	93.0	40.0	41.42	103.6	42.67	106.7	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	20.0	19.01	95.0	25.0	24.62	98.5	24.55	98.2	F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR

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

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Initial Calibration Source: LLI_____

Continuing Calibration Source: LLI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium				25.0	24.01	96.0			F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR

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

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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	129.12	107.6	123.59	103.0
Arsenic	10.0	10.82	108.2					
Barium								
Beryllium				10.0	10.03	100.3	10.03	100.3
Cadmium				10.0	9.78	97.8	9.99	99.9
Calcium								
Chromium				20.0	18.28	91.4	20.43	102.2
Cobalt				100.0	103.37	103.4	100.28	100.3
Copper				50.0	55.82	111.6	51.96	103.9
Iron								
Lead	3.0	3.29	109.7					
Magnesium								
Manganese				30.0	31.31	104.4	31.31	104.4
Mercury	0.2	0.23	115.0					
Nickel				80.0	82.59	103.2	77.78	97.2
Potassium								
Selenium	5.0	4.05	81.0					
Silver				20.0	21.43	107.2	19.10	95.5
Sodium								
Thallium	10.0	8.73	87.3					
Vanadium				100.0	101.29	101.3	97.67	97.7
Zinc				40.0	41.32	103.3	40.37	100.9

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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	10.0	9.61	96.1					
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium	5.0	3.63	72.6					
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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	10.0	8.03	80.3					
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium	5.0	4.54	90.8					
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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	10.0	11.01	110.1					
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

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3
BLANKS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Preparation Blank Matrix (soil/water): WATER_

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum	28.1	U	58.6	B	28.1	U	56.4	B	28.100	U	P
Antimony	11.5	U	11.5	U	11.5	U	11.5	U	11.500	U	P
Arsenic	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	F
Barium	1.8	B	1.4	B	1.6	B	1.4	B	0.840	U	P
Beryllium	0.83	U	0.83	U	0.83	U	0.83	U	0.830	U	P
Cadmium	0.38	U	0.38	U	0.38	U	0.38	U	0.380	U	P
Calcium	41.1	U	68.0	B	41.1	U	63.9	B	41.100	U	P
Chromium	2.9	U	2.9	U	2.9	U	2.9	U	2.900	U	P
Cobalt	3.5	B	2.3	U	2.3	U	2.3	U	2.300	U	P
Copper	9.4	U	9.4	U	9.4	U	9.4	U	9.400	U	P
Iron	15.5	U	22.1	B	15.5	U	23.1	B	15.500	U	P
Lead	0.84	U	0.84	U	0.84	U	0.85	B	0.840	U	F
Magnesium	29.1	U	38.0	B	29.1	U	48.5	B	29.100	U	P
Manganese	2.6	B	1.9	U	2.1	B	1.9	U	1.900	U	P
Mercury	0.055	B	0.050	B	0.050	B	0.054	B	0.065	B	CV
Nickel	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Potassium	233	U	233	U	233	U	233	U	233.000	U	P
Selenium	-0.98	B	-1.2	B	-1.5	B	0.70	U	-1.390	B	F
Silver	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Sodium	84.4	U	84.4	U	84.4	U	84.4	U	84.400	U	P
Thallium	1.1	U	1.1	U	-1.7	B	1.1	U	1.100	U	F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Zinc	9.6	U	9.6	U	9.6	U	9.6	U	9.970	B	P

U.S. EPA - CLP

3
BLANKS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic			1.3	U	1.3	U					F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead			0.85	B	0.84	U					F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium			-1.2	B	0.70	U	0.70	U			F
Silver											NR
Sodium											NR
Thallium			1.1	U							F
Vanadium											NR
Zinc											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic	1.9	B	1.4	B	1.9	B					F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium			-1.5	B							F
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR

3
BLANKS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic	1.3	U	2.3	B	1.3	U					F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	-1.4	B	-1.8	B	-1.4	B					F
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR

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3
BLANKS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic	2.4	B	1.8	B	1.3	U					NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	-0.75	B	0.70	U	0.70	U	0.70	U			F
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR

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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

ICP ID Number: 03144_____ ICS Source: LLI_____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	506161	503979.5	100.8	495144	502156.3	100.4
Antimony	0	600	-14	579.4	96.6	0	596.7	99.4
Arsenic								
Barium	0	500	7	488.0	97.6	7	481.4	96.3
Beryllium	0	500	-2	477.6	95.5	-1	473.5	94.7
Cadmium								
Calcium	500000	500000	491001	490843.4	98.2	480247	485273.2	97.1
Chromium	0	500	2	472.7	94.5	4	465.7	93.1
Cobalt	0	500	-1	454.3	90.9	4	449.9	90.0
Copper	0	500	5	482.7	96.5	-3	480.9	96.2
Iron	200000	200000	184810	184464.2	92.2	181360	183197.2	91.6
Lead								
Magnesium	500000	500000	518589	516667.5	103.3	506703	513273.8	102.7
Manganese	0	500	-4	464.2	92.8	-6	457.0	91.4
Mercury								
Nickel	0	1000	-11	898.6	89.9	-11	885.1	88.5
Potassium	0	0	20	-59.3		99	-59.3	
Selenium								
Silver	0	200	-9	186.2	93.1	-8	184.9	92.4
Sodium	0	0	80	52.9		92	47.7	
Thallium								
Vanadium	0	500	-1	475.1	95.0	-2	471.3	94.3
Zinc	0	1000	17	965.3	96.5	17	961.5	96.2

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

ICP ID Number: 05478_____ ICS Source: LLI_____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	539361	531407.5	106.3	539718	537995.5	107.6
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium	0	1000	1	903.9	90.4	1	914.8	91.5
Calcium	500000	500000	515934	502391.0	100.5	518171	510622.3	102.1
Chromium								
Cobalt								
Copper								
Iron	200000	200000	211680	207040.0	103.5	212670	209969.7	105.0
Lead								
Magnesium	500000	500000	557856	537459.5	107.5	558446	543949.3	108.8
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

DIS2SS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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	2053.6500		34.4700	B	2000.00	101.0		P
Antimony	75-125	520.2400		11.5000	U	500.00	104.0		P
Arsenic	75-125	33.9100		1.3000	U	40.00	84.8		F
Barium	75-125	2013.5900		68.6000	B	2000.00	97.2		P
Beryllium	75-125	48.1500		0.8300	U	50.00	96.3		P
Cadmium	75-125	49.2300		0.3800	U	50.00	98.5		P
Calcium									NR
Chromium	75-125	194.5900		2.9000	U	200.00	97.3		P
Cobalt	75-125	474.9900		2.3000	U	500.00	95.0		P
Copper	75-125	246.2800		9.4000	U	250.00	98.5		P
Iron	75-125	976.4100		15.5000	U	1000.00	97.6		P
Lead	75-125	14.5100		0.9200	B	20.00	68.0	N	F
Magnesium									NR
Manganese	75-125	496.2000		14.2900	B	500.00	96.4		P
Mercury	75-125	1.0700		0.0610	B	1.00	100.9		CV
Nickel	75-125	478.5900		2.6000	U	500.00	95.7		P
Potassium									NR
Selenium		102.6500		97.0000		10.00	56.5		F
Silver	75-125	46.9400		2.2000	U	50.00	93.9		P
Sodium									NR
Thallium	75-125	40.2400		1.1000	U	50.00	80.5		F
Vanadium	75-125	484.7800		2.0000	U	500.00	97.0		P
Zinc	75-125	493.0000		9.6000	U	500.00	98.6		P

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

DIS2SD

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Matrix (soil/water): WATER_____ Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		34.4700	B	28.1000	U	200.0		P
Antimony		11.5000	U	12.1900	B	200.0		P
Arsenic		1.3000	U	1.3000	U			F
Barium		68.6000	B	66.7400	B	2.7		P
Beryllium		0.8300	U	0.8300	U			P
Cadmium		0.3800	U	0.3800	U			P
Calcium		148528.1500		146363.2600		1.5		P
Chromium		2.9000	U	2.9000	U			P
Cobalt		2.3000	U	2.3000	U			P
Copper		9.4000	U	9.4000	U			P
Iron		15.5000	U	15.5000	U			P
Lead		0.9200	B	0.8400	U	200.0		F
Magnesium		50105.7000		49536.8700		1.1		P
Manganese		14.2900	B	13.7800	B	3.6		P
Mercury		0.0610	B	0.0540	B	12.2		CV
Nickel		2.6000	U	2.6000	U			P
Potassium		1541.0700	B	1323.7400	B	15.2		P
Selenium	25.0	97.0000		123.2323		23.8	*	F
Silver		2.2000	U	2.2000	U			P
Sodium		53400.0700		52766.2800		1.2		P
Thallium		1.1000	U	1.1000	U			F
Vanadium		2.0000	U	2.0000	U			P
Zinc		9.6000	U	15.8700	B	200.0		P

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7

LABORATORY CONTROL SAMPLE

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Solid LCS Source: _____

Aqueous LCS Source: LLI_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	2094.52	104.7						
Antimony	500.0	557.26	111.5						
Arsenic	40.0	37.32	93.3						
Barium	2000.0	2005.53	100.3						
Beryllium	50.0	50.16	100.3						
Cadmium	50.0	51.34	102.7						
Calcium	4000.0	4311.85	107.8						
Chromium	200.0	202.14	101.1						
Cobalt	500.0	505.02	101.0						
Copper	250.0	260.14	104.1						
Iron	1000.0	1041.79	104.2						
Lead	20.0	21.96	109.8						
Magnesium	2000.0	2078.75	103.9						
Manganese	500.0	506.93	101.4						
Mercury	1.0	0.99	99.0						
Nickel	500.0	510.17	102.0						
Potassium	4000.0	4010.74	100.3						
Selenium	10.0	8.27	82.7						
Silver	50.0	49.83	99.7						
Sodium	4000.0	4156.02	103.9						
Thallium	50.0	48.38	96.8						
Vanadium	500.0	502.19	100.4						
Zinc	500.0	514.79	103.0						

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8
STANDARD ADDITION RESULTS

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q
IDDIS	AS	0.003	10.00	0.019	20.00	0.046	30.00	0.058	1.4	0.9899	+
IDDIS	AS	0.000	10.00	0.023	20.00	0.043	30.00	0.058	1.0	0.9957	
DIS2SD	SE	0.024	5.00	0.035	10.00	0.044	15.00	0.054	12.3	0.9993	
DIS3S	SE	0.032	5.00	0.041	10.00	0.051	15.00	0.061	16.3	0.9997	

FORM VIII - IN ILM04.0

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

DIS2S L

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

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	34.47	B	140.50	U	100.0		P
Antimony	11.50	U	57.50	U			P
Arsenic							
Barium	68.60	B	71.25	B	3.9		P
Beryllium	0.83	U	4.15	U			P
Cadmium	0.38	U	1.90	U			P
Calcium	148528.15		149041.90		0.3		P
Chromium	2.90	U	14.50	U			P
Cobalt	2.30	U	11.50	U			P
Copper	9.40	U	47.00	U			P
Iron	15.50	U	77.50	U			P
Lead							
Magnesium	50105.70		49896.10		0.4		P
Manganese	14.29	B	14.25	B	0.3		P
Mercury							
Nickel	2.60	U	13.00	U			P
Potassium	1541.07	B	1165.00	U	100.0		P
Selenium							
Silver	2.20	U	11.00	U			P
Sodium	53400.07		52982.80		0.8		P
Thallium							
Vanadium	2.00	U	10.00	U			P
Zinc	9.60	U	48.00	U			P

Verification of Instrument Parameters

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: _____ Date: 07/15/96

Flame AA ID Number: _____

Furnace AA ID Number: ___02803____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					NR
Antimony					NR
Arsenic					NR
Barium					NR
Beryllium					NR
Cadmium					NR
Calcium					NR
Chromium					NR
Cobalt					NR
Copper					NR
Iron					NR
Lead					NR
Magnesium					NR
Manganese					NR
Mercury					NR
Nickel					NR
Potassium					NR
Selenium					NR
Silver					NR
Sodium					NR
Thallium	276.80	BD	10	1.1	F
Vanadium					NR
Zinc					NR

Comments:

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.: FMD04__

ICP ID Number: ___03144____ Date: 07/15/96

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		200	28.1	P
Antimony	206.83		60	11.5	P
Arsenic					NR
Barium	493.40		200	0.84	P
Beryllium	313.04		5	0.83	P
Cadmium					NR
Calcium	317.93		5000	41.1	P
Chromium	267.71		10	2.9	P
Cobalt	228.61		50	2.3	P
Copper	324.75		25	9.4	P
Iron	259.94		100	15.5	P
Lead					NR
Magnesium	279.07		5000	29.1	P
Manganese	257.61		15	1.9	P
Mercury					NR
Nickel	231.60		40	2.6	P
Potassium	766.49		5000	233	P
Selenium					NR
Silver	328.06		10	2.2	P
Sodium	589.59		5000	84.4	P
Thallium					NR
Vanadium	292.40		50	2.0	P
Zinc	213.85		20	9.6	P

Comments:

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: _____ Date: 07/15/96

Flame AA ID Number: _____

Furnace AA ID Number: ___03812____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					NR
Antimony					NR
Arsenic					NR
Barium					NR
Beryllium					NR
Cadmium					NR
Calcium					NR
Chromium					NR
Cobalt					NR
Copper					NR
Iron					NR
Lead	283.30	BZ	3	0.84	F
Magnesium					NR
Manganese					NR
Mercury					NR
Nickel					NR
Potassium					NR
Selenium					NR
Silver					NR
Sodium					NR
Thallium					NR
Vanadium					NR
Zinc					NR

Comments:

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.: FMD04__

ICP ID Number: _____ Date: 07/15/96

Flame AA ID Number: _____

Furnace AA ID Number: ___04724____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					NR
Antimony					NR
Arsenic	193.70	BZ	10	1.3	F
Barium					NR
Beryllium					NR
Cadmium					NR
Calcium					NR
Chromium					NR
Cobalt					NR
Copper					NR
Iron					NR
Lead					NR
Magnesium					NR
Manganese					NR
Mercury					NR
Nickel					NR
Potassium					NR
Selenium					NR
Silver					NR
Sodium					NR
Thallium					NR
Vanadium					NR
Zinc					NR

Comments:

U.S. EPA - CLP

10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: _____ Date: 07/15/96

Flame AA ID Number: _____

Furnace AA ID Number: ___04725____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					NR
Antimony					NR
Arsenic					NR
Barium					NR
Beryllium					NR
Cadmium					NR
Calcium					NR
Chromium					NR
Cobalt					NR
Copper					NR
Iron					NR
Lead					NR
Magnesium					NR
Manganese					NR
Mercury					NR
Nickel					NR
Potassium					NR
Selenium	196.00	BZ	5	0.70	F
Silver					NR
Sodium					NR
Thallium					NR
Vanadium					NR
Zinc					NR

Comments:

U.S. EPA - CLP

10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: ___05478____ Date: 07/15/96

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					NR
Antimony					NR
Arsenic					NR
Barium					NR
Beryllium					NR
Cadmium	226.50		5	0.38	P
Calcium					NR
Chromium					NR
Cobalt					NR
Copper					NR
Iron					NR
Lead					NR
Magnesium					NR
Manganese					NR
Mercury					NR
Nickel					NR
Potassium					NR
Selenium					NR
Silver					NR
Sodium					NR
Thallium					NR
Vanadium					NR
Zinc					NR

Comments:

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: _____ Date: 07/15/96

Flame AA ID Number: ___61734____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					NR
Antimony					NR
Arsenic					NR
Barium					NR
Beryllium					NR
Cadmium					NR
Calcium					NR
Chromium					NR
Cobalt					NR
Copper					NR
Iron					NR
Lead					NR
Magnesium					NR
Manganese					NR
Mercury	254.00		0.2	0.0070	CV
Nickel					NR
Potassium					NR
Selenium					NR
Silver					NR
Sodium					NR
Thallium					NR
Vanadium					NR
Zinc					NR

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

ICP ID Number: ___03144 ___ Date: 09/12/96

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	CD
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony1	206.83	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony2	206.83	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic						
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium						
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.71	0.0000000	0.0000000	-0.0000270	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0006030
Copper	324.75	0.0000000	0.0000000	-0.0001690	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead1						
Lead2						
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	-0.0000190	0.0000270	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium1						
Selenium2						
Silver	328.06	0.0000000	-0.0000180	-0.0002940	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000800	0.0000000	0.0000000

Comments:

FORM XI (PART 1) - IN ILM04.0

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11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

ICP ID Number: ___05478 ___ Date: 09/12/96

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	CO
Aluminum_						
Antimony1						
Antimony2						
Arsenic__						
Barium__						
Beryllium						
Cadmium__	226.50	-0.0000010	0.0000000	0.0000560	0.0000000	-0.0001810
Calcium__						
Chromium_						
Cobalt___						
Copper___						
Iron____						
Lead1___						
Lead2___						
Magnesium						
Manganese						
Mercury__						
Nickel__						
Potassium						
Selenium1						
Selenium2						
Silver___						
Sodium___						
Thallium_						
Vanadium_						
Zinc____						
_____						

Comments:

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11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

ICP ID Number: ___03144 ___ Date: 09/12/96

Analyte	Wave-length (nm)	Interelement Correction Factors for: CO	CR	CU	MN	MO
Aluminum	308.21	-0.0129100	0.0000000	0.0000000	0.0000000	0.0130000
Antimony1	206.83	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony2	206.83	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic						
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium						
Calcium	317.93	0.0000000	0.0004800	0.0000000	0.0000000	0.0000000
Chromium	267.71	-0.0001460	0.0000000	0.0000000	0.0001230	-0.0001850
Cobalt	228.61	0.0000000	0.0000890	0.0000000	0.0000000	0.0000000
Copper	324.75	-0.0014990	0.0000000	0.0000000	0.0000000	0.0003670
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead1						
Lead2						
Magnesium	279.07	0.0000000	0.0000000	0.0000000	-0.0075260	0.0000000
Manganese	257.61	0.0000000	0.0000000	-0.0001800	0.0000000	-0.0002480
Mercury						
Nickel	231.60	0.0009750	0.0000000	0.0000000	0.0000000	-0.0021850
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium1						
Selenium2						
Silver	328.06	0.0000000	0.0000000	0.0000000	0.0001000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	0.0000000	-0.0037990	0.0000000	-0.0001420	-0.0034400
Zinc	213.85	0.0000000	0.0000000	0.0020760	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.: FMD04

ICP ID Number: ___03144 ___ Date: 09/12/96

Analyte	Wave-length (nm)	Interelement Correction Factors for: NI	SB	TI	V	__
Aluminum	308.21	0.0000000	0.0000000	0.0005000	-0.0289870	0.0000000
Antimony1	206.83	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony2	206.83	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic						
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0021580	0.0000000
Cadmium						
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0010160	0.0000000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0003670	0.0000000
Cobalt	228.61	0.0003500	0.0000000	0.0016000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0003600	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	-0.0009450	0.0000000	0.0000000
Lead1						
Lead2						
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0010290	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	-0.0000158	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0004160	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium1						
Selenium2						
Silver	328.06	0.0000000	0.0000000	-0.0002700	-0.0003600	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0050000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	0.0000000	0.0000000	0.0003230	0.0000000	0.0000000
Zinc	213.85	0.0033690	0.0000000	0.0000000	0.0001280	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.: FMD04

ICP ID Number: ___05478 ___ Date: 09/12/96

Analyte	Wave-length (nm)	Interelement Correction Factors for: CR	CU	MN	MO	NI
Aluminum_						
Antimony1						
Antimony2						
Arsenic__						
Barium__						
Beryllium						
Cadmium__	226.50	0.0000000	0.0000000	0.0000000	-0.0000580	0.0000000
Calcium__						
Chromium_						
Cobalt___						
Copper___						
Iron____						
Lead1___						
Lead2___						
Magnesium						
Manganese						
Mercury__						
Nickel___						
Potassium						
Selenium1						
Selenium2						
Silver___						
Sodium___						
Thallium_						
Vanadium_						
Zinc_____						
_____						

Comments:

_____

_____

_____

_____

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11B

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

ICP ID Number: ___05478 ___ Date: 09/12/96

Analyte	Wave-length (nm)	Interelement Correction Factors for: TI	V	__	__	__
Aluminum						
Antimony1						
Antimony2						
Arsenic						
Barium						
Beryllium						
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead1						
Lead2						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium1						
Selenium2						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						

Comments:

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12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: ___03144____ Date: 07/15/96

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	7.00	600000.0	P
Antimony	7.00	200000.0	P
Arsenic			NR
Barium	7.00	100000.0	P
Beryllium	7.00	10000.0	P
Cadmium			NR
Calcium	7.00	600000.0	P
Chromium	7.00	100000.0	P
Cobalt	7.00	100000.0	P
Copper	7.00	100000.0	P
Iron	7.00	250000.0	P
Lead			NR
Magnesium	7.00	600000.0	P
Manganese	7.00	100000.0	P
Mercury			NR
Nickel	7.00	100000.0	P
Potassium	7.00	900000.0	P
Selenium			NR
Silver	7.00	50000.0	P
Sodium	7.00	900000.0	P
Thallium			NR
Vanadium	7.00	100000.0	P
Zinc	7.00	100000.0	P

Comments:

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

ICP ID Number: ___05478____ Date: 07/15/96

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum			NR
Antimony			NR
Arsenic			NR
Barium			NR
Beryllium			NR
Cadmium	10.00	20000.0	P
Calcium			NR
Chromium			NR
Cobalt			NR
Copper			NR
Iron			NR
Lead			NR
Magnesium			NR
Manganese			NR
Mercury			NR
Nickel			NR
Potassium			NR
Selenium			NR
Silver			NR
Sodium			NR
Thallium			NR
Vanadium			NR
Zinc			NR

Comments:

Preparation and Run Logs

U.S. EPA - CLP

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PREPARATION LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
3DDUP	09/25/96		100
DIS2D	09/25/96		100
DIS2S	09/25/96		100
DIS2SD	09/25/96		100
DIS2SS	09/25/96		100
DIS3D	09/25/96		100
DIS3S	09/25/96		100
DIS4S	09/25/96		100
FBK2D	09/25/96		100
IDDIS	09/25/96		100
ISDIS	09/25/96		100
LCSW	09/25/96		100
PBW	09/25/96		100

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PREPARATION LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Method: F_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
3DDUP	09/25/96		100
DIS2D	09/25/96		100
DIS2S	09/25/96		100
DIS2SD	09/25/96		100
DIS2SS	09/25/96		100
DIS3D	09/25/96		100
DIS3S	09/25/96		100
DIS4S	09/25/96		100
FBK2D	09/25/96		100
IDDIS	09/25/96		100
ISDIS	09/25/96		100
LCSW	09/25/96		100
PBW	09/25/96		100

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PREPARATION LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
3DDUP	09/26/96		8
DIS2D	09/26/96		8
DIS2S	09/26/96		8
DIS2SD	09/26/96		8
DIS2SS	09/26/96		8
DIS3D	09/26/96		8
DIS3S	09/26/96		8
DIS4S	09/26/96		8
FBK2D	09/26/96		8
IDDIS	09/26/96		8
ISDIS	09/26/96		8
LCSW	09/26/96		8
PBW	09/26/96		8

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03144_ Method: P_

Start Date: 09/25/96 End Date: 09/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
S0	1.00	1815		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
S	1.00	1818					X				X		X	X			X		X							X		
S	1.00	1821			X			X				X													X			
S	1.00	1824																				X						
S	1.00	1826		X						X						X				X			X					
ICV	1.00	1829		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
ICB	1.00	1832		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
CRI	1.00	1835			X			X			X	X	X				X		X			X			X	X		
ICSA	1.00	1839		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
ICSAB	1.00	1842		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
CCV	1.00	1845		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
CCB	1.00	1848		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
PBW	1.00	1851		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
LCSW	1.00	1854		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS2S	1.00	1857		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS2SA	1.00	1900																										
DIS2SD	1.00	1904		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS2SS	1.00	1907		X	X		X	X			X	X	X	X			X		X			X			X	X		
DIS2SL	5.00	1910		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
ISDIS	1.00	1913		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
IDDIS	1.00	1916		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS2D	1.00	1919		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
CCV	1.00	1922		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
CCB	1.00	1926		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS4S	1.00	1929		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS3S	1.00	1932		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
DIS3D	1.00	1935		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
3DDUP	1.00	1938		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
FBK2D	1.00	1941		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
CRI	1.00	1944			X			X			X	X	X				X		X			X			X	X		
ICSA	1.00	1947		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		
ICSAB	1.00	1951		X	X		X	X		X	X	X	X	X		X	X		X	X		X	X		X	X		

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03144_ Method: P_

Start Date: 09/25/96 End Date: 09/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
CCV	1.00	1954		X	X	_	X	X	_	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_	
CCB	1.00	1957		X	X	_	X	X	_	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_	
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 05478_ Method: P_

Start Date: 09/27/96 End Date: 09/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
S0	1.00	1140							X																		
S	1.00	1145																									
S	1.00	1149							X																		
S	1.00	1152																									
ICV	1.00	1156							X																		
ICB	1.00	1200							X																		
CRI	1.00	1205							X																		
ICSA	1.00	1209							X																		
ICSAB	1.00	1214							X																		
CCV	1.00	1218							X																		
CCB	1.00	1222							X																		
PBW	1.00	1227							X																		
LCSW	1.00	1231							X																		
DIS2S	1.00	1236							X																		
DIS2SA	1.00	1240																									
DIS2SD	1.00	1245							X																		
DIS2SS	1.00	1249							X																		
DIS2SL	5.00	1253							X																		
ISDIS	1.00	1258							X																		
IDDIS	1.00	1302							X																		
DIS2D	1.00	1307							X																		
CCV	1.00	1311							X																		
CCB	1.00	1316							X																		
DIS4S	1.00	1320							X																		
DIS3S	1.00	1324							X																		
DIS3D	1.00	1329							X																		
3DDUP	1.00	1333							X																		
FBK2D	1.00	1338							X																		
CRI	1.00	1342							X																		
ICSA	1.00	1347							X																		
ICSAB	1.00	1351							X																		
CCV	1.00	1355							X																		

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 05478_ Method: P_

Start Date: 09/27/96 End Date: 09/27/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
CCB	1.00	1400							X																		

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04724_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
S0	1.00	0415				X																				
S10	1.00	0419				X																				
S20	1.00	0424				X																				
S40	1.00	0428				X																				
S60	1.00	0432				X																				
S80	1.00	0436				X																				
ICV	1.00	0440				X																				
ICB	1.00	0445				X																				
CRA	1.00	0449				X																				
CCV	1.00	0453				X																				
CCB	1.00	0457				X																				
ZZZZZZ	1.00	0501																								
ZZZZZZ	1.00	0505																								
ZZZZZZ	1.00	0510																								
ZZZZZZ	1.00	0514																								
ZZZZZZ	1.00	0519																								
ZZZZZZ	1.00	0523																								
ZZZZZZ	1.00	0527																								
ZZZZZZ	1.00	0532																								
ZZZZZZ	1.00	0536																								
ZZZZZZ	1.00	0540																								
CCV	1.00	0544				X																				
CCB	1.00	0548				X																				
ZZZZZZ	1.00	0552																								
ZZZZZZ	1.00	0557																								
ZZZZZZ	1.00	0601																								
ZZZZZZ	1.00	0605																								
ZZZZZZ	1.00	0609																								
ZZZZZZ	1.00	0614																								
PBW	1.00	0618				X																				
PBWA	1.00	0622	93.2			X																				
LCSW	1.00	0626				X																				

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04724_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
LCSWA	1.00	0630	98.9			X																				
CCV	1.00	0634				X																				
CCB	1.00	0638				X																				
DIS2S	1.00	0642				X																				
DIS2SA	1.00	0646	91.2			X																				
DIS2SD	1.00	0651				X																				
DIS2SDA	1.00	0655	97.8			X																				
DIS2SS	1.00	0659				X																				
ZZZZZZ	1.00	0703																								
ISDIS	1.00	0707																								
ISDISA	1.00	0711	117.2																							
IDDIS	1.00	0715																								
IDDISA	1.00	0719	49.0																							
CCV	1.00	0723				X																				
CCB	1.00	0727				X																				
DIS2D	1.00	0731				X																				
DIS2DA	1.00	0736	103.2			X																				
DIS4S	1.00	0740				X																				
DIS4SA	1.00	0744	70.2			X																				
DIS3S	1.00	0748				X																				
DIS3SA	1.00	0752	88.2			X																				
DIS3D	1.00	0757				X																				
DIS3DA	1.00	0801	127.7			X																				
3DDUP	1.00	0805				X																				
3DDUPA	1.00	0810	64.8			X																				
CCV	1.00	0814				X																				
CCB	1.00	0818				X																				

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04724_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
S0	1.00	1138				X																				
S10	1.00	1142				X																				
S20	1.00	1147				X																				
S40	1.00	1151				X																				
S60	1.00	1155				X																				
S80	1.00	1159				X																				
ICV	1.00	1204				X																				
ICB	1.00	1208				X																				
CRA	1.00	1212				X																				
CCV	1.00	1216				X																				
CCB	1.00	1220				X																				
ISDIS	1.00	1224				X																				
ISDISA	1.00	1229	105.4			X																				
FBK2D	1.00	1233				X																				
FBK2DA	1.00	1237	85.8			X																				
CCV	1.00	1242				X																				
CCB	1.00	1246				X																				

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04724_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
S0	1.00	1619				X																						
S10	1.00	1621				X																						
S20	1.00	1623				X																						
S40	1.00	1625				X																						
S60	1.00	1627				X																						
S80	1.00	1630				X																						
ICV	1.00	1632				X																						
ICB	1.00	1634				X																						
CRA	1.00	1636				X																						
CCV	1.00	1638				X																						
CCB	1.00	1640				X																						
ISDIS0	1.00	1642																										
ISDIS1	1.00	1644																										
ISDIS2	1.00	1647																										
ISDIS3	1.00	1649																										
CCV	1.00	1651				X																						
CCB	1.00	1653				X																						

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04724_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN				
S0	1.00	1724				X																								
S10	1.00	1726				X																								
S20	1.00	1728				X																								
S40	1.00	1730				X																								
S60	1.00	1732				X																								
S80	1.00	1735				X																								
ICV	1.00	1737				X																								
ICB	1.00	1739				X																								
CRA	1.00	1741				X																								
CCV	1.00	1743				X																								
CCB	1.00	1745				X																								
IDDIS0	1.00	1747				X																								
IDDIS1	1.00	1750				X																								
IDDIS2	1.00	1752				X																								
IDDIS3	1.00	1754				X																								
CCV	1.00	1756				X																								
CCB	1.00	1758				X																								

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03812_ Method: F_

Start Date: 09/25/96 End Date: 09/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
S0	1.00	1625																										
S5	1.00	1630																										
S9	1.00	1635																										
S15	1.00	1640																										
S30	1.00	1645																										
S60	1.00	1650																										
ICV	1.00	1654																										
ICB	1.00	1659																										
CRA	1.00	1704																										
ZZZZZZ	1.00	1708																										
CCV	1.00	1713																										
CCB	1.00	1718																										
ZZZZZZ	1.00	1722																										
ZZZZZZ	1.00	1727																										
ZZZZZZ	1.00	1732																										
ZZZZZZ	5.00	1736																										
ZZZZZZ	5.00	1741																										
ZZZZZZ	5.00	1746																										
ZZZZZZ	5.00	1750																										
ZZZZZZ	5.00	1755																										
ZZZZZZ	5.00	1800																										
ZZZZZZ	1.00	1805																										
CCV	1.00	1809																										
CCB	1.00	1814																										
ZZZZZZ	1.00	1818																										
ZZZZZZ	1.00	1823																										
ZZZZZZ	1.00	1827																										
ZZZZZZ	1.00	1832																										
ZZZZZZ	1.00	1837																										
ZZZZZZ	1.00	1842																										
ZZZZZZ	1.00	1846																										
ZZZZZZ	5.00	1851																										

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03812_ Method: F_

Start Date: 09/25/96 End Date: 09/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
ZZZZZZ	1.00	1855																								
ZZZZZZ	1.00	1900																								
CCV	1.00	1905																								
CCB	1.00	1909																								
ZZZZZZ	1.00	1914																								
ZZZZZZ	1.00	1918																								
ZZZZZZ	1.00	1923																								
ZZZZZZ	1.00	1928																								
ZZZZZZ	1.00	1932																								
ZZZZZZ	1.00	1937																								
PBW	1.00	1941																								
PBWA	1.00	1946	101.2																							
LCSW	1.00	1951																								
LCSWA	1.00	1955	90.2																							
CCV	1.00	2000																								
CCB	1.00	2005																								
DIS2S	1.00	2009																								
DIS2SA	1.00	2014	60.8																							
DIS2SD	1.00	2019																								
DIS2SDA	1.00	2023	62.8																							
DIS2SS	1.00	2028																								
ZZZZZZ	1.00	2033																								
ISDIS	1.00	2037																								
ISDISA	1.00	2042	77.2																							
IDDIS	1.00	2047																								
IDDISA	1.00	2052	55.7																							
CCV	1.00	2056																								
CCB	1.00	2101																								
DIS2D	1.00	2105																								
DIS2DA	1.00	2110	74.1																							
DIS4S	1.00	2115																								
DIS4SA	1.00	2120	27.6																							

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03812_ Method: F_

Start Date: 09/25/96 End Date: 09/25/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
DIS3S	1.00	2124																								
DIS3SA	1.00	2129	64.1																							
DIS3D	1.00	2134																								
DIS3DA	1.00	2139	61.4																							
3DDUP	1.00	2143																								
3DDUPA	1.00	2148	72.6																							
CCV	1.00	2153																								
CCB	1.00	2157																								
FBK2D	1.00	2202																								
FBK2DA	1.00	2207	107.1																							
CCV	1.00	2211																								
CCB	1.00	2216																								

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03812_ Method: F_

Start Date: 09/25/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN				
S0	1.00	2334													X															
S3	1.00	2339													X															
S9	1.00	2344													X															
S15	1.00	2348													X															
S30	1.00	2353													X															
S60	1.00	2358													X															
ICV	1.00	0003													X															
ICB	1.00	0007													X															
CRA	1.00	0012													X															
ZZZZZZ	1.00	0017																												
CCV	1.00	0021													X															
CCB	1.00	0026													X															
ZZZZZZ	5.00	0031																												
ZZZZZZ	5.00	0035																												
ZZZZZZ	1.00	0040																												
ZZZZZZ	1.00	0045																												
ZZZZZZ	1.00	0049																												
ZZZZZZ	1.00	0054																												
ZZZZZZ	1.00	0059																												
ZZZZZZ	1.00	0104																												
PBW	1.00	0108													X															
PBWA	1.00	0113	103.2												X															
CCV	1.00	0117													X															
CCB	1.00	0122													X															
LCSW	1.00	0127													X															
LCSWA	1.00	0131	98.6												X															
DIS2S	1.00	0136													X															
DIS2SA	1.00	0141	68.6												X															
DIS2SD	1.00	0145													X															
DIS2SDA	1.00	0150	69.6												X															
DIS2SS	1.00	0154													X															
ZZZZZZ	1.00	0159																												

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 03812_ Method: F_

Start Date: 09/25/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
ISDIS	1.00	0203													X													
ISDISA	1.00	0208	76.0												X													
CCV	1.00	0213													X													
CCB	1.00	0217													X													
IDDIS	1.00	0222													X													
IDDISA	1.00	0227	47.8												X													
DIS2D	1.00	0231													X													
DIS2DA	1.00	0236	74.2												X													
DIS4S	5.00	0240													X													
DIS4SA	5.00	0245	79.0												X													
DIS3S	1.00	0250													X													
DIS3SA	1.00	0254	76.0												X													
DIS3D	1.00	0259													X													
DIS3DA	1.00	0304	75.3												X													
CCV	1.00	0308													X													
CCB	1.00	0313													X													
3DDUP	1.00	0318													X													
3DDUPA	1.00	0322	67.9												X													
FBK2D	1.00	0327													X													
FBK2DA	1.00	0332	98.2												X													
CCV	1.00	0336													X													
CCB	1.00	0341													X													

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04725_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
S0	1.00	1546																		X						
S5	1.00	1550																		X						
S15	1.00	1554																		X						
S25	1.00	1558																		X						
S40	1.00	1602																		X						
S50	1.00	1606																		X						
ICV	1.00	1610																		X						
ICB	1.00	1614																		X						
CRA	1.00	1618																		X						
CCV	1.00	1622																		X						
CCB	1.00	1626																		X						
ZZZZZZ	1.00	1630																								
ZZZZZZ	1.00	1635																								
ZZZZZZ	1.00	1639																								
ZZZZZZ	1.00	1643																								
ZZZZZZ	5.00	1647																								
ZZZZZZ	5.00	1651																								
ZZZZZZ	5.00	1656																								
ZZZZZZ	5.00	1700																								
ZZZZZZ	5.00	1704																								
ZZZZZZ	5.00	1708																								
CCV	1.00	1712																		X						
CCB	1.00	1716																		X						
ZZZZZZ	1.00	1720																								
ZZZZZZ	1.00	1724																								
ZZZZZZ	1.00	1728																								
ZZZZZZ	1.00	1732																								
ZZZZZZ	1.00	1736																								
ZZZZZZ	1.00	1740																								
ZZZZZZ	1.00	1745																								
ZZZZZZ	1.00	1749																								
ZZZZZZ	5.00	1753																								

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04725_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN				
ZZZZZZ	5.00	1757																												
CCV	1.00	1801																		X										
CCB	1.00	1805																		X										
ZZZZZZ	1.00	1808																												
ZZZZZZ	1.00	1812																												
ZZZZZZ	1.00	1817																												
ZZZZZZ	1.00	1820																												
ZZZZZZ	1.00	1825																												
ZZZZZZ	1.00	1829																												
PBW	1.00	1833																		X										
PBWA	1.00	1837	109.8																	X										
LCSW	1.00	1841																		X										
LCSWA	1.00	1845	120.2																	X										
CCV	1.00	1849																		X										
CCB	1.00	1853																		X										
DIS2S	1.00	1857																												
DIS2SA	1.00	1901	-9999.9																											
DIS2SD	1.00	1905																												
DIS2SDA	1.00	1909	-9999.9																											
DIS2SS	1.00	1914																												
ZZZZZZ	1.00	1918																												
ISDIS	1.00	1922																		X										
ISDISA	1.00	1926	107.9																	X										
IDDIS	1.00	1930																		X										
IDDISA	1.00	1935	88.0																	X										
CCV	1.00	1939																		X										
CCB	1.00	1943																		X										
DIS2D	1.00	1947																		X										
DIS2DA	1.00	1951	102.7																	X										
DIS4S	1.00	1955																		X										
DIS4SA	1.00	1959	97.7																	X										
DIS3S	1.00	2003																												

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04725_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
DIS3SA	1.00	2008	-9999.9																							
DIS3D	1.00	2012																		X						
DIS3DA	1.00	2016	113.6																	X						
3DDUP	1.00	2020																		X						
3DDUPA	1.00	2024	121.0																	X						
CCV	1.00	2028																		X						
CCB	1.00	2032																		X						
FBK2D	1.00	2036																		X						
FBK2DA	1.00	2040	126.4																	X						
CCV	1.00	2044																		X						
CCB	1.00	2048																		X						

ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04725_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
S0	1.00	2213																		X						
S5	1.00	2217																		X						
S15	1.00	2221																		X						
S25	1.00	2225																		X						
S40	1.00	2229																		X						
S50	1.00	2233																		X						
ICV	1.00	2237																		X						
ICB	1.00	2241																		X						
CRA	1.00	2245																		X						
CCV	1.00	2249																		X						
CCB	1.00	2253																		X						
ZZZZZZ	2.00	2257																								
ZZZZZZ	2.00	2301																								
DIS2S	5.00	2306																		X						
DIS2SA	5.00	2310	111.6																	X						
DIS2SD	5.00	2314																								
DIS2SDA	5.00	2318	116.3																							
DIS2SS	5.00	2322																		X						
ZZZZZZ	5.00	2326																								
DIS3S	5.00	2331																								
DIS3SA	5.00	2335	115.1																							
CCV	1.00	2339																		X						
CCB	1.00	2343																		X						

ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04725_ Method: F_

Start Date: 09/27/96 End Date: 09/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
S0	1.00	0112																		X							
S5	1.00	0114																		X							
S15	1.00	0116																		X							
S25	1.00	0118																		X							
S40	1.00	0120																		X							
S50	1.00	0122																		X							
ICV	1.00	0125																		X							
ICB	1.00	0127																		X							
CRA	1.00	0129																		X							
CCV	1.00	0131																		X							
CCB	1.00	0133																		X							
ZZZZZZ0	10.00	0135																									
ZZZZZZ1	10.00	0137																									
ZZZZZZ2	10.00	0139																									
ZZZZZZ3	10.00	0141																									
ZZZZZZ0	5.00	0143																									
ZZZZZZ1	5.00	0145																									
ZZZZZZ2	5.00	0147																									
ZZZZZZ3	5.00	0149																									
ZZZZZZ0	5.00	0151																									
ZZZZZZ1	5.00	0153																									
ZZZZZZ2	5.00	0155																									
ZZZZZZ3	5.00	0157																									
ZZZZZZ0	5.00	0159																									
ZZZZZZ1	5.00	0200																									
ZZZZZZ2	5.00	0202																									
ZZZZZZ3	5.00	0204																									
DIS2SD0	10.00	0206																		X							
DIS2SD1	10.00	0208																		X							
DIS2SD2	10.00	0211																		X							
DIS2SD3	10.00	0213																		X							
CCV	1.00	0215																		X							

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 04725_ Method: F_

Start Date: 09/27/96 End Date: 09/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
CCB	1.00	0217																		X						
DIS3S0	10.00	0219																		X						
DIS3S1	10.00	0221																		X						
DIS3S2	10.00	0223																		X						
DIS3S3	10.00	0225																		X						
CCV	1.00	0227																		X						
CCB	1.00	0229																		X						

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 02803_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
S0	1.00	0344		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
S10	1.00	0348		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
S20	1.00	0351		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
S40	1.00	0355		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
S60	1.00	0359		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
S80	1.00	0402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
ICV	1.00	0406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
ICB	1.00	0409		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
CRA	1.00	0412		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
ZZZZZZ	1.00	0416		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	0419		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
CCB	1.00	0423		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
PBW	1.00	0426		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
PBWA	1.00	0430	106.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
LCSW	1.00	0433		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
LCSWA	1.00	0436	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2S	1.00	0440		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2SA	1.00	0443	91.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2SD	1.00	0446		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2SDA	1.00	0450	102.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2SS	1.00	0453		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
ZZZZZZ	1.00	0457		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	0500		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
CCB	1.00	0503		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
ISDIS	1.00	0507		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
ISDISA	1.00	0510	95.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
IDDIS	1.00	0513		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
IDDISA	1.00	0517	94.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2D	1.00	0520		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS2DA	1.00	0523	94.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS4S	1.00	0527		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
DIS4SA	1.00	0530	88.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 02803_ Method: F_

Start Date: 09/26/96 End Date: 09/26/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN		
DIS3S	1.00	0533		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIS3SA	1.00	0537	97.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
CCV	1.00	0540		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
CCB	1.00	0543		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
DIS3D	1.00	0547		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
DIS3DA	1.00	0550	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
3DDUP	1.00	0553		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
3DDUPA	1.00	0557	101.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
FBK2D	1.00	0600		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
FBK2DA	1.00	0604	117.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
CCV	1.00	0607		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
CCB	1.00	0611		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 61734_ Method: CV

Start Date: 09/27/96 End Date: 09/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
S0	1.00	1209																X								
S0.2	1.00	1211																X								
S0.5	1.00	1214																X								
S1.0	1.00	1216																X								
S2.5	1.00	1219																X								
ICV	1.00	1222																X								
ICB	1.00	1225																X								
CRA	1.00	1227																X								
CCV	1.00	1229																X								
CCB	1.00	1232																X								
PBW	1.00	1234																X								
LCSW	1.00	1236																X								
ISDIS	1.00	1239																X								
IDDIS	1.00	1241																X								
DIS2D	1.00	1244																X								
DIS2S	1.00	1246																X								
DIS2SD	1.00	1248																X								
DIS2SS	1.00	1250																X								
DIS4S	1.00	1253																X								
DIS3S	1.00	1255																X								
CCV	1.00	1257																X								
CCB	1.00	1300																X								
DIS3D	1.00	1302																X								
3DDUP	1.00	1304																X								
FBK2D	1.00	1307																X								
ZZZZZZ	1.00	1309																								
ZZZZZZ	1.00	1311																								
ZZZZZZ	1.00	1313																								
ZZZZZZ	1.00	1316																								
ZZZZZZ	5.00	1319																								
ZZZZZZ	1.00	1321																								
CCV	1.00	1324																X								

FORM XIV - IN ILM04.0

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: LANCASTER_LABORATORIES___ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FMD04__

Instrument ID Number: 61734_ Method: CV

Start Date: 09/27/96 End Date: 09/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	
CCB	1.00	1326																X								

FORM XIV - IN ILM04.0

Raw Data

ICP Data

LANCASTER LABORATORIES

Run.Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 1 S0 09/25/96 18:15

ELEM	CONC (ppm)	AVG INTENSITY (COUNTS)	%RSD	INTEGRATIONS #1	#2	#3
Ag	0.000	5.66666	44.41	6.00000	3.00000	8.00000
Al	0.000	10.00000	52.91	8.00000	16.00000	6.00000
As	0.000	-12.00000	221.8	-40.00000	-9.00000	13.00000
B	0.000	2.66666	216.5	6.00000	6.00000	-4.00000
Ba	0.000	0.00000	0	0.00000	0.00000	0.00000
Be	0.000	2.00000	0	2.00000	2.00000	2.00000
Ca	0.000	4.00000	132.2	0.00000	10.00000	2.00000
Cd	0.000	-0.33333	173.2	0.00000	-1.00000	0.00000
Co	0.000	-0.66666	173.2	0.00000	-2.00000	0.00000
Cr	0.000	1.33333	86.60	2.00000	2.00000	0.00000
Cu	0.000	0.33333	754.9	0.00000	-2.00000	3.00000
Fe	0.000	10.66666	19.51	13.00000	9.00000	10.00000
K	0.000	5.00000	34.64	6.00000	3.00000	6.00000
Mg	0.000	19.33333	20.90	17.00000	24.00000	17.00000
Mn	0.000	2.00000	0	2.00000	2.00000	2.00000
Mo	0.000	1.66666	91.65	3.00000	2.00000	0.00000
Na	0.000	-36.66666	35.06	-42.00000	-46.00000	-22.00000
Ni	0.000	3.66666	56.77	6.00000	2.00000	3.00000
Pb	0.000	2.66666	169.0	3.00000	-2.00000	7.00000
Sb	0.000	-8.66666	259.3	-14.00000	-28.00000	16.00000
Se	0.000	10.66666	156.1	16.00000	24.00000	-8.00000
Si	0.000	23.33333	17.84	20.00000	22.00000	28.00000
Sn	0.000	0.66666	173.2	0.00000	2.00000	0.00000
Sr	0.000	0.00000	0	0.00000	0.00000	0.00000
Ti	0.000	8.66666	24.01	7.00000	8.00000	11.00000
Tl	0.000	2.66666	43.30	2.00000	2.00000	4.00000
V	0.000	3.33333	34.64	4.00000	2.00000	4.00000
Zn	0.000	3.66666	15.74	4.00000	4.00000	3.00000

LANCASTER LABORATORIES

Run Name: 9626903161 INSTRUMENT ID: 03144

Type: 2 S1 S 09/25/96 18:18

ELEM	CONC (ppm)	AVG INTENSITY (COUNTS)	%RSD	INTEGRATIONS #1	#2	#3
[illegible]	10.000	16132.00000	0.833	15985.00000	16162.00000	16249.00000
[illegible]	10.000	26537.00000	0.564	26369.00000	26657.00000	26585.00000
[illegible]	10.000	6192.33349	1.082	6121.00000	6202.00000	6254.00000
[illegible]	10.000	10359.00000	1.008	10249.00000	10371.00000	10457.00000
[illegible]	10.000	16430.00000	0.988	16259.00000	16449.00000	16582.00000
[illegible]	10.000	6394.33349	1.032	6324.00000	6404.00000	6455.00000
[illegible]	50.000	66106.33593	0.939	65394.00000	66393.00000	66532.00000
[illegible]	20.000	20791.33398	0.940	20580.00000	20828.00000	20966.00000
[illegible]	50.000	25445.66601	0.983	25182.00000	25475.00000	25680.00000
[illegible]	10.000	20369.66601	1.003	20148.00000	20410.00000	20551.00000

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DUP050307068

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 3 S2 S 09/25/96 18:21 -

ELEM	CONC (ppm)	AVG INTENSITY (COUNTS)	%RSD	INTEGRATIONS #1	#2	#3
As	5.000	8188.00000	1.134	8294.00000	8121.00000	8149.00000
Be	1.000	977.66668	0.413	980.00000	980.00000	973.00000
Co	2.000	1508.00000	0.303	1512.00000	1509.00000	1503.00000
Sb	10.000	17165.00000	0.627	17137.00000	17284.00000	17074.00000
Se	5.000	5325.00000	0.379	5340.00000	5333.00000	5302.00000
Si	5.000	6118.66650	0.287	6135.00000	6121.00000	6100.00000
Sn	10.000	1425.66662	0.359	1430.00000	1427.00000	1420.00000
Sr	1.000	11037.66699	0.317	11072.00000	11039.00000	11002.00000
Ti	5.000	5561.66650	0.340	5575.00000	5570.00000	5540.00000
Tl	10.000	579.00000	0.456	581.00000	580.00000	576.00000
V	5.000	8303.33300	0.248	8311.00000	8319.00000	8280.00000

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Type: 4 S3 5 09/25/96 18:24

Elem	CONC (ppm)	AVG INTENSITY (COUNTS)	%RSD	INTEGRATIONS #1	#2	#3
Cd	1.000	862.00000	0.232	862.00000	864.00000	860.00000
	2.000	3600.66674	0.452	3612.00000	3582.00000	3608.00000

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DUP050307070

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 5 S4 5 09/25/96 18:26

ELEM	CONC (ppm)	AVG INTENSITY (COUNTS)	%RSD	INTEGRATIONS #1	#2	#3
Al	50.000	22692.00000	1.299	22356.00000	22812.00000	22908.00000
Ca	100.000	113682.33593	1.254	112063.00000	114234.00000	114750.00000
K	500.000	8440.66699	1.510	8295.00000	8495.00000	8532.00000
Mg	100.000	41215.00000	1.202	40661.00000	41367.00000	41617.00000
Na	500.000	349716.34375	1.231	344852.00000	351258.00000	353039.00000

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 6 ICV 09/25/96 18:29

ELEM	AVG. (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	0.57014	0.720	0.57052	0.56585	0.57404		
Al	30.68478	0.289	30.60288	30.67245	30.77902		
As	2.28607	1.193	2.31041	2.29124	2.25657		
B	1.36032	0.275	1.35600	1.36215	1.36279		
Ba	5.83684	0.139	5.82940	5.84552	5.83560		
Be	0.58594	0.200	0.58525	0.58526	0.58730		
Ca	62.58642	0.231	62.45800	62.55740	62.74388		
Cd	5.76820	0.255	5.78340	5.75401	5.76720		
Co	1.13968	0.464	1.14498	1.13439	1.13966		
Cr	5.86706	0.244	5.85575	5.86222	5.88321		
Cu	5.90962	0.210	5.90449	5.90059	5.92378		
Fe	5.89470	0.236	5.88759	5.88576	5.91074		
K	61.52447	0.481	61.22811	61.52447	61.82083		
Mg	30.94850	0.198	30.93713	30.89342	31.01496		
Mn	5.84269	0.218	5.83695	5.83383	5.85729		
Mo	29.79819	0.092	29.77349	29.82794	29.79315		
Na	61.93701	0.212	61.90985	61.82123	62.07995		
Ni	11.60525	0.179	11.59268	11.59376	11.62929		
Pb	29.12100	0.191	29.09490	29.08300	29.18511		
Sb	5.89179	0.314	5.88964	5.91133	5.87440		
Se	2.32791	0.420	2.33105	2.31693	2.33575		
Si	4.85934	4.246	4.63858	4.89210	5.04732		
Sn	5.75691	0.494	5.72640	5.78281	5.76152		
Sr	1.18977	0.194	1.18956	1.18756	1.19219		
Ti	2.38819	0.135	2.38729	2.38549	2.39180		
Tl	6.09858	0.866	6.14542	6.04129	6.10903		
V	2.36581	0.177	2.36608	2.36148	2.36987		
Zn	5.87096	0.203	5.85940	5.87020	5.88329		

DUP050307072

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 7 ICB 09/25/96 18:32

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00194	119.8	0.00038	-0.00428	-0.00194		
Al	0.02472	13.59	0.02174	0.02836	0.02405		
As	0.00072	2054.	0.01700	-0.00253	-0.01229		
B	0.00924	24.17	0.01127	0.00962	0.00684		
Ba	0.00185	57.73	0.00309	0.00123	0.00123		
Be	0.00000	52.79	0.00000	0.00000	0.00000		
Ca	0.03548	12.72	0.04047	0.03431	0.03166		
Cd	0.00213	81.49	0.00314	0.00314	0.00012		
Co	0.00354	74.80	0.00619	0.00089	0.00354		
Cr	-0.00214	150.2	-0.00537	-0.00214	0.00108		
Cu	0.00772	7.244	0.00836	0.00739	0.00740		
Fe	-0.00122	57.42	-0.00163	-0.00041	-0.00163		
K	0.07902	263.3	-0.11854	0.05927	0.29636		
Mg	0.02025	54.14	0.03078	0.02106	0.00890		
Mn	0.00261	91.47	0.00469	0.00313	0.00000		
Mo	0.01991	17.40	0.02369	0.01916	0.01689		
Na	0.07246	51.59	0.09819	0.08962	0.02957		
Ni	0.00228	84.33	0.00420	0.00228	0.00035		
Pb	0.01311	75.38	0.01445	0.02226	0.00262		
Sb	0.00748	193.9	0.02367	0.00318	-0.00440		
Se	0.00752	208.1	0.01254	-0.01003	0.02007		
Si	0.05110	28.12	0.06611	0.04973	0.03746		
Sn	-0.01392	58.53	-0.00451	-0.01861	-0.01864		
Sr	0.00024	43.30	0.00036	0.00018	0.00018		
Ti	-0.00690	0	-0.00690	-0.00690	-0.00690		
Tl	-0.06947	103.9	-0.01172	-0.15044	-0.04625		
V	-0.00174	52.79	-0.00254	-0.00194	-0.00073		
Zn	0.00177	31.56	0.00209	0.00210	0.00112		

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Type: 8 CRT 09/25/96 18:35

M	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
[illegible]	0.02143	10.89	0.02377	0.01910	0.02143		
[illegible]	0.00494	156.2	0.01299	-0.00241	0.00425		
[illegible]	0.01653	52.78	0.00898	0.01453	0.02609		
[illegible]	0.00687	40.70	0.00391	0.00947	0.00724		
[illegible]	0.00061	100	0.00061	0.00123	0.00000		
[illegible]	0.01003	0.014	0.01002	0.01003	0.01002		
[illegible]	0.00780	40.63	0.01044	0.00868	0.00428		
[illegible]	0.01018	8.547	0.01068	0.00917	0.01068		
[illegible]	0.10337	1.480	0.10160	0.10425	0.10426		
[illegible]	0.01828	10.20	0.01720	0.02043	0.01720		
[illegible]	0.05582	1.728	0.05582	0.05679	0.05486		
[illegible]	-0.00467	22.57	-0.00406	-0.00406	-0.00589		
K	0.01975	346.4	-0.05927	0.05927	0.05927		
Mg	0.01550	54.98	0.01631	0.02359	0.00660		
Mn	0.03131	0.001	0.03131	0.03131	0.03131		
Mo	0.00479	31.57	0.00630	0.00479	0.00327		
Na	0.01432	46.06	0.01814	0.01813	0.00670		
Ni	0.08259	4.092	0.08292	0.08580	0.07906		
Pb	0.00861	69.56	0.01514	0.00731	0.00337		
Sb	0.12912	0.822	0.12980	0.12967	0.12790		
Se	0.02069	164.1	0.01348	0.05770	-0.00909		
Si	0.02150	15.96	0.02039	0.02535	0.01875		
Sn	-0.00432	325.0	0.00972	-0.00432	-0.01836		
Sr	0.00012	43.30	0.00009	0.00009	0.00018		
Ti	-0.00630	16.49	-0.00690	-0.00510	-0.00690		
Tl	-0.02716	195.6	-0.01561	-0.08515	0.01926		
V	0.10129	0.680	0.10170	0.10050	0.10168		
Zn	0.04132	1.401	0.04100	0.04098	0.04199		

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 9 ICSA 09/25/96 18:39

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00884	15.64	-0.00914	-0.00733	-0.01004		
Al	506.16058	0.596	503.06185	509.09542	506.32446		
As	-0.21023	19.37	-0.17653	-0.25551	-0.19867		
B	0.08886	2.179	0.08663	0.09017	0.08977		
Ba	0.00702	10.18	0.00743	0.00743	0.00619		
Be	-0.00204	0.219	-0.00204	-0.00205	-0.00204		
Ca	491.00122	0.612	487.88891	493.89270	491.22201		
Cd	-0.00159	103.6	-0.00117	-0.00342	-0.00019		
Co	-0.00131	325.2	-0.00440	-0.00307	0.00355		
Cr	0.00229	80.33	0.00442	0.00124	0.00121		
Cu	0.00484	71.24	0.00759	0.00597	0.00097		
Fe	184.80996	0.497	183.96868	185.79275	184.66847		
K	0.01975	916.5	0.05927	0.17781	-0.17781		
Mg	518.58941	0.480	516.23315	521.19970	518.33532		
Mn	-0.00423	1.177	-0.00418	-0.00428	-0.00423		
Mo	-0.00554	20.82	-0.00428	-0.00579	-0.00655		
Na	0.08008	23.02	0.08532	0.09533	0.05960		
Ni	-0.01122	14.93	-0.01025	-0.01026	-0.01316		
Pb	0.00190	988.5	0.01410	0.01137	-0.01976		
Sb	-0.01374	85.92	-0.02284	-0.01799	-0.00039		
Se	-0.03365	60.85	-0.02414	-0.01965	-0.05715		
Si	0.18836	1.167	0.19058	0.18618	0.18832		
Sn	0.00930	150.5	0.02332	0.00929	-0.00469		
Sr	0.01884	0.961	0.01866	0.01902	0.01884		
Ti	-0.00660	7.872	-0.00600	-0.00690	-0.00690		
Tl	0.16247	70.06	0.04097	0.17977	0.26667		
V	-0.00081	256.4	-0.00200	0.00159	-0.00202		
Zn	0.01683	0.445	0.01689	0.01674	0.01685		

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LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Rep: 10 ICSAB 09/25/96 18:42

Elem	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
[illegible]	0.18619	0.933	0.18820	0.18512	0.18526		
[illegible]	503.97952	0.397	501.74346	504.58734	505.60772		
[illegible]	-0.10686	27.77	-0.13947	-0.09970	-0.08141		
[illegible]	0.05539	1.529	0.05630	0.05523	0.05463		
[illegible]	0.48805	0.480	0.48537	0.48970	0.48908		
[illegible]	0.47762	0.643	0.47454	0.47761	0.48070		
[illegible]	490.84335	0.453	488.39666	491.37701	492.75634		
[illegible]	0.87981	0.242	0.87736	0.88126	0.88081		
[illegible]	0.45427	0.167	0.45339	0.45471	0.45471		
[illegible]	0.47269	0.908	0.46782	0.47593	0.47433		
[illegible]	0.48269	0.637	0.47930	0.48531	0.48344		
[illegible]	184.46424	0.467	183.49424	184.75495	185.14352		
[illegible]	-0.05927	200.0	-0.05927	-0.17781	0.05927		
Mg	516.66748	0.327	514.72625	517.42565	517.85046		
Mn	0.46424	0.382	0.46218	0.46526	0.46526		
Mo	-0.00655	52.87	-0.00579	-0.01033	-0.00352		
Na	0.05293	38.31	0.05674	0.07103	0.03101		
Ni	0.89855	0.696	0.89246	0.89822	0.90496		
Pb	0.04997	8.775	0.04585	0.04947	0.05458		
Sb	0.57936	3.558	0.57067	0.56450	0.60290		
Se	0.02503	39.43	0.01448	0.02656	0.03405		
Si	0.08466	6.822	0.08693	0.08896	0.07810		
Sn	-0.00320	220.5	-0.00322	-0.01028	0.00388		
Sr	0.01830	0.495	0.01830	0.01839	0.01821		
Ti	-0.00750	6.928	-0.00780	-0.00690	-0.00780		
Tl	0.17185	52.45	0.22419	0.06775	0.22362		
V	0.47513	0.552	0.47391	0.47814	0.47334		
[illegible]	0.96530	0.845	0.95608	0.96822	0.97161		

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 11 CCV 09/25/96 18:45

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Al	0.48317	0.282	0.48238	0.48474	0.48238		
[illegible]	25.99057	0.461	25.95671	26.12373	25.89126		
As	1.97426	0.830	1.96024	1.99229	1.97024		
[illegible]	1.25311	1.198	1.23970	1.26934	1.25028		
Ba	4.88821	0.545	4.86114	4.91445	4.88904		
Be	0.49759	0.424	0.49590	0.49996	0.49691		
Ca	53.26701	0.396	53.11924	53.50890	53.17290		
Cd	4.90976	0.529	4.88439	4.93637	4.90851		
[illegible]	0.98986	0.204	0.99166	0.99025	0.98768		
[illegible]	5.08198	0.488	5.06527	5.11054	5.07014		
Co	5.06177	0.386	5.04862	5.08425	5.05244		
Fe	5.07460	0.450	5.06140	5.10100	5.06140		
[illegible]	50.08495	0.626	49.96641	50.44058	49.84786		
Mg	26.07051	0.353	25.97163	26.15405	26.08585		
Mn	4.97746	0.511	4.95501	5.00513	4.97224		
Mo	25.44953	0.488	25.32599	25.57484	25.44777		
Na	51.83114	0.377	51.74727	52.05458	51.69157		
Ni	9.86219	0.557	9.81991	9.92435	9.84231		
Pb	25.04262	0.306	24.97847	25.12768	25.02172		
Sb	5.07027	0.434	5.05532	5.09558	5.05990		
Se	2.01470	0.257	2.02066	2.01125	2.01220		
Si	6.28469	1.869	6.15521	6.38447	6.31440		
Sn	4.86535	0.299	4.85078	4.87994	4.86533		
Sr	0.99341	0.498	0.98915	0.99885	0.99223		
Ti	2.04033	0.530	2.03973	2.05144	2.02983		
Tl	5.02315	1.396	4.94412	5.07810	5.04723		
V	1.98581	0.495	1.97849	1.99699	1.98195		
[illegible]	5.02385	0.406	5.00995	5.04733	5.01428		

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 12 CCB 09/25/96 18:48

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00194	60.33	-0.00076	-0.00194	-0.00311		
Al	0.05859	22.92	0.07029	0.06155	0.04392		
As	0.01297	98.66	0.02532	-0.00024	0.01385		
B	0.01317	23.26	0.01466	0.01520	0.00965		
Ba	0.00144	24.74	0.00123	0.00185	0.00123		
Be	0.00000	45.26	0.00000	0.00000	0.00000		
Ca	0.06803	16.82	0.07917	0.06861	0.05630		
Cd	0.00137	63.01	0.00237	0.00087	0.00087		
Co	0.00177	86.45	0.00088	0.00354	0.00089		
Cr	-0.00214	0.032	-0.00214	-0.00214	-0.00215		
Cu	0.00386	28.75	0.00450	0.00258	0.00450		
Fe	0.02212	23.53	0.02761	0.02151	0.01724		
K	-0.01975	458.2	-0.11854	0.00000	0.05927		
Mg	0.03803	62.86	0.04532	0.05745	0.01133		
Mn	0.00052	172.3	0.00156	0.00000	0.00000		
Mo	0.01336	34.58	0.01840	0.01235	0.00932		
Na	0.03052	84.94	0.04955	0.04102	0.00099		
Ni	0.00098	225.8	0.00228	0.00227	-0.00158		
Pb	0.01700	13.29	0.01829	0.01831	0.01439		
Sb	0.00408	227.2	0.00970	-0.00662	0.00917		
Se	0.00783	216.3	0.02194	0.01254	-0.01097		
Si	0.03496	12.40	0.03988	0.03332	0.03168		
Sn	0.00240	291.8	0.00243	-0.00463	0.00942		
Sr	0.00012	86.60	0.00018	0.00018	0.00000		
Ti	-0.00510	91.69	0.00030	-0.00780	-0.00780		
Tl	-0.23715	19.33	-0.18517	-0.27190	-0.25437		
V	-0.00156	45.26	-0.00074	-0.00197	-0.00198		
Zn	0.00178	31.34	0.00210	0.00211	0.00114		

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 13 PBW 09/25/96 18:51

****,100-100,DF1,962695720002,8,.

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	0.00038	599.5	0.00039	0.00272	-0.00194		
Al	0.02269	49.89	0.01314	0.03519	0.01973		
As	0.00581	208.0	-0.00736	0.00839	0.01639		
B	0.01612	11.03	0.01409	0.01686	0.01742		
Ba	0.00020	346.4	0.00061	0.00061	-0.00061		
Be	0.00000	43.56	0.00000	0.00000	0.00000		
Ca	0.02785	31.62	0.03782	0.02463	0.02111		
Cd	0.00050	198.4	0.00125	0.00087	-0.00062	C	
Co	0.00045	168.4	0.00089	0.00089	-0.00042		
Cr	-0.00107	173.4	0.00107	-0.00215	-0.00215		
Cu	0.00354	54.47	0.00161	0.00547	0.00354		
Fe	0.00851	21.83	0.01054	0.00811	0.00689		
K	-0.01975	916.5	0.17781	-0.05927	-0.17781		
Mg	0.01375	30.56	0.01618	0.00890	0.01618		
Mn	0.00000	67.05	0.00000	0.00000	0.00000		
Mo	0.00378	23.09	0.00327	0.00479	0.00327		
Na	0.02100	122.4	0.02100	0.04673	-0.00472		
Ni	0.00096	303.2	0.00032	0.00417	-0.00159		
Pb	0.00260	260.6	-0.00524	0.00653	0.00653		
Sb	0.00077	75.98	0.00041	0.00045	0.00146		
Se	0.00658	224.2	0.01818	0.01160	-0.01003		
Si	0.03170	9.385	0.03500	0.03087	0.02923		
Sn	0.00002	60301	0.00938	0.00938	-0.01868		
Sr	-0.00003	173.2	-0.00009	0.00000	0.00000		
Ti	-0.00750	6.928	-0.00780	-0.00690	-0.00780		
Tl	-0.10990	74.61	-0.20241	-0.08113	-0.04616		
V	-0.00159	43.56	-0.00199	-0.00079	-0.00200		
Zn	0.00997	0.130	0.00997	0.00995	0.00998		

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LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Type: 14 LCSW 09/25/96 18:54

Data: 1-1,DF1,962695720002,8,,

Item	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
✓	0.04983	3.578	0.05021	0.05138	0.04788		
✓Al	2.09452	0.106	2.09229	2.09675	2.09451		
As	2.07399	1.298	2.04291	2.08861	2.09044		
B	2.08059	0.347	2.07225	2.08503	2.08448		
✓Ba	2.00553	0.210	2.00409	2.00223	2.01029		
✓Be	0.05016	0.005	0.05016	0.05016	0.05016		
✓Ca	4.31185	0.288	4.29748	4.31859	4.31947		
Cd	0.05057	2.275	0.05082	0.04931	0.05157	C	
Co	0.50502	0.151	0.50413	0.50546	0.50546		
Cr	0.20214	0.461	0.20321	0.20160	0.20160		
Cu	0.26014	0.742	0.25821	0.26207	0.26014		
Fe	1.04179	0.221	1.04016	1.04077	1.04443		
✓K	4.01074	1.706	4.08977	3.97123	3.97123		
✓Mg	2.07875	0.906	2.06339	2.07309	2.09978		
✓Mn	0.50693	0.178	0.50745	0.50745	0.50589		
Mo	2.06465	0.152	2.06213	2.06364	2.06818		
✓Na	4.15602	0.455	4.14172	4.17746	4.14888		
✓Ni	0.51017	0.378	0.50824	0.51017	0.51211		
Pb	0.51377	0.441	0.51508	0.51509	0.51115		
✓Sb	0.55726	1.257	0.55704	0.56437	0.55036		
Se	1.99793	1.291	1.96845	2.00890	2.01643		
Si	4.88506	0.519	4.85581	4.90091	4.89845		
Sn	3.98967	0.766	3.95457	4.01073	4.00370		
Sr	1.02005	0.261	1.01715	1.02059	1.02240		
Ti	1.00126	0.051	1.00156	1.00156	1.00066		
Tl	2.00768	3.461	2.07717	2.00768	1.93819		
V	0.50219	0.250	0.50078	0.50259	0.50321		
Zn	0.51479	0.251	0.51382	0.51626	0.51429		

DUP050307080

LANCASTER LABORATORIES

Run Name: 9626903I61 DI 525 INSTRUMENT ID: 03144

Tube: 15 2585290 09/25/96 18:57

U***,100-100,DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00083	405.2	0.00305	-0.00277	-0.00277		
Al	0.03447	13.54	0.03069	0.03969	0.03303		
As	0.00616	86.81	0.01208	0.00166	0.00474		
B	0.03316	8.425	0.03354	0.03575	0.03020		
Ba	0.06860	1.043	0.06942	0.06818	0.06818		
Be	0.00000	151.3	0.00000	0.00000	0.00000		
Ca	148.52815	0.129	148.31146	148.59471	148.67828		
Cd	0.00062	69.46	0.00087	0.00087	0.00012	C	
Co	0.00088	299.8	-0.00176	0.00354	0.00088		
Cr	-0.00161	57.69	-0.00215	-0.00215	-0.00053		
Cu	0.00128	302.8	0.00353	0.00354	-0.00321		
Fe	0.00344	20.29	0.00385	0.00384	0.00264		
K	1.54107	3.846	1.60034	1.54107	1.48180		
Mg	50.10570	0.241	49.96815	50.19633	50.15264		
Mn	0.01429	0.027	0.01429	0.01429	0.01428		
Mo	0.00378	61.10	0.00630	0.00327	0.00176		
Na	53.40007	0.100	53.40864	53.44870	53.34286		
Ni	0.00000	26351	0.00129	0.00032	-0.00160		
Pb	0.00063	534.9	-0.00134	0.00458	-0.00131		
Sb	0.00429	231.3	-0.00309	0.00039	0.01557		
Se	0.10223	15.43	0.11039	0.11227	0.08404		
Si	14.06347	0.249	14.02436	14.09244	14.07359		
Sn	0.00236	296.8	0.00235	-0.00465	0.00940		
Sr	0.45574	0.159	0.45498	0.45643	0.45580		
Ti	-0.00180	292.9	0.00030	-0.00780	0.00210		
Tl	-0.16193	53.89	-0.08102	-0.15036	-0.25441		
V	-0.00079	151.3	-0.00199	0.00040	-0.00079		
Zn	0.00801	0.161	0.00800	0.00801	0.00803		

LANCASTER LABORATORIES

Run Name: 9626903I61 DT52 S A INSTRUMENT ID: 03144

Tube: 16 2585290 09/25/96 19:00
U**,100-100,DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
__Al	0.01831	6.419	0.01712	0.01833	0.01947		
__As	0.43722	2.598	0.44677	0.42466	0.44024		
__B	0.02489	66.42	0.03888	0.00664	0.02913		
__Ba	0.23729	1.178	0.23988	0.23767	0.23432		
__Be	0.46388	0.783	0.46119	0.46801	0.46243		
__Ca	0.01003	0.032	0.01004	0.01003	0.01003		
__Cd	145.78053	0.711	144.85774	146.90299	145.58084		
__Co	0.00922	6.245	0.00985	0.00909	0.00871		
__Cr	0.09922	2.781	0.10011	0.09613	0.10143		
__Cu	0.01832	10.18	0.01724	0.02047	0.01724		
__Fe	0.05156	2.856	0.05284	0.05187	0.04995		
__K	0.20534	1.041	0.20310	0.20554	0.20737		
__Mg	3.33899	3.695	3.20069	3.43778	3.37851		
__Mn	49.90760	0.764	49.60903	50.33725	49.77651		
__Mo	0.04566	0.021	0.04566	0.04565	0.04566		
__Na	0.19766	1.147	0.19539	0.19993	0.19766		
__Ni	54.25205	0.761	53.85558	54.68045	54.22012		
__Pb	0.07693	1.451	0.07564	0.07758	0.07757		
__Sb	0.00425	106.6	-0.00098	0.00686	0.00688		
__Se	0.11415	2.827	0.11706	0.11470	0.11068		
__Si	0.08967	4.808	0.09061	0.09343	0.08496		
__Sn	14.15682	0.643	14.08435	14.25911	14.12701		
__Sr	0.52960	0.001	0.52960	0.52961	0.52959		
__Ti	0.46474	0.800	0.46114	0.46857	0.46450		
__Tl	0.10294	0	0.10294	0.10294	0.10294		
__V	0.08838	101.9	0.03639	0.03630	0.19246		
__Zn	0.09771	1.553	0.09629	0.09752	0.09931		
	0.05050	1.119	0.04985	0.05083	0.05083		

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DUP050307082

LANCASTER LABORATORIES

Run Name: 9626903I61 DIS2SD INSTRUMENT ID: 03144

Tube: 17 2585290 09/25/96 19:04

D***,100-100,DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00515	60.01	-0.00281	-0.00397	-0.00865		
Al	0.00950	67.33	0.01325	0.00211	0.01315		
As	0.00728	180.2	0.02006	0.00792	-0.00615		
B	0.03390	7.378	0.03630	0.03409	0.03131		
Ba	0.06674	1.418	0.06756	0.06694	0.06570		
Be	0.00000	14622	0.00000	0.00000	0.00000		
Ca	146.36326	0.236	146.15274	146.76322	146.17384		
Cd	-0.00188	188.9	-0.00590	-0.00062	0.00087	C	
Co	0.00000	13656	0.00353	-0.00176	-0.00176		
Cr	-0.00215	0.000	-0.00215	-0.00215	-0.00215		
Cu	0.00096	115.1	-0.00031	0.00160	0.00160		
Fe	0.00121	57.65	0.00081	0.00203	0.00081		
K	1.32374	5.170	1.36325	1.36325	1.24471		
Mg	49.53687	0.394	49.44139	49.76182	49.40740		
Mn	0.01378	6.526	0.01430	0.01430	0.01274		
Mo	0.00327	46.15	0.00176	0.00327	0.00479		
Na	52.76628	0.342	52.62379	52.96976	52.70528		
Ni	-0.00096	115.2	0.00031	-0.00160	-0.00159		
Pb	-0.00458	236.1	0.00263	-0.01703	0.00063		
Sb	0.01219	35.70	0.00966	0.01722	0.00969		
Se	0.09094	5.308	0.09628	0.08969	0.08687		
Si	13.88519	0.453	13.84800	13.95792	13.84964		
Sn	-0.00931	43.50	-0.01166	-0.01163	-0.00463		
Sr	0.45015	0.377	0.44982	0.45199	0.44864		
Ti	0.00090	115.4	0.00210	0.00030	0.00030		
Tl	-0.13876	92.12	0.00576	-0.23705	-0.18500		
V	0.00000	14622	0.00040	-0.00079	0.00041		
Zn	0.01587	0.009	0.01587	0.01587	0.01587		

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LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 18 2585290 DTSAS S 09/25/96 19:07

R***,100-100,DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	0.04694	4.325	0.04928	0.04578	0.04575		
Al	2.05365	1.683	2.04176	2.09259	2.02660		
As	0.04727	34.82	0.05178	0.02902	0.06101		
B	2.04311	0.319	2.05055	2.04053	2.03827		
Ba	2.01359	0.239	2.01896	2.01214	2.00967		
Be	0.04815	0.000	0.04815	0.04815	0.04815		
Ca	148.14666	0.446	148.58885	148.46482	147.38633		
Cd	0.05084	2.565	0.05234	0.05008	0.05009	C	
Co	0.47499	0.740	0.47100	0.47631	0.47765		
Cr	0.19459	2.089	0.19835	0.19512	0.19028		
Cu	0.24628	1.580	0.24852	0.24853	0.24179		
Fe	0.97641	0.600	0.97743	0.98170	0.97011		
K	5.35424	1.278	5.39376	5.39376	5.27522		
Mg	50.81927	0.257	50.89616	50.89371	50.66792		
Mn	0.49620	0.793	0.49985	0.49672	0.49203		
Mo	1.97439	0.351	1.98044	1.97590	1.96683		
Na	56.23709	0.382	56.39718	56.32141	55.99267		
Ni	0.47859	0.308	0.48021	0.47731	0.47825		
Pb	0.01182	33.44	0.00788	0.01180	0.01579		
Sb	0.52024	1.963	0.53134	0.51814	0.51123		
Se	0.08142	5.699	0.08675	0.07922	0.07829		
Si	18.22552	0.353	18.26029	18.26517	18.15111		
Sn	3.98688	1.118	4.03839	3.96114	3.96111		
Sr	1.44586	0.418	1.45130	1.44695	1.43934		
Ti	0.99555	0.810	0.99975	1.00066	0.98625		
Tl	0.04273	204.3	0.03107	-0.03819	0.13532		
V	0.48478	0.007	0.48482	0.48479	0.48474		
Zn	0.49300	0.150	0.49381	0.49284	0.49236		

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LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 19 2585290 09/25/96 19:10

ULA**,100-100,DF5,962695720002,8,,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00219	123.1	-0.00375	0.00092	-0.00374		
Al	0.02562	17.77	0.03074	0.02412	0.02201		
As	0.00254	402.4	-0.00864	0.00479	0.01150		
B	0.02889	5.869	0.03075	0.02742	0.02851		
Ba	0.01425	4.347	0.01487	0.01363	0.01425		
Be	0.00000	42.42	0.00000	0.00000	0.00000		
Ca	29.80838	0.385	29.69431	29.92391	29.80691		
Cd	0.00037	115.0	0.00012	0.00012	0.00088		
Co	0.00001	12495	0.00089	-0.00175	0.00089		
Cr	-0.00161	208.2	-0.00053	0.00107	-0.00538		
Cu	-0.00064	229.9	-0.00031	-0.00225	0.00064		
Fe	-0.00081	85.88	-0.00041	-0.00163	-0.00041		
K	0.17781	57.73	0.05927	0.23708	0.23708		
Mg	9.97922	0.504	9.92501	10.02454	9.98812		
Mn	0.00285	0.064	0.00286	0.00285	0.00285		
Mo	0.00352	53.92	0.00554	0.00327	0.00176		
Na	10.59656	0.277	10.56844	10.62706	10.59417		
Ni	-0.00095	307.5	-0.00351	0.00225	-0.00160		
Pb	0.00260	419.7	-0.00917	0.00455	0.01243		
Sb	0.00328	110.0	0.00734	0.00208	0.00042		
Se	0.02540	57.41	0.01066	0.02571	0.03982		
Si	2.79501	0.404	2.78217	2.79941	2.80345		
Sn	-0.00464	0.372	-0.00462	-0.00464	-0.00466		
Sr	0.09056	0.757	0.08978	0.09105	0.09087		
Ti	-0.00750	6.928	-0.00780	-0.00780	-0.00690		
Tl	-0.01149	603.4	-0.08077	-0.01163	0.05793		
V	-0.00159	42.42	-0.00198	-0.00198	-0.00081		
Zn	0.00753	6.575	0.00803	0.00752	0.00704		

LANCASTER LABORATORIES

Run Name: 9626903I61 INSTRUMENT ID: 03144

Tube: 20 2585287 L5015 09/25/96 19:13
***,100-100,DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
Ag	-0.00320	55.58	-0.00476	-0.00126	-0.00360		
Al	0.01830	38.44	0.01321	0.02633	0.01536		
As	0.00013	3363.	-0.00250	-0.00253	0.00544		
B	0.02334	3.685	0.02409	0.02353	0.02240		
Ba	0.08451	0.423	0.08430	0.08492	0.08430		
Be	0.00000	174.6	0.00000	0.00000	0.00000		
Ca	102.92404	0.394	103.22019	103.09088	102.46104		
Cd	-0.00012	1841.	-0.00213	0.00238	-0.00062	C	
Co	-0.00086	175.9	-0.00175	-0.00175	0.00089		
Cr	-0.00215	149.9	0.00107	-0.00215	-0.00538		
Cu	0.00450	56.66	0.00740	0.00257	0.00354		
Fe	0.00324	49.72	0.00202	0.00506	0.00263		
K	0.67175	5.094	0.71126	0.65199	0.65199		
Mg	37.59380	0.437	37.55172	37.77505	37.45463		
Mn	0.00524	0.085	0.00524	0.00523	0.00524		
Mo	0.00226	38.49	0.00176	0.00327	0.00176		
Na	29.40841	0.553	29.54898	29.44605	29.23019		
Ni	-0.00384	101.0	-0.00833	-0.00159	-0.00160		
Pb	-0.00918	167.1	-0.02687	-0.00133	-0.00066		
Sb	0.00637	87.18	0.00094	0.00611	0.01205		
Se	-0.01160	41.60	-0.01285	-0.01568	-0.00627		
Si	8.46437	0.454	8.47507	8.49636	8.42168		
Sn	-0.00932	86.90	-0.00465	-0.01867	-0.00463		
Sr	0.28203	0.306	0.28257	0.28248	0.28103		
Ti	-0.00780	0	-0.00780	-0.00780	-0.00780		
Tl	-0.08655	102.6	-0.18467	-0.06351	-0.01146		
V	-0.00100	174.6	0.00101	-0.00200	-0.00201		
Zn	0.03241	0.884	0.03258	0.03207	0.03256		

LANCASTER LABORATORIES

Run Name: 9626903I61 IDDLS INSTRUMENT ID: 03144

Tube: 21 2585288 09/25/96 19:16

****,100-100,DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
X Ag	-0.00201	87.57	-0.00164	-0.00394	-0.00046		
X Al	0.01756	109.2	0.03958	0.00435	0.00875		
As	0.00966	48.97	0.01201	0.01277	0.00421		
B	0.51674	0.645	0.51341	0.51674	0.52008		
X Ba	0.06074	0	0.06074	0.06074	0.06074		
X Be	0.00000	35.87	0.00000	0.00000	0.00000		
X Ca	155.28259	0.830	154.05485	156.62614	155.16676		
Cd	-0.00014	816.7	0.00123	-0.00065	-0.00102	C	
X Co	0.00575	47.96	0.00354	0.00884	0.00487		
X Cr	-0.00290	32.03	-0.00398	-0.00237	-0.00236		
X Cu	0.00228	97.40	0.00356	-0.00028	0.00357		
X Fe	0.13804	1.837	0.13722	0.14088	0.13601		
X K	4.62322	3.391	4.68249	4.44541	4.74177		
X Mg	38.21257	0.767	37.94625	38.52664	38.16481		
X Mn	1.80321	0.872	1.78862	1.81989	1.80113		
Mo	0.00705	28.34	0.00857	0.00781	0.00479		
X Na	78.70844	0.987	77.96458	79.51567	78.64505		
X Ni	0.00770	40.12	0.00899	0.00417	0.00994		
Pb	0.00720	68.14	0.01241	0.00265	0.00655		
X Sb	-0.00099	472.1	-0.00545	-0.00144	0.00391		
Se	-0.01224	204.1	0.00312	-0.04110	0.00123		
Si	6.99685	0.763	6.94188	7.04854	7.00014		
Sn	-0.00230	465.4	-0.00464	-0.01165	0.00939		
Sr	0.83287	1.039	0.82435	0.84166	0.83260		
Ti	-0.00750	6.928	-0.00780	-0.00690	-0.00780		
Tl	-0.03501	475.8	0.14421	-0.18523	-0.06403		
X V	-0.00193	35.87	-0.00113	-0.00233	-0.00234		
X Zn	0.00797	6.138	0.00748	0.00799	0.00845		

LANCASTER LABORATORIES

Run Name: 9626903I61 DIS 2D. INSTRUMENT ID: 03144

Time: 22 2585289 09/25/96 19:19
****,100-100;DF1,962695720002,8,,

ELEM	AVG (ppm)	%RSD	INTEGRATIONS #1	#2	#3	REREAD	REDIG
X Al	-0.00363	37.21	-0.00285	-0.00285	-0.00519		
X As	0.00874	0.543	0.00877	0.00876	0.00869		
Ba	0.01703	82.02	0.02921	0.00178	0.02011		
Be	0.54047	0.449	0.53882	0.54326	0.53934		
X Ca	0.09835	0.727	0.09918	0.09794	0.09794		
X Cd	0.00000	7654.	0.00000	0.00000	0.00000		
X Co	80.00498	0.161	80.12696	80.01876	79.86922		
Cr	0.00012	595.9	0.00012	-0.00062	0.00088	C	
Cu	0.00177	86.10	0.00089	0.00089	0.00354		
Fe	-0.00162	286.6	0.00106	0.00106	-0.00700		
K	-0.00031	0.810	-0.00032	-0.00032	-0.00031		
X Mg	0.00100	92.24	0.00202	0.00080	0.00019		
X Mn	3.73414	3.174	3.85268	3.73414	3.61560		
Mo	27.88720	0.302	27.98349	27.85240	27.82571		
X Na	0.10249	0.001	0.10249	0.10249	0.10249		
X Ni	0.00756	15.27	0.00781	0.00857	0.00630		
Pb	63.95898	0.116	63.92181	63.91037	64.04475		
X Sb	0.00193	28.79	0.00225	0.00226	0.00129		
Se	0.00459	73.99	0.00262	0.00851	0.00263		
Si	-0.00208	141.9	0.00378	0.00381	-0.00133		
Sn	-0.01254	125.7	-0.00250	-0.03073	-0.00439		
Sr	6.49456	0.178	6.48912	6.48666	6.50791		
Ti	-0.01165	60.14	-0.01866	-0.01164	-0.00464		
Tl	0.57110	0.200	0.57240	0.57068	0.57022		
V	-0.00690	0	-0.00690	-0.00690	-0.00690		
X Zn	-0.06946	212.4	0.04040	-0.23721	-0.01159		
	0.00003	7654.	0.00165	0.00165	-0.00320		
	0.00719	3.924	0.00703	0.00752	0.00703		

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