



ecology and environment, inc.

International Specialists in the Environment

ANALYTICAL SERVICES CENTER

4493 Walden Avenue

Lancaster, New York 14086

Tel. (716) 685-8080, Fax: (716) 685-0852

RECEIVED

MAR 22 1995

Don't forget to call us for information
on our new environmental testing services

March 17, 1995

LAB NAME: Ecology and Environment, Inc.

CASE NUMBER: RH794

SDG NUMBER: 0215

CONTRACT NUMBER: C003181

SAMPLES IN SDG: TP1 TP2 TP3 TP4A

SDG NARRATIVE:

Enclosed are the analytical results for samples received at the Analytical Services Center on February 17, 1995. The samples were analyzed for the following parameters according to NYSDEC Analytical Services Protocol, September 1989, Revision 12/91:

Arsenic	Method 7060
Barium	Method 6010
Cadmium	Method 6010
Chromium	Method 6010
Lead	Method 7421
Mercury	Method 7471
Selenium	Method 7740
Silver	Method 6010
TCLP Metals	Method 1311

TCLP METALS

CLP criterion are not applied as the samples were analyzed by SW-846 methodology.

Sample TP2 had low spike recovery for silver. The reported sample results have been flagged accordingly. No further action is required.

Case Narrative

SDG #: 0215

Page 2 of 2

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



Gary Hahn - Manager

Analytical Services Center

March 17, 1995

cc: T. Suozzo
Region 7

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Analyzed
21915	Soil	As, Ba, Cd, Cr, Pb, Se, Ag	2/17/95	2/24/95
21916	↓	Hg	↓	↓
21917	↓	↓	↓	↓
21918	↓	↓	↓	↓
TCLP				
21915	Water	As, Ba, Cd, Cr, Pb, Se	2/17/95	3/16/95
21916	↓		↓	↓
21917	↓		↓	↓
21918	↓		↓	↓
21915	↓	Hg		3/7/95
21916	↓	↓		↓
21917	↓	↓		↓
21918	↓	↓		↓
21915	↓	Hg		2/24/95
21916	↓	↓		↓
21917	↓	↓	↓	↓
21918	↓	↓	↓	↓

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CONTRACT LAB SAMPLE INFORMATION SHEET

Part 1

Print legibly

CAUTION (check if applicable)

- ☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)—SPDES

- | | | |
|---|---|---|
| ☐ 2. 13 PP Metals | ☐ 3. Volatiles—(USEPA 624 GC/MS) | ☐ 6. Pesticides/PCB's (USEPA 608-GC) |
| ☐ 4. Acids Base/Neutrals (USEPA 625-GC/MS) | ☐ 5. Cyanide | ☐ 8. BOD |
| ☐ 7. Halogenated Volatiles (USEPA 601-GC) | ☐ 8. Aromatic Volatiles (USEPA 602-GC) | ☐ 12. TSS |
| ☐ 10. pH | ☐ 11. COD | ☐ 15. Ammonia |
| ☐ 13. Settleable Solids | ☐ 14. TKN | ☐ 18. Reactive Phosphorus |
| ☐ 16. Nitrate/Nitrite | ☐ 17. Total Phosphorus | ☐ 21. Total Phenols |
| ☐ 19. Oil/Grease | ☐ 20. TOC | ☐ 60. PCB's congener method |
| ☐ 22. Other _____ | ☐ 69. PCB's at 0.005 ug/L | ☐ 64. Total Solids |
| | ☐ 62. CBOD | ☐ 65. Volatiles (USEPA 524.2 GC/MS) |

CONTRACT LABORATORY PROTOCOLS

- | | |
|--|--|
| ☐ 23. (ALL)—Water—Includes 24-28 | ☐ 29. (ALL)—Soil/Sediments—Includes 30-34 |
| ☐ 24. Base/Neutral/Alkalinity (B/N/A)—Water—GC/MS (ASP #88-2) | ☐ 30. B/N/A—Soil/Sediment—GC/MS (ASP #89-2) |
| ☐ 25. Volatile Organic Analysis VOA—Water—GC/MS (ASP #89-1) | ☐ 31. VOA—Soil/Sediments—GC/MS (ASP #89-1) |
| ☐ 26. Pesticides/PCB's—Water—GC (ASP #89-3) | ☐ 32. Pesticides/PCB's—Soil/Sediment—GC (ASP #89-3) |
| ☐ 27. Metals—23 In Water | ☐ 33. Metals—23 In Soil/Sediment |
| ☐ 28. Cyanide—Water | ☐ 34. Cyanide—Soil/Sediment |
| ☐ 66. Dioxin—Water (ASP #89-4) | ☐ 67. Dioxin—Soil/Sediment (ASP #89-4) |
| ☐ 35. Other _____ | |

HAZARDOUS WASTES/RCRA ANALYSIS SW-846

- | | |
|--|---|
| ☐ 36. EP Toxicity | ☐ 38. Ignitability |
| ☐ 39. Corrosivity | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☒ 44. TCLP (Metals Only) |
| ☐ 45. Reactivity | ☐ 47. Appendix IX |
| ☐ 48. Other _____ | ☒ 68. Metals—17 Hazardous |
| ☐ 40. VOA—(USEPA 8240-GC/MS) | |
| ☐ 43. TCLP | |
| ☐ 46. Dioxin (USEPA 8280) | |
| ☐ 63. Percent Solids | |

MUNICIPAL SLUDGE

- | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| ☐ 49. RSG-01 | ☐ 50. RSSR-01 | ☐ 51. RSGR-01 | ☐ 52. RSRB-01 | ☐ 53. RSRI-01 (EP Toxicity-Metals only + RSSR-01) |
| ☐ 54. RSRO-01 | ☐ 55. RSSB-01 | ☐ 56. RSRR-01 | ☐ 57. RSRR-02 | ☐ 58. Other _____ |

COLLECTED BY

T. Surazo

TELEPHONE NUMBER

607 775 25 45

REGION NO.

7

CONTRACT LAB

E & E

COUNTY

Syracuse

SAMPLING DATE

2/15/95

MILITARY TIME

10:00

SAMPLE MATRIX:

- ☐ Air ☒ Soil/Sediment ☐ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

RH7940215-

SAMPLE NUMBER

TP1

CHECK FOR MS/MD

- ☐
- This Sample

TYPE OF SAMPLE:

- ☒
- Grab
- ☐
- Composite
- ☐
- Term _____ hrs

Report via Category B, unless checked ☐Check if field duplicate ☐

Outfall Number

Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD
MSD

SAMPLING POINT

GAF DUMP SITE
SITE # 704611, TP1



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

Part 1

Print legibly

CAUTION (check if applicable)

- ☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)—SPDES

- | | | |
|---|---|---|
| ☐ 2. 13 PP Metals | ☐ 3. Volatiles—(USEPA 624 GC/MS) | ☐ 6. Pesticides/PCB's (USEPA 608-GC) |
| ☐ 4. Acids Base/Neutrals (USEPA 625-GC/MS) | ☐ 5. Cyanide | ☐ 9. BOD |
| ☐ 7. Halogenated Volatiles (USEPA 601-GC) | ☐ 8. Aromatic Volatiles (USEPA 602-GC) | ☐ 12. TSS |
| ☐ 10. pH | ☐ 11. COD | ☐ 15. Ammonia |
| ☐ 13. Settleable Solids | ☐ 14. TKN | ☐ 18. Reactive Phosphorus |
| ☐ 16. Nitrate/Nitrite | ☐ 17. Total Phosphorus | ☐ 21. Total Phenols |
| ☐ 19. Oil/Grease | ☐ 20. TOC | ☐ 60. PCB's congener method |
| ☐ 22. Other _____ | ☐ 69. PCB's at 0.065 ug/L | ☐ 64. Total Solids |
| | ☐ 62. CBOD | ☐ 65. Volatiles (USEPA 524 2 GC/MS) |

CONTRACT LABORATORY PROTOCOLS

- | | |
|--|---|
| ☐ 23. (ALL)—Water—Includes 24-28 | ☐ 29. (ALL)—Soil/Sediments—Includes 30-34 |
| ☐ 24. Dissolved/Total A/D (B/N/A)—Water—GC/MS (ASP #88-2) | ☐ 30. BNA—Soil/Sediment—GC/MS (ASP #89-2) |
| ☐ 25. Volatile Organic Analysis VOA—Water—GC/MS (ASP #89-1) | ☐ 31. VOA—Soils/Sediments—GC/MS (ASP #89-1) |
| ☐ 26. Pesticides/PCB's—Water—GC (ASP #89-3) | ☐ 32. Pesticides/PCB's—Soils/Sediment—GC (ASP #89-3) |
| ☐ 27. Metals—23 In Water | ☐ 33. Metals—23 In Soil/Sediment |
| ☐ 28. Cyanide—Water | ☐ 34. Cyanide—Soils/Sediment |
| ☐ 66. Dioxin—Water (ASP #89-4) | ☐ 67. Dioxin—Soil/Sediment (ASP #89-4) |
| ☐ 35. Other _____ | |

HAZARDOUS WASTES/RCRA ANALYSIS SW-846

- | | |
|--|---|
| ☐ 36. EP Toxicity | ☐ 37. Ignitability |
| ☐ 39. Corrosivity | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☒ 44. TCLP (Metals Only) |
| ☐ 45. Reactivity | ☐ 47. Appendix IX |
| ☐ 48. Other _____ | ☒ 68. Metals—17 Hazardous |
| ☐ 40. VOA—(USEPA 8240-GC/MS) | |
| ☐ 43. TCLP | |
| ☐ 46. Dioxin (USEPA 8280) | |
| ☐ 63. Percent Solids | |

MUNICIPAL SLUDGE

- | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| ☐ 49. RSGB-01 | ☐ 50. RSSR-01 | ☐ 51. RSGR-01 | ☐ 52. RSRB-01 | ☐ 53. RSRI-01 (EP Toxicity-Metals only + RSRR-01) |
| ☐ 54. RSRO-01 | ☐ 55. RSSB-01 | ☐ 56. RSRR-01 | ☐ 57. RSRR-02 | ☐ 58. Other _____ |

COLLECTED BY:

T. Surazo

TELEPHONE NUMBER:

607 775 25 45

REGION NO:

7

CONTRACT LAB:

E E E

COUNTY:

Broome

SAMPLING DATE:

2/15/95

MILITARY TIME:

10:00

SAMPLE MATRIX:

- ☐ Air ☒ Soil/Sediment ☐ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

RH7940215-

SAMPLE NUMBER

TP 2

CHECK FOR MS/MD

☐ This Sample

TYPE OF SAMPLE:

- ☒ Grab ☐ Composite ☐ Term _____ hrs

☐ Check if there will be more samples with this SDG sent in this calendar weekReport via Category B, unless checked ☐

SAMPLING POINT:

GAF DUMP SITE
SITE #704011, TP 2Check if field duplicate ☐

Outfall Number

Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD
MGD

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

Part 1

Print legibly

CAUTION (check if applicable)

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| ☐ 10. pH | ☐ 11. COD | ☐ 15. Ammonia |
| ☐ 13. Settleable Solids | ☐ 14. TKN | ☐ 18. Reactive Phosphorus |
| ☐ 16. Nitrate/Nitrite | ☐ 17. Total Phosphorus | ☐ 21. Total Phenols |
| ☐ 19. Oil/Grease | ☐ 20. TOC | ☐ 60. PCB's congener method |
| ☐ 22. Other _____ | ☐ 59. PCB's at 0.065 ug/L | ☐ 64. Total Solids |
| | ☐ 62. CBOD | ☐ 65. Volatiles (USEPA 524 2 GC/MS) |

CONTRACT LABORATORY PROTOCOLS

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| ☐ 35. Other _____ | |

HAZARDOUS WASTES/RCRA ANALYSIS SW-846

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| ☐ 39. Corrosivity | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☒ 44. TCLP (Metals Only) |
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MUNICIPAL SLUDGE

- | | | | | |
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| ☐ 54. RSRO-01 | ☐ 55. RSSB-01 | ☐ 56. RSRR-01 | ☐ 57. RSRR-02 | ☐ 58. Other _____ |

COLLECTED BY:

T. Surazo

TELEPHONE NUMBER:

607 775 2545

REGION NO:

7

CONTRACT LAB:

E & E

COUNTY:

3 Broome

SAMPLING DATE:

2/15/95

MILITARY TIME:

10:00

SAMPLE MATRIX:

- ☐ Air ☒ Soil/Sediment ☐ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

RH 7940215-

SAMPLE NUMBER

TP 3

CHECK FOR MS/MD

☐ This Sample

TYPE OF SAMPLE:

☒ Grab ☐ Composite ☐ Term _____ hrsReport via Category B, unless checked ☐

SAMPLING POINT:

GAF DUMP SITE
SITE # 704011 TP 3Check if field
duplicate ☐

Outfall Number

Check if sampling is part
of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD
MGD

74-16-1 (4/91)-9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CONTRACT LAB SAMPLE INFORMATION SHEET

Part 1

Print legibly

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Place QA Label Here

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| ☐ 19. Oil/Grease | ☐ 20. TOC | ☐ 60. PCB's congener method |
| ☐ 22. Other _____ | ☐ 69. PCB's at 0.065 ug/L | ☐ 64. Total Solids |
| | ☐ 62. CBOD | ☐ 65. Volatiles (USEPA 524 2 GC/MS) |

CONTRACT LABORATORY PROTOCOLS

- | | |
|--|--|
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| ☐ 35. Other _____ | |

HAZARDOUS WASTES/RCRA ANALYSIS SW-846

- | | |
|--|---|
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| ☐ 39. Corrosivity | ☐ 41. BNA—(USEPA 8270-GC/MS) |
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| ☐ 43. TCLP | |
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MUNICIPAL SLUDGE

- | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| ☐ 49. RSGB-01 | ☐ 50. RSSR-01 | ☐ 51. RSGR-01 | ☐ 52. RSRB-01 | ☐ 53. RSRI-01 (EP Toxicity-Metals only + RSRR-01) |
| ☐ 54. RSRO-01 | ☐ 55. RSSB-01 | ☐ 56. RSRR-01 | ☐ 57. RSRR-02 | ☐ 58. Other _____ |

COLLECTED BY

T. Surazo

TELEPHONE NUMBER

607 775 2545

REGION NO.

7

CONTRACT LAB:

E E E

COUNTY:

Broome

SAMPLING DATE

2/15/95

MILITARY TIME:

10:00

SAMPLE MATRIX:

- ☐ Air ☒ Soil/Sediment ☐ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

RH7940215-

SAMPLE NUMBER
TP 4A

CHECK FOR MS/MD

- ☐ This Sample

TYPE OF SAMPLE:

- ☒ Grab
☐ Composite
☐ Term _____ hrs

☐ Check if there will be more samples with this SDG sent in this calendar week

Report via Category B, unless checked ☐

SAMPLING POINT:

GAF DUMP SITE
SITE #704011, TP-34A

Check if field duplicate ☐

Outfall Number

Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD

AMGD

8

Any questions on sample contact
Tom Suozzo @ 607-775-2545

Ecology and Environment, Inc.
Analytical Services Center
Cooler Receipt Form

PACKAGE RECEIPT #: 318 NUMBER OF COOLERS: 1-Box DATE RECEIVED: 2/17/95
E&E Project #: _____ Project or Site Name: GAF DUMP SITE # 704011

A: Preliminary Examination Phase

(CIRCLE ONE)

- 1 Did coolers come with airbill or packing slip? YES NO
if YES, enter carrier and Airbill #: AIRBORNE EXPRESS # 264875 MS2
- 2 Did cooler(s) have custody seals? YES NO
if YES, how many and where: _____
- 3 Were custody seals unbroken and intact on receipt? YES NO
4 Where custody seals dated and signed? YES NO
if YES, enter Date: N/A Name: N/A
- 5 Initial here to acknowledge receipt of cooler(s): _____

B Unpacking Phase:

- Date Cooler(s) Opened: 2/17/95 C-O-C Numbers: N/A
Coolers Opened By(print): Scott Strawn (sign): Scott Strawn
- 6 Where C-O-C forms received and sealed in plastic bag? Not sealed in plastic bag YES NO
7 Was the project identifiable from the C-O-C form? YES NO
if YES, enter the project number and name in the heading above.
- 8 Was enough packing material used in cooler(s)? YES NO
Circle type of material: _____ Vermiculite _____ Bubble Wrap _____ Other Peanut
- 9 If required, was enough ice used?: NONE YES NO
if YES, circle type of ice: _____ WET _____ DRY _____ BLUE _____ Other _____
- 10 Was a temperature blank included inside cooler(s)? YES NO
if Yes, indicate temperature in table below.
If No, indicate Cooler temperature in table below.
- 11 Were all containers sealed in separate plastic bags?: YES NO
12 Did all containers arrive unbroken and in good condition? YES NO

C Login Phase:

- Date Samples Logged in: _____
Samples logged in By(print): _____ (sign): _____
- 13 Were all container labels complete(eg.date,time,preserv.)? YES NO
14 Were all C-O-C forms filled out properly in ink and signed? YES NO
15 Did the C-O-C form agree with containers received? YES NO
16 Were the correct containers used for the tests requested? YES NO
17 Were the correct preservatives listed on the sample labels? YES NO
18 Was a sufficient sample volume sent for the tests requested? YES NO
19 Were all volatile samples received without head space? YES NO

Please record Temp. Blank or Cooler Temp. for each cooler, range (2 - 5 C°)*

AIRBILL #	TEMP.C°	AIRBILL #	TEMP.C°	AIRBILL #	TEMP.C°

* If NO or Temp. outside of acceptable range a Discrepancy form must be filed.

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

[illegible]

Comments :

Signature: _____ Name: Gary Hahn _____

Date: _____ Title: Laboratory Manager _____

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

TP1

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794 SAS No.: ____ SDG No.: 0215__

Matrix (soil/water): SOIL__ Lab Sample ID: 21915

Level (low/med): LOW__ Date Received: 02/17/95

% Solids: __89.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	9.3			P
7440-39-3	Barium	243			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	45.3			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	67.5			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	62.5			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	4.3			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.49	U		P
7440-22-4	Silver	352			P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: ____ Clarity Before: ____ Texture: GS__

Color After: Y__ Clarity After: C__ Artifacts: __

Comments:

TEXTURE_- GRANULAR_SOIL

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

TP2

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794 SAS No.: _____ SDG No.: 0215__

Matrix (soil/water): SOIL__ Lab Sample ID: 21916

Level (low/med): LOW__ Date Received: 02/17/95

% Solids: __87.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic	5.1	-		P
7440-39-3	Barium	151	-		P
7440-41-7	Beryllium		-		NR
7440-43-9	Cadmium	2.0	-		P
7440-70-2	Calcium		-		NR
7440-47-3	Chromium	7.6	-		P
7440-48-4	Cobalt		-		NR
7440-50-8	Copper		-		NR
7439-89-6	Iron		-		NR
7439-92-1	Lead	50.8	-		P
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury	0.34	-		CV
7440-02-0	Nickel		-		NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium	0.51	U		P
7440-22-4	Silver	43.8	-		P
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc		-		NR
	Cyanide		-		NR

Color Before: _____ Clarity Before: _____ Texture: GS _____

Color After: Y/CL_____ Clarity After: C_____ Artifacts: _____

Comments:

TEXTURE_- GRANULAR_SOIL_____

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

TP3

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794 SAS No.: ____ SDG No.: 0215__

Matrix (soil/water): SOIL__ Lab Sample ID: 21917

Level (low/med): LOW__ Date Received: 02/17/95

% Solids: __60.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic	6.6	-		P
7440-39-3	Barium	113	-		P
7440-41-7	Beryllium		-		NR
7440-43-9	Cadmium	2.3	-		P
7440-70-2	Calcium		-		NR
7440-47-3	Chromium	8.5	-		P
7440-48-4	Cobalt		-		NR
7440-50-8	Copper		-		NR
7439-89-6	Iron		-		NR
7439-92-1	Lead	25.4	-		P
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury	0.16	U		CV
7440-02-0	Nickel		-		NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium	0.72	U		P
7440-22-4	Silver	10.9	-		P
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc		-		NR
	Cyanide		-		NR

Color Before: ____ Clarity Before: ____ Texture: GS__

Color After: Y__ Clarity After: C__ Artifacts: __

Comments:

TEXTURE - GRANULAR SOIL

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

TP4A

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794 SAS No.: ____ SDG No.: 0215__

Matrix (soil/water): SOIL__ Lab Sample ID: 21918

Level (low/med): LOW__ Date Received: 02/17/95

% Solids: __51.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	6.5			P
7440-39-3	Barium	137			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	2.2			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	10.7			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	42.8			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.86	U		P
7440-22-4	Silver	20.1			P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: ____ Clarity Before: ____ Texture: GS__

Color After: Y__ Clarity After: C__ Artifacts: __

Comments:

TEXTURE - GRANULAR SOIL

FORM I - IN

12/91

NYSDEC ASP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: RH794 SAS No.: _____ SDG No.: 0215____
 Initial Calibration Source: EPA-LV/P-E____
 Continuing Calibration Source: VH/NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic	1000.0	1032.25	103.2	1000.0	927.04	92.7	983.72	98.4	P
Barium	1000.0	953.31	95.3	500.0	499.08	99.8	505.84	101.2	P
Beryllium									NR
Cadmium	500.0	480.48	96.1	500.0	503.15	100.6	512.15	102.4	P
Calcium									NR
Chromium	1000.0	1000.24	100.0	500.0	504.22	100.8	513.41	102.7	P
Cobalt									NR
Copper									NR
Iron									NR
Lead	1000.0	977.03	97.7	1000.0	989.83	99.0	1009.57	101.0	P
Magnesium									NR
Manganese									NR
Mercury	5.0	5.46	109.2	1.0	1.00	100.0	1.10	110.0	CV
Nickel									NR
Potassium									NR
Selenium	1000.0	1011.53	101.2	1000.0	1003.50	100.3	1028.25	102.8	P
Silver	200.0	196.27	98.1	500.0	477.78	95.6	489.38	97.9	P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

FORM II (PART 1) - IN

12/91

NYSDEC ASP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE____ Case No.: RH794 SAS No.: _____ SDG No.: 0215____
 Initial Calibration Source: EPA-LV/P-E____
 Continuing Calibration Source: VHG/NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic				1000.0	948.57	94.9			P
Barium				500.0	494.34	98.9			P
Beryllium									NR
Cadmium				500.0	501.87	100.4			P
Calcium									NR
Chromium				500.0	500.55	100.1			P
Cobalt									NR
Copper									NR
Iron									NR
Lead				1000.0	984.36	98.4			P
Magnesium									NR
Manganese									NR
Mercury				1.0	0.89	89.0	1.10	110.0	CV
Nickel									NR
Potassium									NR
Selenium				1000.0	1005.62	100.6			P
Silver				500.0	479.11	95.8			P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

FORM II (PART 1) - IN

12/91

NYSDEC ASP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE____ Case No.: RH794 SAS No.: _____ SDG No.: 0215____
 Initial Calibration Source: EPA-LV/P-E____
 Continuing Calibration Source: VHG/NBS____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury				1.0	1.10	110.0	1.15	115.0	CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

FORM II (PART 1) - IN

12/91

NYSDEC ASP

2B

CRDL STANDARD FOR AA AND ICP

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_

Case No.: RH794

SAS No.: _____

SDG No.: 0215__

AA CRDL Standard Source: PERKIN-ELMER

ICP CRDL Standard Source: VHG_____

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				5000.0	4923.97	98.5	4933.95	98.7
Barium				400.0	383.59	95.9	384.15	96.0
Beryllium								
Cadmium				10.0	9.13	91.3	9.30	93.0
Calcium								
Chromium				20.0	20.40	102.0	20.35	101.7
Cobalt								
Copper								
Iron								
Lead				400.0	398.97	99.7	397.73	99.4
Magnesium								
Manganese								
Mercury	0.2	0.19	95.0					
Nickel								
Potassium								
Selenium				5000.0	4921.95	98.4	4947.69	99.0
Silver				20.0	19.80	99.0	19.93	99.6
Sodium								
Thallium								
Vanadium								
Zinc								

FORM II (PART 2) - IN

12/91

NYSDEC ASP

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: RH794 SAS No.: _____ SDG No.: 0215_____

Preparation Blank Matrix (soil/water): SOIL_____

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum		-		-		-		-		-	NR
Antimony		-		-		-		-		-	NR
Arsenic	3.6	U	3.6	U	3.6	U	3.6	U	0.004	U	P
Barium	4.7	U	4.7	U	4.7	U	4.7	U	0.005	U	P
Beryllium		-		-		-		-		-	NR
Cadmium	0.3	U	0.3	U	0.3	U	0.3	U	0.000	U	P
Calcium		-		-		-		-		-	NR
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.001	U	P
Cobalt		-		-		-		-		-	NR
Copper		-		-		-		-		-	NR
Iron		-		-		-		-		-	NR
Lead	2.2	U	2.2	U	2.2	U	2.2	U	0.002	U	P
Magnesium		-		-		-		-		-	NR
Manganese		-		-		-		-		-	NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel		-		-		-		-		-	NR
Potassium		-		-		-		-		-	NR
Selenium	4.4	U	4.4	U	4.4	U	4.4	U	0.004	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.001	U	P
Sodium		-		-		-		-		-	NR
Thallium		-		-		-		-		-	NR
Vanadium		-		-		-		-		-	NR
Zinc		-		-		-		-		-	NR
Cyanide		-		-		-		-		-	NR

FORM III - IN

12/91

NYSDEC ASP

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: RH794 SAS No.: _____ SDG No.: 0215____
 Preparation Blank Matrix (soil/water): _____
 Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	C		1	C	2	C	3	C	C		
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

FORM III - IN

12/91

NYSDEC ASP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE____ Case No.: RH794 SAS No: _____ SDG No.: 0215____
 ICP ID Number: OPTIMA_____ ICS Source: VHG_____

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum								
Antimony								
Arsenic	0	0	8	6.7		5	6.0	
Barium	0	405	6	428.9	105.9	6	432.2	106.7
Beryllium								
Cadmium	23	793	24	851.1	107.3	25	860.0	108.4
Calcium								
Chromium	0	388	-12	408.2	105.2	-12	410.4	105.8
Cobalt								
Copper								
Iron								
Lead	67	765	-46	808.6	105.7	-48	812.2	106.2
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium	0	0	-59	-75.0		-72	-67.8	
Silver	0	873	1	894.0	102.4	1	907.4	103.9
Sodium								
Thallium								
Vanadium								
Zinc								

FORM IV - IN

12/91

NYSDEC ASP

5A
SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

TP1S

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: RH794 SAS No.: _____ SDG No.: 0215_____

Matrix (soil/water): SOIL_____ Level (low/med): LOW_____

% Solids for Sample: _89.6

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum							NR
Antimony							NR
Arsenic							NR
Barium							NR
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium							NR
Cobalt							NR
Copper							NR
Iron							NR
Lead							NR
Magnesium							NR
Manganese							NR
Mercury		5.0391	4.3359	0.560	125.6		CV
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR
Cyanide							NR

Comments:

TEXTURE - GRANULAR SOIL

FORM V (Part 1) - IN

12/91

NYSDEC ASP

6
DUPLICATES

NYSDEC SAMPLE NO.

TP1D

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_ Case No.: RH794 SAS No.: _____ SDG No.: 0215__

Matrix (soil/water): SOIL_ Level (low/med): LOW__

% Solids for Sample: _89.6 % Solids for Duplicate: _89.6

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

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	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		4.3359	4.2801	1.3		CV
Nickel						NR
Potassium						NR
Selenium						NR
Silver						NR
Sodium						NR
Thallium						NR
Vanadium						NR
Zinc						NR
Cyanide						NR

FORM VI - IN

12/91

NYSDEC ASP

7

LABORATORY CONTROL SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_

Case No.: RH794

SAS No.: _____

SDG No.: 0215__

Solid LCS Source: EPA-LV_____

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)					%R
	True	Found	%R	True	Found	C	Limits		
Aluminum									
Antimony									
Arsenic	1000.0	1111.91	111.2						
Barium	1000.0	1058.74	105.9						
Beryllium									
Cadmium	1000.0	1068.43	106.8						
Calcium									
Chromium	1000.0	1111.45	111.1						
Cobalt									
Copper									
Iron									
Lead	1000.0	1075.59	107.6						
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	1000.0	1074.86	107.5						
Silver	1000.0	1065.32	106.5						
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

FORM VII - IN

12/91

NYSDEC ASP

7

LABORATORY CONTROL SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_

Case No.: RH794

SAS No.: _____

SDG No.: 0215__

Solid LCS Source: EPA-LV_____

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)					%R
	True	Found	%R	True	Found	C	Limits		
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury				12.7	11.1		8.5	17.0	87.4
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

FORM VII - IN

12/91

8

STANDARD ADDITION RESULTS

SDG No. : 0215__

[illegible]

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NYSDEC ASP

9
ICP SERIAL DILUTION

NYSDEC SAMPLE NO.

TP4AL

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794 SAS No.: __ SDG No.: 0215__

Matrix (soil/water): SOIL__ Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Aluminum		-		-		-	NR
Antimony		-		-		-	NR
Arsenic	33.43	-	31.80	B	4.9	-	P
Barium	704.94	-	738.30	B	4.7	-	P
Beryllium		-		-		-	NR
Cadmium	11.47	-	12.40	B	8.1	-	P
Calcium		-		-		-	NR
Chromium	54.73	-	57.00	-	4.1	-	P
Cobalt		-		-		-	NR
Copper		-		-		-	NR
Iron		-		-		-	NR
Lead	219.62	-	224.30	-	2.1	-	P
Magnesium		-		-		-	NR
Manganese		-		-		-	NR
Mercury		-		-		-	NR
Nickel		-		-		-	NR
Potassium		-		-		-	NR
Selenium	4.40	U	22.00	U		-	P
Silver	103.34	-	106.00	-	2.6	-	P
Sodium		-		-		-	NR
Thallium		-		-		-	NR
Vanadium		-		-		-	NR
Zinc		-		-		-	NR

FORM IX - IN

12/91

NYSDEC ASP

10

INSTRUMENT DETECTION LIMITS (SEMIANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_ Case No.: RH794 SAS No.: _____ SDG No.: 0215__

ICP ID Number: OPTIMA_____ Date: 12/14/94

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRQL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	188.98		10	3.6	P
Barium	233.53		200	4.7	P
Beryllium			5		NR
Cadmium	226.50		5	0.3	P
Calcium			5000		NR
Chromium	205.55		10	0.6	P
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	220.35		3	2.2	P
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.03		5	4.4	P
Silver	328.07		10	0.7	P
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

FORM XI - IN

12/91

NYSDEC ASP

10

INSTRUMENT DETECTION LIMITS (SEMIANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____

Lab Code: EANDE_ Case No.: RH794 SAS No.: _____ SDG No.: 0215__

ICP ID Number: _____ Date: 01/23/95

Flame AA ID Number : 2380_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRQL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

FORM XI - IN

12/91

NYSDEC ASP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____
 Lab Code: EANDE_____ Case No.: RH794 SAS No.: _____ SDG No.: 0215_____
 ICP ID Number: OPTIMA_____ Date: 08/25/94

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		Al	Ca	Fe	Mg	_____
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.83	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.11	0.0000000	0.0000000	0.0000000	0.0000000	
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	
Calcium	315.88	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	205.55	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	302.11	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium	766.48	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.84	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

FORM XI (PART 1) - IN

12/91

NYSDEC ASP

12
ICP LINEAR RANGES (SEMIANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
Lab Code: EANDE_ Case No.: RH794 SAS No.: _____ SDG No.: 0215____
ICP ID Number: OPTIMA_____ Date: 12/07/94

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum_	10.00	50000.0	P_
Antimony_	10.00	2000.0	P_
Arsenic_	10.00	10000.0	P_
Barium_	10.00	5000.0	P_
Beryllium_	10.00	1000.0	P_
Cadmium_	10.00	5000.0	P_
Calcium_	10.00	100000.0	P_
Chromium_	10.00	10000.0	P_
Cobalt_	10.00	10000.0	P_
Copper_	10.00	100000.0	P_
Iron_	10.00	250000.0	P_
Lead_	10.00	10000.0	P_
Magnesium_	10.00	100000.0	P_
Manganese_	10.00	10000.0	P_
Mercury_			NR
Nickel_	10.00	10000.0	P_
Potassium_	10.00	50000.0	P_
Selenium_	10.00	10000.0	P_
Silver_	10.00	10000.0	P_
Sodium_	10.00	50000.0	P_
Thallium_	10.00	10000.0	P_
Vanadium_	10.00	10000.0	P_
Zinc_	10.00	5000.0	P_

Comments:

FORM XII - IN

12/91

13
PREPARATION LOG

Method: P_

[illegible]

12/91

13
PREPARATION LOG

Method: CV

[illegible]

FORM XIII - IN

12/91

NYSDEC ASP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: RH794_

SAS No.: _____ SDG No.:0215__

Instrument ID Number: 2380_____

Method: CV

Start Date: 02/24/95

End Date: 02/24/95

NYSDEC Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	1246		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.2	1.00	1248		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.4	1.00	1250		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.8	1.00	1252		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S2	1.00	1254		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S4	1.00	1256		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S8	1.00	1258		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICV	1.00	1300		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICB	1.00	1302		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1306		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CRA	1.00	1308		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1310		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBS	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
LCSS	1.00	1314		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1316		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1318		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1320		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1324		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1326		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1328		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1330		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1332		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1334		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1336		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1338		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1340		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1342		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1344		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1346		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1348		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

12/91

NYSDEC ASP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: RH794_

SAS No.: _____ SDG No.:0215__

Instrument ID Number: 2380_____

Method: CV

Start Date: 02/24/95

End Date: 02/24/95

NYSDEC Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
ZZZZZZ	1.00	1350		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1352		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1354		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1356		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1358		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1400		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1404		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1408		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1410		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1412		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1414		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1416		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1418		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1420		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1422		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1424		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1426		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1428		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP1	1.00	1430		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
TP1D	1.00	1432		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
TP1S	1.00	1434		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1436		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1438		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
TP2	1.00	1440		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
TP3	1.00	1442		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
TP4A	1.00	1444		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1446		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1448		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

12/91

12/9/94

CALIBRATION STANDARD SOLUTION PREPARATION

ICP calibration standard (STDHIGH) for all elements except arsenic, iron, sodium, calcium, magnesium and potassium were prepared from VHG multielement stock (LOT# 401922) and VHG Silver 1,000 ppm stock (LOT# 402631B) and VHG Antimony 1,000 ppm stock (LOT# 402631A) on 474/45 0800

ICP calibration standard (STD2) for the elements iron, arsenic and selenium were prepared from VHG multielement stock (LOT# 401922) and VHG arsenic 1,000 ppm stock (LOT# 402489A) on _____.

ICP calibration standard (STD3) for the elements Calcium, Magnesium, Sodium and Potassium 100 ppm stock (LOT# 400805A) on _____.

Furnace calibration standards for As were prepared from NIST reference material 3103A (LOT# 392906) on _____ for the following runs:
_____.

Furnace calibration standards for Pb were prepared from NIST reference material 3128 (LOT# 490103) on _____ for the following runs:
_____.

Furnace calibration standards for Se were prepared from NIST reference material 3149 (LOT# 390608) on _____ for the following runs:
_____.

Furnace calibration standards for Tl were prepared from NIST reference material 3158 (LOT# 390308) on _____ for the following runs:
_____.

Mercury calibration standards were made from Fisher SM114-500 mercury 1,000 ppm stock (LOT# 936694-24) on _____.

Run #1

RAW DATA

2/24/95

Gem

Δ 9500.371 Ag, As, Ba, Cd, Cr, Pb, Se

Δ PBS 585 ^{327/24/95} LCS ~~2/2~~ 2/21

Run
2/24/95
39

ANALYZE

A 7 Ar A

02/24/95

08:44:18

Method Name: 9502240844 Read delay: 50 Rinse time: 0
Format Name: clpf Replicates: 2 Data Disp: SPEC4
Comments: Standard Condition Default Values

Result Name: 9502240844 Store Result: **Yes** No Append
Spectr Name: 9502240844 Store Spectrum: **Yes** No Append
Source Name: XL Global Source: **Yes** No
IEC Name: stdcond InterElem Corr: **Off** On

Resolution: Low **Normal** High
Scanning: **Off** On
Processing Mode: Peak Area **Multcomp.Spec.Fit**
Integration Mode: **Auto** Manual
Auto Int Samp Time: Min: 2 Max: **50**

Command?

F5	F6	F7	F8	F9	F10	F11	F12
Manual			Calib Spectrum	Repro- cessing	MSF Data	IEC Data	Optimize

02/24/95 08:47

blank

rep	1	AG	sf	-115.7
rep	1	ASILM	sf	-5.8
rep	1	BA	sf	-15.9
rep	1	CD	sf	10.9
rep	1	CR	sf	-0.4
rep	1	PBILM	sf	15.0
rep	1	SEILM	sf	0.4
rep	2	AG	sf	-117.1
rep	2	ASILM	sf	-3.8
rep	2	BA	sf	-13.4
rep	2	CD	sf	10.3
rep	2	CR	sf	0.2
rep	2	PBILM	sf	13.4
rep	2	SEILM	sf	0.0

02/24/95 08:49

blank

AG	av	-116.43	sf	sd	1.009	%cv	0.87
ASILM	av	-4.80	sf	sd	1.454	%cv	30.33
BA	av	-14.68	sf	sd	1.765	%cv	12.02
CD	av	10.61	sf	sd	0.455	%cv	4.28
CR	av	-0.08	sf	sd	0.433	%cv	574.9
PBILM	av	14.21	sf	sd	1.179	%cv	8.29
SEILM	av	0.20	sf	sd	0.326	%cv	159.6

02/24/95 08:52

#1

rep	1	AG	sf	66158.5
rep	1	ASILM	sf	671.8
rep	1	BA	sf	27285.7
rep	1	CD	sf	17342.5
rep	1	CR	sf	7493.2
rep	1	PBILM	sf	3014.7
rep	1	SEILM	sf	398.6
rep	2	AG	sf	66439.3
rep	2	ASILM	sf	668.9
rep	2	BA	sf	27337.2
rep	2	CD	sf	17383.6
rep	2	CR	sf	7503.6
rep	2	PBILM	sf	3008.6
rep	2	SEILM	sf	402.9

NOT ANALYZED AS
STANDARD,

MEM 4/24/95

02/24/95 08:53

#1

AG	av	66298.94	sf	sd	198.550	%cv	0.30
ASILM	av	670.33	sf	sd	2.024	%cv	0.30
BA	av	27311.43	sf	sd	36.436	%cv	0.13
CD	av	17363.02	sf	sd	29.057	%cv	0.17
CR	av	7498.41	sf	sd	7.310	%cv	0.10
PBILM	av	3011.66	sf	sd	4.259	%cv	0.14
SEILM	av	400.77	sf	sd	3.073	%cv	0.77

02/24/95 08:55

#1 standard

rep	1	AG	sf	66109.0
rep	1	ASILM	sf	676.2

rep	1	BA	sf	27280.2
rep	1	CD	sf	17356.5
rep	1	CR	sf	7487.3
rep	1	PBILM	sf	3023.2
rep	1	SEILM	sf	402.0

rep	2	AG	sf	66164.8
rep	2	ASILM	sf	670.8
rep	2	BA	sf	27290.6
rep	2	CD	sf	17363.4
rep	2	CR	sf	7486.1
rep	2	PBILM	sf	3018.0
rep	2	SEILM	sf	400.1

02/24/95 08:57

#1 standard

AG	av	66136.91	sf	sd	39.482	%cv	0.06	conc	1000.0
ASILM	av	673.50	sf	sd	3.857	%cv	0.57	conc	1000.0
BA	av	27285.36	sf	sd	7.354	%cv	0.03	conc	1000.0
CD	av	17359.97	sf	sd	4.872	%cv	0.03	conc	1000.0
CR	av	7486.66	sf	sd	0.841	%cv	0.01	conc	1000.0
PBILM	av	3020.60	sf	sd	3.675	%cv	0.12	conc	2000.0
SEILM	av	401.06	sf	sd	1.353	%cv	0.34	conc	1000.0

02/24/95 09:00

ICV1

rep	1	AG	conc	195.92	ppb
rep	1	BA	conc	951.33	ppb
rep	1	CD	conc	479.04	ppb
rep	1	PBILM	conc	976.61	ppb
rep	2	AG	conc	196.61	ppb
rep	2	BA	conc	955.29	ppb
rep	2	CD	conc	481.93	ppb
rep	2	PBILM	conc	977.44	ppb

02/24/95 09:00

ICV1

AG	av	196.27	ppb	TV	sd	0.492	%cv	0.25
BA	av	953.31	ppb	200	sd	2.801	%cv	0.29
CD	av	480.48	ppb	1000	sd	2.044	%cv	0.43
PBILM	av	977.03	ppb	500	sd	0.589	%cv	0.06
				1000	sd			

02/24/95 09:03

ICV2

rep	1	ASILM	conc	1037.07	ppb
rep	1	CR	conc	1001.77	ppb
rep	1	SEILM	conc	1014.30	ppb
rep	2	ASILM	conc	1027.44	ppb
rep	2	CR	conc	998.72	ppb
rep	2	SEILM	conc	1008.75	ppb

02/24/95 09:05

ICV2

ASILM	av	1032.25	ppb	TV	sd	6.808	%cv	0.66
CR	av	1000.24	ppb	1000	sd	2.159	%cv	0.22
SEILM	av	1011.53	ppb	1000	sd	3.930	%cv	0.39

02/24/95 09:09

ICB

rep	1	AG	conc	0.02	ppb
rep	1	ASILM	conc	-0.29	ppb
rep	1	BA	conc	0.04	ppb
rep	1	CD	conc	0.16	ppb
rep	1	CR	conc	0.74	ppb
rep	1	PBILM	conc	-0.52	ppb
rep	1	SEILM	conc	3.01	ppb
rep	2	AG	conc	-0.05	ppb
rep	2	ASILM	conc	3.80	ppb
rep	2	BA	conc	0.03	ppb
rep	2	CD	conc	0.06	ppb
rep	2	CR	conc	0.24	ppb
rep	2	PBILM	conc	0.77	ppb
rep	2	SEILM	conc	-1.48	ppb

02/24/95 09:11

ICB

AG	av	-0.01	ppb <1.00	sd	0.053	%cv	426.0
ASILM	av	1.76	ppb <4.00	sd	2.888	%cv	164.5
BA	av	0.04	ppb <5.00	sd	0.006	%cv	15.56
CD	av	0.11	ppb <0.21	sd	0.071	%cv	63.21
CR	av	0.49	ppb <1.00	sd	0.352	%cv	71.59
PBILM	av	0.12	ppb <3.00	sd	0.909	%cv	741.3
SEILM	av	0.76	ppb <5.00	sd	3.175	%cv	417.1

02/24/95 09:14

CCV1

rep	1	AG	conc	477.96	ppb
rep	1	ASILM	conc	925.82	ppb
rep	1	BA	conc	499.57	ppb
rep	1	CD	conc	503.20	ppb
rep	1	CR	conc	503.82	ppb
rep	1	PBILM	conc	989.32	ppb
rep	1	SEILM	conc	1001.17	ppb
rep	2	AG	conc	477.60	ppb
rep	2	ASILM	conc	928.26	ppb
rep	2	BA	conc	498.60	ppb
rep	2	CD	conc	503.10	ppb
rep	2	CR	conc	504.61	ppb
rep	2	PBILM	conc	990.33	ppb
rep	2	SEILM	conc	1005.83	ppb

02/24/95 09:16

CCV1

AG	av	477.78	ppb	sd	0.257	%cv	0.05
ASILM	av	927.04	ppb	sd	1.719	%cv	0.19
BA	av	499.08	ppb	sd	0.684	%cv	0.14
CD	av	503.15	ppb	sd	0.074	%cv	0.01
CR	av	504.22	ppb	sd	0.557	%cv	0.11
PBILM	av	989.83	ppb	sd	0.712	%cv	0.07
SEILM	av	1003.50	ppb	sd	3.293	%cv	0.33

02/24/95 09:19

CCB1

rep	1	AG	conc	0.02	ppb
rep	1	ASILM	conc	1.78	ppb
rep	1	BA	conc	-0.01	ppb

rep	1	CD	conc	0.03	ppb
rep	1	CR	conc	0.65	ppb
rep	1	PBILM	conc	-0.21	ppb
rep	1	SEILM	conc	-0.50	ppb
rep	2	AG	conc	-0.01	ppb
rep	2	ASILM	conc	3.18	ppb
rep	2	BA	conc	0.07	ppb
rep	2	CD	conc	0.08	ppb
rep	2	CR	conc	0.49	ppb
rep	2	PBILM	conc	0.92	ppb
rep	2	SEILM	conc	0.59	ppb

02/24/95 09:21
CCB1

AG	av	0.00	ppb	sd	0.021	%cv	931.4
ASILM	av	2.48	ppb	sd	0.989	%cv	39.83
BA	av	0.03	ppb	sd	0.061	%cv	202.8
CD	av	0.06	ppb	sd	0.035	%cv	63.65
CR	av	0.57	ppb	sd	0.111	%cv	19.49
PBILM	av	0.35	ppb	sd	0.801	%cv	225.7
SEILM	av	0.04	ppb	sd	0.773	%cv	1730.

02/24/95 09:23
ICSAI

rep	1	AG	conc	1.33	ppb
rep	1	ASILM	conc	5.10	ppb
rep	1	BA	conc	6.06	ppb
rep	1	CD	conc	24.35	ppb
rep	1	CR	conc	-11.46	ppb
rep	1	PBILM	conc	-44.24	ppb
rep	1	SEILM	conc	-56.06	ppb
rep	2	AG	conc	1.35	ppb
rep	2	ASILM	conc	10.10	ppb
rep	2	BA	conc	5.98	ppb
rep	2	CD	conc	24.23	ppb
rep	2	CR	conc	-12.11	ppb
rep	2	PBILM	conc	-46.82	ppb
rep	2	SEILM	conc	-61.66	ppb

02/24/95 09:25
ICSAI

AG	av	1.34	ppb	sd	0.015	%cv	1.13
ASILM	av	7.60	ppb	sd	3.535	%cv	46.49
BA	av	6.02	ppb	sd	0.052	%cv	0.87
CD	av	24.29	ppb	sd	0.082	%cv	0.34
CR	av	-11.78	ppb	sd	0.459	%cv	3.90
PBILM	av	-45.53	ppb	sd	1.821	%cv	4.00
SEILM	av	-58.86	ppb	sd	3.956	%cv	6.72

02/24/95 09:28
ICSABI

rep	1	AG	conc	892.53	ppb
rep	1	ASILM	conc	8.45	ppb
rep	1	BA	conc	428.53	ppb
rep	1	CD	conc	850.66	ppb
rep	1	CR	conc	408.59	ppb
rep	1	PBILM	conc	807.83	ppb
rep	1	SEILM	conc	-78.20	ppb

rep	2	AG	conc	895.48	ppb
rep	2	ASILM	conc	4.89	ppb
rep	2	BA	conc	429.31	ppb
rep	2	CD	conc	851.48	ppb
rep	2	CR	conc	407.76	ppb
rep	2	PBILM	conc	809.43	ppb
rep	2	SEILM	conc	-71.84	ppb

02/24/95 09:30

ICSABI

AG	av	894.01	ppb	sd	2.083	%cv	0.23
ASILM	av	6.67	ppb	sd	2.521	%cv	37.79
BA	av	428.92	ppb	sd	0.556	%cv	0.13
CD	av	851.07	ppb	sd	0.582	%cv	0.07
CR	av	408.18	ppb	sd	0.586	%cv	0.14
PBILM	av	808.63	ppb	sd	1.137	%cv	0.14
SEILM	av	-75.02	ppb	sd	4.501	%cv	6.00

02/24/95 09:33

CRII

rep	1	AG	conc	19.78	ppb
rep	1	ASILM	conc	4926.81	ppb
rep	1	BA	conc	384.62	ppb
rep	1	CD	conc	8.94	ppb
rep	1	CR	conc	20.54	ppb
rep	1	PBILM	conc	397.30	ppb
rep	1	SEILM	conc	4925.30	ppb

rep	2	AG	conc	19.82	ppb
rep	2	ASILM	conc	4921.14	ppb
rep	2	BA	conc	382.56	ppb
rep	2	CD	conc	9.31	ppb
rep	2	CR	conc	20.26	ppb
rep	2	PBILM	conc	400.63	ppb
rep	2	SEILM	conc	4918.60	ppb

02/24/95 09:35

CRII

AG	av	19.80	ppb	sd	0.031	%cv	0.16
ASILM	av	4923.97	ppb	sd	4.011	%cv	0.08
BA	av	383.59	ppb	sd	1.463	%cv	0.38
CD	av	9.13	ppb	sd	0.267	%cv	2.92
CR	av	20.40	ppb	sd	0.194	%cv	0.95
PBILM	av	398.97	ppb	sd	2.357	%cv	0.59
SEILM	av	4921.95	ppb	sd	4.737	%cv	0.10

02/24/95 09:41

PBS 385

rep	1	AG	conc	-0.02	ppb
rep	1	ASILM	conc	1.03	ppb
rep	1	BA	conc	0.04	ppb
rep	1	CD	conc	-0.03	ppb
rep	1	CR	conc	-0.26	ppb
rep	1	PBILM	conc	0.78	ppb
rep	1	SEILM	conc	-0.49	ppb

rep	2	AG	conc	-0.02	ppb
rep	2	ASILM	conc	2.38	ppb
rep	2	BA	conc	-0.11	ppb

Samples Dgested

lg → 100mL.

DE M 4/24/95

rep	2	CD	conc	0.23	ppb
rep	2	CR	conc	-0.47	ppb
rep	2	PBILM	conc	1.51	ppb
rep	2	SEILM	conc	-2.05	ppb

02/24/95 09:43 PBS1

PBS 305 585 KB. 3/15/95

AG	av	-0.02	ppb	<0.10	mg/kg	sd	0.006	%cv	29.79
ASILM	av	1.70	ppb	<0.40		sd	0.952	%cv	55.89
BA	av	-0.03	ppb	<0.50		sd	0.106	%cv	324.0
CD	av	0.10	ppb	<0.02		sd	0.181	%cv	183.7
CR	av	-0.37	ppb	<0.10		sd	0.149	%cv	40.68
PBILM	av	1.14	ppb	<0.30		sd	0.517	%cv	45.24
SEILM	av	-1.27	ppb	<0.50		sd	1.103	%cv	86.70

02/24/95 09:46

LCS 2/21

rep	1	AG	conc	1062.61	ppb
rep	1	ASILM	conc	1111.76	ppb
rep	1	BA	conc	1056.75	ppb
rep	1	CD	conc	1065.49	ppb
rep	1	CR	conc	1107.67	ppb
rep	1	PBILM	conc	1071.22	ppb
rep	1	SEILM	conc	1072.11	ppb

rep	2	AG	conc	1068.03	ppb
rep	2	ASILM	conc	1112.05	ppb
rep	2	BA	conc	1060.73	ppb
rep	2	CD	conc	1071.36	ppb
rep	2	CR	conc	1115.22	ppb
rep	2	PBILM	conc	1079.95	ppb
rep	2	SEILM	conc	1077.60	ppb

02/24/95 09:48

LCS 2/21

LCSS1

AG	av	1065.32	ppb	sd	3.831	%cv	0.36
ASILM	av	1111.91	ppb	sd	0.204	%cv	0.02
BA	av	1058.74	ppb	sd	2.812	%cv	0.27
CD	av	1068.43	ppb	sd	4.153	%cv	0.39
CR	av	1111.45	ppb	sd	5.338	%cv	0.48
PBILM	av	1075.59	ppb	sd	6.176	%cv	0.57
SEILM	av	1074.86	ppb	sd	3.882	%cv	0.36

9500.371

02/24/95 09:50

21915

rep	1	AG	conc	3143.30	ppb
rep	1	ASILM	conc	82.77	ppb
rep	1	BA	conc	2180.95	ppb
rep	1	CD	conc	406.52	ppb
rep	1	CR	conc	604.63	ppb
rep	1	PBILM	conc	561.00	ppb
rep	1	SEILM	conc	-186.23	ppb

rep	2	AG	conc	3171.21	ppb
rep	2	ASILM	conc	83.31	ppb
rep	2	BA	conc	2172.95	ppb
rep	2	CD	conc	405.94	ppb
rep	2	CR	conc	604.30	ppb
rep	2	PBILM	conc	558.23	ppb
rep	2	SEILM	conc	-188.66	ppb

02/24/95 09:51
21915

TP1

				mg/kg	sd		%cv	
AG	av	3157.26	ppb 316			19.739	%cv	0.63
ASILM	av	83.04	ppb 8.30			0.387	%cv	0.47
BA	av	2176.95	ppb 218			5.659	%cv	0.26
CD	av	406.23	ppb 40.6			0.416	%cv	0.10
CR	av	604.47	ppb 60.4			0.234	%cv	0.04
PBILM	av	559.62	ppb 56.0			1.962	%cv	0.35
SEILM	av	-187.44	ppb <0.50			1.722	%cv	0.92

02/24/95 09:55
21916

rep			conc	
1	AG		380.93	ppb
1	ASILM		47.39	ppb
1	BA		1314.71	ppb
1	CD		17.07	ppb
1	CR		65.99	ppb
1	PBILM		444.49	ppb
1	SEILM		-17.91	ppb
2	AG		381.64	ppb
2	ASILM		41.62	ppb
2	BA		1314.59	ppb
2	CD		16.91	ppb
2	CR		65.77	ppb
2	PBILM		439.91	ppb
2	SEILM		-13.90	ppb

02/24/95 09:57
21916

TP2

				mg/kg	sd		%cv	
AG	av	381.28	ppb 38.1			0.503	%cv	0.13
ASILM	av	44.50	ppb 4.45			4.075	%cv	9.16
BA	av	1314.65	ppb 131			0.087	%cv	0.01
CD	av	16.99	ppb 1.70			0.113	%cv	0.66
CR	av	65.88	ppb 6.59			0.155	%cv	0.24
PBILM	av	442.20	ppb 44.2			3.241	%cv	0.73
SEILM	av	-15.90	ppb <0.50			2.834	%cv	17.82

02/24/95 10:00
21917

rep			conc	
1	AG		66.31	ppb
1	ASILM		39.38	ppb
1	BA		684.86	ppb
1	CD		13.64	ppb
1	CR		51.71	ppb
1	PBILM		156.45	ppb
1	SEILM		-33.22	ppb
2	AG		66.56	ppb
2	ASILM		41.25	ppb
2	BA		687.42	ppb
2	CD		13.89	ppb
2	CR		52.16	ppb
2	PBILM		153.54	ppb
2	SEILM		-31.29	ppb

02/24/95 10:02
21917

TP3

				mg/kg	sd		%cv	
AG	av	66.43	ppb 6.64			0.177	%cv	0.27

ASILM	av	40.32	ppb 4.03	mg/kg sd	1.318	%cv	3.27
BA	av	686.14	ppb 68.6	sd	1.807	%cv	0.26
CD	av	13.77	ppb 1.38	sd	0.178	%cv	1.29
CR	av	51.94	ppb 5.19	sd	0.319	%cv	0.61
PBILM	av	154.99	ppb 15.5	sd	2.055	%cv	1.33
SEILM	av	-32.25	ppb 40.50	sd	1.361	%cv	4.22

02/24/95 10:05
21918

rep	1	AG	conc	104.77	ppb
rep	1	ASILM	conc	34.39	ppb
rep	1	BA	conc	714.44	ppb
rep	1	CD	conc	11.46	ppb
rep	1	CR	conc	55.10	ppb
rep	1	PBILM	conc	221.85	ppb
rep	1	SEILM	conc	-22.21	ppb
rep	2	AG	conc	101.91	ppb
rep	2	ASILM	conc	32.47	ppb
rep	2	BA	conc	695.44	ppb
rep	2	CD	conc	11.48	ppb
rep	2	CR	conc	54.36	ppb
rep	2	PBILM	conc	217.39	ppb
rep	2	SEILM	conc	-17.02	ppb

02/24/95 10:07 TP4A
21918

AG	av	103.34	ppb 10.3	mg/kg sd	2.021	%cv	1.96
ASILM	av	33.43	ppb 3.34	sd	1.358	%cv	4.06
BA	av	704.94	ppb 70.5	sd	13.432	%cv	1.91
CD	av	11.47	ppb 1.15	sd	0.011	%cv	0.10
CR	av	54.73	ppb 5.47	sd	0.524	%cv	0.96
PBILM	av	219.62	ppb 22.0	sd	3.151	%cv	1.43
SEILM	av	-19.61	ppb 40.50	sd	3.664	%cv	18.68

02/24/95 10:11
21918.L

rep	1	AG	conc	11.71	ppb
rep	1	ASILM	conc	1.35	ppb
rep	1	BA	conc	81.16	ppb
rep	1	CD	conc	1.27	ppb
rep	1	CR	conc	6.83	ppb
rep	1	PBILM	conc	24.91	ppb
rep	1	SEILM	conc	-5.94	ppb
rep	2	AG	conc	11.77	ppb
rep	2	ASILM	conc	4.77	ppb
rep	2	BA	conc	81.41	ppb
rep	2	CD	conc	1.27	ppb
rep	2	CR	conc	6.62	ppb
rep	2	PBILM	conc	23.90	ppb
rep	2	SEILM	conc	1.44	ppb

SERIAL DILUTION
PREPARED INCORRECTLY.
SEE BELOW.

JEM 2/24/95

02/24/95 10:12
21918.L

AG	av	11.74	ppb	sd	0.044	%cv	0.37
ASILM	av	3.06	ppb	sd	2.419	%cv	79.02
BA	av	81.29	ppb	sd	0.177	%cv	0.22
CD	av	1.27	ppb	sd	0.005	%cv	0.43
CR	av	6.72	ppb	sd	0.148	%cv	2.80

PBILM	av	24.41 ppb	sd	0.713 %cv	2.92
SEILM	av	-2.25 ppb	sd	5.216 %cv	231.6

02/24/95 10:32
CCV2

rep	1	AG	conc	489.91 ppb
rep	1	ASILM	conc	981.91 ppb
rep	1	BA	conc	506.06 ppb
rep	1	CD	conc	512.63 ppb
rep	1	CR	conc	513.07 ppb
rep	1	PBILM	conc	1006.48 ppb
rep	1	SEILM	conc	1027.25 ppb
rep	2	AG	conc	488.84 ppb
rep	2	ASILM	conc	985.52 ppb
rep	2	BA	conc	505.62 ppb
rep	2	CD	conc	511.68 ppb
rep	2	CR	conc	513.76 ppb
rep	2	PBILM	conc	1012.66 ppb
rep	2	SEILM	conc	1029.26 ppb

02/24/95 10:34
CCV2

AG	av	489.38 ppb	sd	0.756 %cv	0.15
ASILM	av	983.72 ppb	sd	2.550 %cv	0.26
BA	av	505.84 ppb	sd	0.313 %cv	0.06
CD	av	512.15 ppb	sd	0.677 %cv	0.13
CR	av	513.41 ppb	sd	0.482 %cv	0.09
PBILM	av	1009.57 ppb	sd	4.370 %cv	0.43
SEILM	av	1028.25 ppb	sd	1.422 %cv	0.14

02/24/95 10:37
CCB2

rep	1	AG	conc	0.08 ppb
rep	1	ASILM	conc	3.28 ppb
rep	1	BA	conc	0.00 ppb
rep	1	CD	conc	-0.04 ppb
rep	1	CR	conc	-0.12 ppb
rep	1	PBILM	conc	-0.21 ppb
rep	1	SEILM	conc	-2.76 ppb
rep	2	AG	conc	-0.01 ppb
rep	2	ASILM	conc	3.23 ppb
rep	2	BA	conc	-0.04 ppb
rep	2	CD	conc	0.08 ppb
rep	2	CR	conc	0.05 ppb
rep	2	PBILM	conc	-0.17 ppb
rep	2	SEILM	conc	0.60 ppb

02/24/95 10:39
CCB2

AG	av	0.03 ppb	sd	0.062 %cv	185.4
ASILM	av	3.25 ppb	sd	0.032 %cv	0.97
BA	av	-0.02 ppb	sd	0.026 %cv	157.8
CD	av	0.02 ppb	sd	0.084 %cv	419.7
CR	av	-0.03 ppb	sd	0.119 %cv	355.8
PBILM	av	-0.19 ppb	sd	0.028 %cv	14.96
SEILM	av	-1.08 ppb	sd	2.370 %cv	219.5

02/24/95 10:42

21918.L

rep	1	AG	conc	21.33	ppb
rep	1	ASILM	conc	6.00	ppb
rep	1	BA	conc	148.36	ppb
rep	1	CD	conc	2.56	ppb
rep	1	CR	conc	11.17	ppb
rep	1	PBILM	conc	45.57	ppb
rep	1	SEILM	conc	-5.64	ppb

rep	2	AG	conc	21.08	ppb
rep	2	ASILM	conc	6.71	ppb
rep	2	BA	conc	146.96	ppb
rep	2	CD	conc	2.40	ppb
rep	2	CR	conc	11.63	ppb
rep	2	PBILM	conc	44.14	ppb
rep	2	SEILM	conc	-3.34	ppb

02/24/95 10:44
21918.L

TP4A (Serial Dilution)

AG	av	21.20	ppb	sd	0.177	%cv	0.83
ASILM	av	6.36	ppb	sd	0.507	%cv	7.98
BA	av	147.66	ppb	sd	0.987	%cv	0.67
CD	av	2.48	ppb	sd	0.112	%cv	4.52
CR	av	11.40	ppb	sd	0.327	%cv	2.87
PBILM	av	44.86	ppb	sd	1.009	%cv	2.25
SEILM	av	-4.49	ppb	sd	1.626	%cv	36.24

02/24/95 10:47
ICSABF

rep	1	AG	conc	1.44	ppb
rep	1	ASILM	conc	4.45	ppb
rep	1	BA	conc	6.07	ppb
rep	1	CD	conc	25.05	ppb
rep	1	CR	conc	-12.35	ppb
rep	1	PBILM	conc	-48.56	ppb
rep	1	SEILM	conc	-71.95	ppb

rep	2	AG	conc	1.49	ppb
rep	2	ASILM	conc	6.56	ppb
rep	2	BA	conc	6.06	ppb
rep	2	CD	conc	25.18	ppb
rep	2	CR	conc	-12.55	ppb
rep	2	PBILM	conc	-46.48	ppb
rep	2	SEILM	conc	-71.91	ppb

02/24/95 10:48
ICSABF

AG	av	1.47	ppb	sd	0.034	%cv	2.29
ASILM	av	5.50	ppb	sd	1.489	%cv	27.06
BA	av	6.07	ppb	sd	0.004	%cv	0.06
CD	av	25.12	ppb	sd	0.091	%cv	0.36
CR	av	-12.45	ppb	sd	0.138	%cv	1.10
PBILM	av	-47.52	ppb	sd	1.470	%cv	3.09
SEILM	av	-71.93	ppb	sd	0.030	%cv	0.04

02/24/95 10:51
ICSABF

rep	1	AG	conc	911.30	ppb
rep	1	ASILM	conc	5.57	ppb
rep	1	BA	conc	433.80	ppb

rep	1	CD	conc	862.97	ppb
rep	1	CR	conc	411.91	ppb
rep	1	PBILM	conc	816.34	ppb
rep	1	SEILM	conc	-66.84	ppb
rep	2	AG	conc	903.56	ppb
rep	2	ASILM	conc	6.43	ppb
rep	2	BA	conc	430.57	ppb
rep	2	CD	conc	857.04	ppb
rep	2	CR	conc	408.86	ppb
rep	2	PBILM	conc	808.02	ppb
rep	2	SEILM	conc	-68.77	ppb

02/24/95 10:53

ICSABF

AG	av	907.43	ppb	sd	5.471	%cv	0.60
ASILM	av	6.00	ppb	sd	0.610	%cv	10.16
BA	av	432.19	ppb	sd	2.280	%cv	0.53
CD	av	860.00	ppb	sd	4.191	%cv	0.49
CR	av	410.38	ppb	sd	2.159	%cv	0.53
PBILM	av	812.18	ppb	sd	5.881	%cv	0.72
SEILM	av	-67.80	ppb	sd	1.360	%cv	2.01

02/24/95 10:56

CRIF

rep	1	AG	conc	19.99	ppb
rep	1	ASILM	conc	4938.27	ppb
rep	1	BA	conc	385.36	ppb
rep	1	CD	conc	9.31	ppb
rep	1	CR	conc	20.46	ppb
rep	1	PBILM	conc	396.03	ppb
rep	1	SEILM	conc	4958.78	ppb
rep	2	AG	conc	19.87	ppb
rep	2	ASILM	conc	4929.64	ppb
rep	2	BA	conc	382.94	ppb
rep	2	CD	conc	9.29	ppb
rep	2	CR	conc	20.23	ppb
rep	2	PBILM	conc	399.42	ppb
rep	2	SEILM	conc	4936.60	ppb

02/24/95 10:58

CRIF

AG	av	19.93	ppb	sd	0.083	%cv	0.42
ASILM	av	4933.95	ppb	sd	6.106	%cv	0.12
BA	av	384.15	ppb	sd	1.712	%cv	0.45
CD	av	9.30	ppb	sd	0.011	%cv	0.12
CR	av	20.35	ppb	sd	0.162	%cv	0.80
PBILM	av	397.73	ppb	sd	2.399	%cv	0.60
SEILM	av	4947.69	ppb	sd	15.689	%cv	0.32

02/24/95 11:01

CCV3

rep	1	AG	conc	478.65	ppb
rep	1	ASILM	conc	940.48	ppb
rep	1	BA	conc	494.05	ppb
rep	1	CD	conc	501.00	ppb
rep	1	CR	conc	498.25	ppb
rep	1	PBILM	conc	979.77	ppb
rep	1	SEILM	conc	1003.78	ppb

rep	2	AG	conc	479.56	ppb
rep	2	ASILM	conc	956.67	ppb
rep	2	BA	conc	494.64	ppb
rep	2	CD	conc	502.74	ppb
rep	2	CR	conc	502.84	ppb
rep	2	PBILM	conc	988.96	ppb
rep	2	SEILM	conc	1007.46	ppb

02/24/95 11:03
CCV3

AG	av	479.11	ppb	sd	0.639	%cv	0.13
ASILM	av	948.57	ppb	sd	11.448	%cv	1.21
BA	av	494.34	ppb	sd	0.417	%cv	0.08
CD	av	501.87	ppb	sd	1.233	%cv	0.25
CR	av	500.55	ppb	sd	3.248	%cv	0.65
PBILM	av	984.36	ppb	sd	6.500	%cv	0.66
SEILM	av	1005.62	ppb	sd	2.603	%cv	0.26

02/24/95 11:06
CCB3

rep	1	AG	conc	-0.01	ppb
rep	1	ASILM	conc	3.12	ppb
rep	1	BA	conc	-0.13	ppb
rep	1	CD	conc	0.12	ppb
rep	1	CR	conc	-0.23	ppb
rep	1	PBILM	conc	1.80	ppb
rep	1	SEILM	conc	2.88	ppb
rep	2	AG	conc	0.78	ppb
rep	2	ASILM	conc	3.62	ppb
rep	2	BA	conc	-0.19	ppb
rep	2	CD	conc	0.00	ppb
rep	2	CR	conc	-0.67	ppb
rep	2	PBILM	conc	-0.52	ppb
rep	2	SEILM	conc	-0.67	ppb

02/24/95 11:07
CCB3

AG	av	0.39	ppb	sd	0.557	%cv	143.2
ASILM	av	3.37	ppb	sd	0.355	%cv	10.52
BA	av	-0.16	ppb	sd	0.040	%cv	24.74
CD	av	0.06	ppb	sd	0.089	%cv	146.6
CR	av	-0.45	ppb	sd	0.315	%cv	70.11
PBILM	av	0.64	ppb	sd	1.634	%cv	255.5
SEILM	av	1.10	ppb	sd	2.504	%cv	226.6

From Page No. _____

Sl. rack in: 8:30am Out 9:30am 95°C
 Rack 1: 8:30am Out 9:30am 96°C
 Rack 2: 9:30am Out 10:30am 94°C

Std's made
 at 8:15am
 2/24/95

Job No.	ID No.	B	Read	Conc.	DF	Amnt.	Unit	Final Conc.	
	Blank	8	3						r=0.9997
	0.2 ug/L		7						y=19.92x+4.18
	0.4		12						y=-0.21
	0.8		20						
	2.0		46						
	4.0		86						
	8.0		162						
Time: 13:00	ICV		113	5.46		100 ml	ug/L	5.46	Tv=5 109? rec
13:02	ICB		3	<0.20				<0.20	
13:04	CCV		24	1.00				1.00	
13:06	CCB		4	<0.20				<0.20	
	CRA		8	0.19				0.19	
Rack	PBW	14	4	<0.20				<0.20	
PBS	PBS	19	5	<0.20				<0.20	
LCSS	LCSS	138	115	5.56		0.05 g	mg/kg	11.13	Tv=12.7 88? rec
	LCSS DUP	3	138	1.72		0.06 g		11.20	88? rec
						2/24/95			
9500.356	21822.13	13	5	<0.20		100 ml	ug/L	<0.20	
	21822.13 MS	5	26	1.10				1.10	110? rec
	21822.13 MSD	91	25	1.05				1.05	105? rec
	21823.11	3	4	<0.20				<0.20	
	21826.01	9	4	<0.20				<0.20	purge
Time: 13:28	CCV	8	26	1.10		100 ml	ug/L	1.10	
13:30	CCB	64	4	<0.20				<0.20	
9500.356	21826.01 MS	56	25	1.05		100 ml	ug/L	1.05	purge 105? rec
Rack 2	21826.01 MSD	16	24	1.00				1.00	purge 100? rec
9500.368	21906.16	10	2	<0.20				<0.20	
	21907.16	93	4	<0.20				<0.20	
9500.380	21960.11	22	4	<0.20				<0.20	
9500.386	22007.11	7	4	<0.20				<0.20	To Page No. 47

Witnessed & Understood by me,

Date

Invented by

Date

Recorded by

TITLE

(4)

Intella
2.24.95 fc

Project No.

Book No. 997

47

From Page No. 4

Rack 3: 9:30am Out 10:30am 95°C
Rack 4: 10:30am Out 11:30am 95°C

Hg

2/24/95

125

Lab No.	ID No.	B	Read	Conc.	DF	Amnt.	Unit	Final Conc.	
Rack 2									
9500.355	21814.02	14	4	<0.20		100ml	ug/l	<0.20	purge
	21815.04	11	5	<0.20		1	g	<0.20	purge
9500.367	21904.05	356	5	<0.20		1	g	<0.20	
9500.375	21929.04	209	5	<0.20		1	g	<0.20	
Time: 13:52	CCV	155	22	0.89		100ml	ug/l	0.89	
13:54	CCB	59	5	<0.20		1	g	<0.20	
9500.375	21929.04 DUP	41	3	<0.20		100ml	ug/l	<0.20	RPD=N/C
Rack 3	21929.04 SPK	146	18	0.69		1	g	0.69	purge 69% rec
9500.371	21915.010500	2	4	<0.20	100x	1ml/100ml	mg/l	<0.02	STC #6
	21916.010500	100	3	<0.20				<0.02	
	21916.010500 DUP	25	4	<0.20				<0.02	RPD=N/C
	21916.010500 SPK	15	23	0.94				0.094	94% rec
	21917.010500	30	5	<0.20				<0.02	
	21918.010500	11	5	<0.20				<0.02	
Time: 14:12	CCV	115	26	1.10		100ml	ug/l	1.10	
14:14	CCB	201	5	<0.20		1	g	<0.20	
9500.366	21897.02	403	5	<0.20		0.20g	mg/kg	<0.10	
	21898.02	372	5	<0.20		1g	g	<0.10	
	21899.02	17	7	<0.20				<0.10	
Rack 4	21900.02	112	5	<0.20				<0.10	
9500.375	21926.02	87	5	<0.20				<0.10	
	21927.02	318	6	<0.20				<0.10	SHG VAP
	21928.02	77	6	<0.20				<0.10	
9500.371	21915.01	62	159	7.77				3.89	TP1
TP1 (DUP)	21915.01 DUP	15	157	7.67				3.84	RPD=1.3
TP1 (SPIKE)	21915.01 SPK	105	184	9.03				4.51	4x rule

To Page No. 48

Witnessed & Understood by me.

RM

Date

2/24/95

Invented by

Recorded by

LS

Date

2/24/95

From Page No. 47Test Performed: HgAnalyzed At: 2/24/95Date: 2/24/95Work Performed by: 145

Job No. <u>Back 4</u>	ID No.	B B	Read	Conc.	DF	Amt.	Unit	Final Conc.	
Time: 14:36	CCV	131	26	1.10		100ml	ug/L	1.10	
14:38	CCB	83	6	<0.20		L	L	<0.20	
9500.371	21916.01	395	16	0.59		0.20g	mg/kg	0.53	TP2
	21917.01	213	8	<0.20		L	L	<0.20	TP3
	21918.01	5	9	0.24		L	L	0.24 0.12	TP1
Time: 14:46	CCV	55	27	1.15		100ml	ug/L	1.15	
14:48	CCB	82	3	<0.20		L	L	<0.20	

152/24/95

To Page N

Witnessed & Understood by me, EWDate 2/24/95

Invented by

Recorded by 145Date 2/24/95

21826.01 MS
purge
21826.01 MS
purge
21826.01 MS
CCB
CCU
21826.01
purge
21823.11
21822.13 MS
21822.13 MS

21822.13
LCSS II
LCSS II

PBS
PBW
KRA
CCB
CCU

ICB
ICU

8.0
4.0
2.0
0.8
0.4
0.2
Blank

Chart speed: 10 m
Range: 5 mV
MS 2/24/9

0	10	20	30	40	50	60	70	80	90
100	90	80	70	60	50	40	30	20	10

21918.010500

21917.010500

21916.010520 SPL

21916.010500 DUP

21916.010500

21915.010500

21929.04 SPL

purge

21929.04 DUP

CCB

CCV

21929.04

21929.05

21815.02

21814.02

purge

22007.17

21960.11

21907.16

21906.16

21826.01 msd

purge

21826.01 rms

21826.01 ms 2/20/95

CCB

CCV

21826.01

21823.11

21822.13 msd

21822.13 ms

21822.13

21822.13

21822.13

21822.13

21822.13

21822.13

21822.13

21822.13

LCSS DUP

LCSS I

PBS

90

80

70

CUB

CCV

21918.01

TP4A

21917.01

TP3

21916.01

TP2

CUB

CCV

TA3(SPA)

21915.0

SPK

TP1(DWP)

21915.01 DWP

21915.01

TP1

21928.02

21927.02

21926.02

21900.02

21899.02

21898.02

21897.02

CUB

CCV

21918.010500

21917.010500

21916.010520 SPL

21916.010500 DWP

21916.010500

21915.010500

21929.010500 SPL

DWP

58

Test Performed: **METALS DIGESTION**Date: 2/21/95Work Performed by: NS

Job Number	ID Number	pH (1-14)	Color	Clarity	Texture	Artifacts	Digestion Code (ICP)	Digestion Code (HGA)	Initial Weight or Volume	Final Weight or Volume	Color (Final)	Clarity (Final)
9500.329	21707.01				white particles		21	22	1.00g	100ml	C	C
	21708.01											
	21709.01											
	21710.01											
9500.333	21725.01				M							
9500.340	21743.03				CY							
	21743.03 DUP											
	21743.03 SPIC ^{AD}											
9500.353	21809.03											
9500.362	21880.02				SD							
9500.367	21902.03				CY							
	21903.03											
9500.371	21915.01				GS							
	21916.01											
	21917.01											
	21918.01											
9500.374	21689.01				M		21					
PBS1	PBS585		C	C			21		100ml		C	C
PBS1	PBS586							22				
LCS1	LCS						21	22				

TP1
 TP2 v.b. 2/15/95
 TP3
 TP4A

Comments:

BALANCE

MODEL S-400

CALIBRATION

SERIAL # 9645-0.50g = 0.20g witnessed1.00g = 0.20g by: par 2-21-952.00g = 2.01g

Circle one reference

REFERENCE

METHOD

CLP

SW846

3050
(SOLIDS)3010
(ICP-WATER)3020
(FURNACE-WATER)

OTHER

Δ Added 1.0 ml ICP SPIC (402102A) to ICP cont.
 □ Added 1.0 ml Fu spk (814-124) to Fu "

Approved by: RMDate: 2/23/95

METALS DIGESTION/EXTRACTION CODES

- 01 E.P. TOX Extraction Metals
- 02 E.P. TOX Extraction Organics
- 03 E. P. TOX Extraction Miscellaneous
- 04 E.P. TOX Digestion ICP
- 05 TCLP Extraction Metals
- 06 TCLP Extraction Organics
- 07 TCLP ZHE Extraction Purgeables
- 08 TCLP Digestion ICP
- 09 California Wet Test Extraction Metals
- 10 California Wet Test Extraction Organics
- 11 California Wet Test Digestion/ICP
- 12 Metals Available ICP
- 13 E.P. TOX Cr +6
- 14 MMWEP Extraction Metals
- 15 MMWEP Extraction Wet Chem.
- 16 MMWEP Digestion ICP
- 17 MMWEP Digestion Furnace
- 18 Cal. Wet Test Cr +6
- 19 TCLP Cr +6
- 20
- 21 ICP/Flame
- 22 Furnace
- 23 CR +6
- 24 Total Recoverable ICP
- 25 Total Recoverable Furnace
- 26 Soluble Metals ICP
- 27 Soluble Metals Furnace
- 28 Metals on Air Filters
- 29 Miscellaneous

COLOR CODES

- R Red
- O Orange
- G Green
- Y Yellow
- B Blue
- BR Brown
- BK Black
- CL Clear

CLARITY CODES (LIQUID)

- CL Cloudy
- C Clear

TEXTURE CODES (SOLID)

- H Homogeneous
- M Mixture
- F Fine Soil
- G Granular Soil
- SL Sludge
- CY Clay
- SD Sand

COMMENTS

- 1 Reactive
- 2 Effervescent
- 3 Phase Change
- 4 Precipitation
- 5 Other (Explain)

ARTIFACTS

- 1 Rocks
- 2 Sticks, Leaves
- 3 Shavings
- 4 Other (Explain)

Entered
2/21/12 157

157

From Page No.____

% Solids

In 12:15 @ 104°C

Out 1:54 @ 104°C

Doc. 2/21/95

Work Performed By: G. Alb

Job No. ID No.

Dish #	Dish Wgt gms	Initial Wt tared gms	Final Wgt	% Solids
--------	-----------------	-------------------------	--------------	-------------

9500.230	20775.01	1	0.9800	6.1947	6.8470	94.7
9500.232	20805.01	2	0.9790	2.0662	2.9912	97.4
9500.355	21816.03	3	0.9800	5.092	5.0270	79.5
	21817.03	4	0.9818	6.1574	5.9632	80.9
9500.371	21915.01	5	0.9812	5.8922	6.2600	89.6
	21916.01	6	0.9810	5.8237	6.0537	87.1
	21917.01	7	0.9810	5.6610	4.4309	60.9
	21918.01	8	0.9809	5.3569	3.7280	51.3

Scale: Mettler

5gms = 5.00000	2/21/95
2gms = 2.00000	
0.2gm = 0.20000	

To Page No._____.

Witnessed & Understood by me.

Date _____

Invented by

Date

Recorded by

COVER PAGE - TCLP DATA PACKAGE

SOW No.: ILM03.0

[illegible]

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

Signature: Gary Hahn Name: Gary Hahn _____
Date: 3-17-85 Title: Laboratory Manager _____

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181

TP1

Lab Code: EANDE_ Case No.: RH794 SAS No.: SDG No.: 0215

Matrix (soil/water): WATER Lab Sample ID: 21915

Level (low/med): LOW__ Date Received: 02/17/95

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: R_____ Clarity Before: C_____ Texture: _____

Color After: CL_____ Clarity After: C_____ Artifacts:

Comments :

THIS SAMPLE IS A TCLP EXTRACT

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

TP2

Lab Code: EANDE_ Case No.: RH794 SAS No.: SDG No.: 0215

Matrix (soil/water): WATER Lab Sample ID: 21916

Level (low/med): LOW Date Received: 02/17/95

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL_____ Clarity Before: C Texture:

Color After: CL_____ Clarity After: C Artifacts:

Comments :

THIS SAMPLE IS A TCLP EXTRACT

SAMPLE RESULTS

TP3

Concentration Units (mg/L): MG/L

[illegible]

THIS SAMPLE IS A TCLP EXTRACT

SAMPLE RESULTS

TP4A

Concentration Units (mg/L): MG/L

[illegible]

THIS SAMPLE IS A TCLP EXTRACT

REGULATED TCLP METALS RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

Matrix (soil/water): WATER

Concentration Units (mg/L): MG/L

Regulatory
Level[illegible]

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____

Lab Code: EANDE____ Case No.: RH794____ SAS No.: _____ SDG No.: 0215____

Initial Calibration Source: EPA-LV/P-E____

Continuing Calibration Source: VHG/NBS____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic				1000.0	973.50	97.3	998.40	99.8	P
Barium				500.0	475.40	95.1	473.50	94.7	P
Beryllium									NR
Cadmium				500.0	480.30	96.1	487.50	97.5	P
Calcium									NR
Chromium				500.0	477.60	95.5	471.90	94.4	P
Cobalt									NR
Copper									NR
Iron									NR
Lead				1000.0	931.90	93.2	998.50	99.8	P
Magnesium									NR
Manganese									NR
Mercury	5.0	5.46	109.2	1.0	1.00	100.0	1.10	110.0	CV
Nickel									NR
Potassium									NR
Selenium				1000.0	993.80	99.4	1023.00	102.3	P
Silver				500.0	462.69	92.5	462.02	92.4	P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									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: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____

Lab Code: EANDE____ Case No.: RH794____ SAS No.: _____ SDG No.: 0215____

Initial Calibration Source: EPA-LV/P-E____

Continuing Calibration Source: VH/NBS____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic				1000.0	968.00	96.8	964.00	96.4	P
Barium				500.0	468.50	93.7	475.30	95.1	P
Beryllium									NR
Cadmium				500.0	478.20	95.6	480.40	96.1	P
Calcium									NR
Chromium				500.0	464.40	92.9	476.70	95.3	P
Cobalt									NR
Copper									NR
Iron									NR
Lead				1000.0	955.20	95.5	936.80	93.7	P
Magnesium									NR
Manganese									NR
Mercury				1.0	0.89	89.0	1.10	110.0	CV
Nickel									NR
Potassium									NR
Selenium				1000.0	986.10	98.6	994.70	99.5	P
Silver				500.0	462.03	92.4	454.26	90.9	P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									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: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____

Lab Code: EANDE____ Case No.: RH794____ SAS No.: _____ SDG No.: 0215____

Initial Calibration Source: EPA-LV/P-E____

Continuing Calibration Source: VH/NBS____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic				1000.0	958.80	95.9			P
Barium				500.0	460.60	92.1			P
Beryllium									NR
Cadmium				500.0	477.10	95.4			P
Calcium									NR
Chromium				500.0	454.20	90.8			P
Cobalt									NR
Copper									NR
Iron									NR
Lead				1000.0	946.40	94.6			P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium				1000.0	975.20	97.5			P
Silver				500.0	447.06	89.4	460.90	92.2	P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: RH794_ SAS No.: _____ SDG No.: 0215_
 Initial Calibration Source: EPA-LV/P-E_
 Continuing Calibration Source: VHG/NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver				500.0	475.62	95.1			P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

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2B

CRDL STANDARD FOR AA AND ICP

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: RH794_____ SAS No.: _____ SDG No.: 0215_____

AA CRDL Standard Source: PERKIN-ELMER

ICP CRDL Standard Source: VHG_____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury	0.2	0.19	95.0					
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

FORM II (PART 2) - IN

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3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: RH794_____ SAS No.: _____ SDG No.: 0215_____

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C		1	C	2	C	3	C	C		
Aluminum											NR
Antimony											NR
Arsenic			81.2	U	81.2	U	81.2	U	81.200	U	P
Barium			7.0	U	7.0	U	7.0	U	7.000	U	P
Beryllium											NR
Cadmium			2.7	U	2.7	U	2.7	U	2.700	U	P
Calcium											NR
Chromium			9.6	U	9.6	U	9.6	U	9.600	U	P
Cobalt											NR
Copper											NR
Iron											NR
Lead			47.5	U	47.5	U	47.5	U	47.500	U	P
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel											NR
Potassium											NR
Selenium			128.0	U	128.0	U	128.0	U	128.000	U	P
Silver			0.7	U	0.7	U	0.7	U	0.700	U	P
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

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3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____

Lab Code: EANDE____ Case No.: RH794____ SAS No.: _____ SDG No.: 0215____

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C		1	C	2	C	3	C	C		
Aluminum											NR
Antimony											NR
Arsenic			81.2	U	81.2	U					P
Barium			7.0	U	7.0	U					P
Beryllium											NR
Cadmium			2.7	U	2.7	U					P
Calcium											NR
Chromium			9.6	U	9.6	U					P
Cobalt											NR
Copper											NR
Iron											NR
Lead			47.5	U	47.5	U					P
Magnesium											NR
Manganese											NR
Mercury			0.2	U							CV
Nickel											NR
Potassium											NR
Selenium			128.0	U	128.0	U					P
Silver			0.7	U							P
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

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3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: RH794_____ SAS No.: _____ SDG No.: 0215_____

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)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
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			0.7	U	0.7	U	0.7	U			P
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

NYSDEC ASP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: RH794 SAS No: _____ SDG No.: 0215_____

ICP ID Number: OPTIMA_____ ICS Source: VHG_____

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum								
Antimony								
Arsenic		0		35.0				
Barium		497		442.6	89.1			
Beryllium								
Cadmium		872		754.4	86.5			
Calcium								
Chromium		457		452.2	98.9			
Cobalt								
Copper								
Iron								
Lead		962		965.1	100.3			
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium		0		-18.2				
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

FORM IV - IN

12/91

6
 DUPLICATES

TP2D

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

[illegible]

SPIKE SAMPLE RECOVERY

TP2S

Contract : C003181

Matrix: WATER

Level (low/med): LOW

Concentration Units (mg/L) : MG/L

[illegible]

Comments :

LABORATORY CONTROL SAMPLE

Aqueous LCS Source: VHG/P-E_____

[illegible]

8

STANDARD ADDITION RESULTS

Concentration Units: ug/L

[illegible]

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10

Instrument Detection Limits (Quarterly)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794__ SAS No.: ____ SDG No.: 0215__

ICP ID Number: JY____ Date: 01/25/95

Flame AA ID Number : ____

Furnace AA ID Number : ____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	197.30		10	81.2	P
Barium	233.53		200	7.0	P
Beryllium			5		NR
Cadmium	226.50		5	2.7	P
Calcium			5000		NR
Chromium	205.56		10	9.6	P
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	220.35		3	47.5	P
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.00		5	128.0	P
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

FORM X - IN

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10

Instrument Detection Limits (Quarterly)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794__ SAS No.: __ SDG No.: 0215__

ICP ID Number: OPTIMA__ Date: 12/14/94

Flame AA ID Number : __

Furnace AA ID Number : __

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum__			200		NR
Antimony__			60		NR
Arsenic__			10		NR
Barium__			200		NR
Beryllium__			5		NR
Cadmium__			5		NR
Calcium__			5000		NR
Chromium__			10		NR
Cobalt__			50		NR
Copper__			25		NR
Iron__			100		NR
Lead__			3		NR
Magnesium__			5000		NR
Manganese__			15		NR
Mercury__			0.2		NR
Nickel__			40		NR
Potassium__			5000		NR
Selenium__			5		NR
Silver__	328.07		10	0.7	P
Sodium__			5000		NR
Thallium__			10		NR
Vanadium__			50		NR
Zinc__			20		NR

Comments:

FORM X - IN

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10

Instrument Detection Limits (Quarterly)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794__ SAS No.: __ SDG No.: 0215__

ICP ID Number: __ Date: 01/23/95

Flame AA ID Number : 2380__

Furnace AA ID Number : __

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

FORM X - IN

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11A

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794__ SAS No.: __ SDG No.: 0215__

ICP ID Number: JY__ Date: 01/03/95

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		Al	Ca	Fe	Mg	V__
Aluminum	396.15	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Antimony	217.58	-0.0000000	-0.0000000	-0.0017000	-0.0000000	-0.0000000
Arsenic	197.30	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Barium	233.53	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Beryllium	313.04	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0006000
Cadmium	226.50	-0.0000000	-0.0000000	-0.0001700	-0.0000000	-0.0000000
Calcium	317.93	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Chromium	205.56	-0.0000000	-0.0000000	-0.0002000	-0.0000000	-0.0000000
Cobalt	228.62	-0.0000000	-0.0000000	-0.0002000	-0.0000000	-0.0000000
Copper	324.75	-0.0000000	-0.0000000	-0.0002000	-0.0000000	-0.0000000
Iron	259.94	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Lead	220.35	-0.0013000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Magnesium	279.08	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Manganese	257.61	-0.0000000	-0.0000000	-0.0002000	-0.0000000	-0.0000000
Mercury						
Nickel	231.60	-0.0000000	-0.0000000	-0.0002000	-0.0000000	-0.0000000
Potassium	766.47	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Selenium	196.00	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Silver	328.07	-0.0000000	-0.0000000	-0.0002000	-0.0000000	-0.0002000
Sodium	589.59	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Thallium	190.80	-0.0000000	-0.0000000	-0.0000000	-0.0000000	-0.0000000
Vanadium	292.40	-0.0000000	-0.0000000	-0.0002300	-0.0000000	-0.0000000
Zinc	213.86	-0.0000000	-0.0000000	-0.0001700	-0.0000000	-0.0000000

Comments:

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11A

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RH794__ SAS No.: ____ SDG No.: 0215__

ICP ID Number: OPTIMA____ Date: 08/25/94

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		Al	Ca	Fe	Mg	____
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.83	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.11	0.0000000	0.0000000	0.0000000	0.0000000	
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	
Calcium	315.88	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	205.55	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	302.11	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium	766.48	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.84	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

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12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT___ Contract: C003181___

Lab Code: EANDE___ Case No.: RH794___ SAS No.: _____ SDG No.: 0215___

ICP ID Number: JY_____ Date: 02/08/95

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	2000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	10000.0	P
Cadmium	10.00	10000.0	P
Calcium	10.00	700000.0	P
Chromium	10.00	10000.0	P
Cobalt	10.00	10000.0	P
Copper	10.00	10000.0	P
Iron	10.00	500000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	700000.0	P
Manganese	10.00	10000.0	P
Mercury			NR
Nickel	10.00	10000.0	P
Potassium	10.00	700000.0	P
Selenium	10.00	10000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	700000.0	P
Thallium	10.00	10000.0	P
Vanadium	10.00	10000.0	P
Zinc	10.00	10000.0	P

Comments:

FORM XII - IN

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12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_ Case No.: RH794__ SAS No.: _____ SDG No.: 0215__

ICP ID Number: OPTIMA_____ Date: 12/07/94

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	50000.0	P
Antimony	10.00	2000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	5000.0	P
Beryllium	10.00	1000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	100000.0	P
Chromium	10.00	10000.0	P
Cobalt	10.00	10000.0	P
Copper	10.00	100000.0	P
Iron	10.00	250000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	100000.0	P
Manganese	10.00	10000.0	P
Mercury			NR
Nickel	10.00	10000.0	P
Potassium	10.00	50000.0	P
Selenium	10.00	10000.0	P
Silver	10.00	10000.0	P
Sodium	10.00	50000.0	P
Thallium	10.00	10000.0	P
Vanadium	10.00	10000.0	P
Zinc	10.00	5000.0	P

Comments:

13
PREPARATION LOG

Contract: C003181

Case No. : RH794

SAS No. : _____

SDG No. : 0215

Method: P_

[illegible]

13
PREPARATION LOG

Method: CV

[illegible]

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14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: RH794__

SAS No.: _____ SDG No.:0215__

Instrument ID Number: JY_____

Method: P_

Start Date: 03/06/95

End Date: 03/06/95

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
SO	1.00	1229		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-	-				
S	1.00	1235		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-	-				
S	1.00	1241		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
S	1.00	1246		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
CCB	1.00	1252		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
CCV	1.00	1259		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
ZZZZZZ	1.00	1311		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1317		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1323		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1329		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1336		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1342		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1348		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1354		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1400		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
CCB	1.00	1412		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
CCV	1.00	1422		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
ZZZZZZ	1.00	1429		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
CCB	1.00	1435		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
CCV	1.00	1441		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
ICSAB	1.00	1447		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
SO	1.00	1522		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
S	1.00	1528		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
S	1.00	1534		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
CCB	1.00	1538		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
CCV	1.00	1544		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
PBW	1.00	1550		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
LCSW	1.00	1557		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					
ZZZZZZ	1.00	1606		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
ZZZZZZ	1.00	1612		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TP1	1.00	1618		-	-	X	X	-	X	-	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-					

FORM XIV - IN

ILM03.0

14
ANALYSIS RUN LOG

End Date: 03/06/95

91

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: RH794__

SAS No.: _____ SDG No.: 0215__

Instrument ID Number: OPTIMA_____

Method: P_

Start Date: 03/07/95

End Date: 03/07/95

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.00	0520		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
S	1.00	0526		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
ZZZZZZ	1.00	0536		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
CCB	1.00	0541		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
CCV	1.00	0548		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
ICSAB	1.00	0553		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
ZZZZZZ	1.00	0558		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0607		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0614		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0619		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0626		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0631		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PBW	1.00	0641		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
LCSW	1.00	0645		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
CCB	1.00	0650		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
CCV	1.00	0655		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
ZZZZZZ	1.00	0658		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0704		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0707		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TP1	1.00	0713		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
TP2	1.00	0718		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
TP2D	1.00	0723		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
TP2S	1.00	0727		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
ZZZZZZ	1.00	0729		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TP3	1.00	0735		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
CCB	1.00	0740		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
CCV	1.00	0745		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
ZZZZZZ	1.00	0748		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0803		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0805		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ZZZZZZ	1.00	0809		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

FORM XIV - IN

ILM03.0

14
ANALYSIS RUN LOG

End Date: 03/07/95

93

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: RH794__

SAS No.: _____ SDG No.: 0215__

Instrument ID Number: OPTIMA_____

Method: P_

Start Date: 03/07/95

End Date: 03/07/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	1257		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
S	1.00	1301		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
ZZZZZZ	1.00	1304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1315		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	1319		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1320		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	1322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1323		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	1330		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CCV	1.00	1333		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
ICSAB	1.00	1337		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
ZZZZZZ	1.00	1343		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1346		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1350		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1354		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1358		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1403		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1409		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1413		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	1418		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CCV	1.00	1421		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
ZZZZZZ	1.00	1424		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1426		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1429		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1434		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1440		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1445		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP4A	1.00	1450		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
ZZZZZZ	1.00	1456		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1500		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

ILM03.0

14
ANALYSIS RUN LOG

End Date: 03/07/95

95

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: RH794__

SAS No.: _____ SDG No.:0215__

Instrument ID Number: 2380_____

Method: CV

Start Date: 02/24/95

End Date: 02/24/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
S0	1.00	1246		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.2	1.00	1248		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.4	1.00	1250		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.8	1.00	1252		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S2	1.00	1254		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S4	1.00	1256		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S8	1.00	1258		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICV	1.00	1300		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICB	1.00	1302		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1304		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1306		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CRA	1.00	1308		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
PBW	1.00	1310		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1314		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1316		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1318		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1320		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1324		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1326		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1328		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1330		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1332		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1334		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1336		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1338		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1340		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1342		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1344		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1346		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1348		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

ILM03.0

14
ANALYSIS RUN LOG

End Date: 02/24/95

97

Run #1

Measures :STDLOW

Entered

Copied

3/8/95 *kr*-----
Elements of SIMULTANEOUS

\$As	188.979	4.0950	0.00000	4.4590-0.36400
		4.1770	0.00000	4.3720-0.19500
		4.1290	0.00000	4.4200-0.29100
\$Se	196.026	7.5280	0.00000	7.7600-0.23200
		7.4780	0.00000	7.7240-0.24600
		7.5590	0.00000	7.7420-0.18300
\$Cr	205.559	7.1940	0.00000	6.9030 0.29100
		7.2530	0.00000	6.8160 0.43700
		7.2880	0.00000	6.9230 0.36500
\$Zn	213.856	12.921	0.00000	12.814 0.10700
		12.914	0.00000	12.827 0.08700
		12.858	0.00000	12.795 0.06300
\$Sb	217.581	5.8420	0.00000	6.2650-0.42300
		5.8170	0.00000	6.2900-0.47300
		5.9100	0.00000	6.3440-0.43400
\$Pb	220.353	20.409	20.789	0.00000-0.38000
		20.462	20.633	0.00000-0.17100
		20.577	20.630	0.00000-0.05300
\$Cd	226.502	13.032	0.00000	13.451-0.41900
		13.117	0.00000	13.262-0.14500
		13.076	0.00000	13.366-0.29000
\$Co	228.616	27.164	26.253	0.00000 0.91100
		27.155	26.386	0.00000 0.76900
		26.928	26.580	0.00000 0.34800
\$Ni	231.604	16.686	15.021	0.00000 1.6650
		16.641	14.900	0.00000 1.7410
		16.600	14.962	0.00000 1.6380
\$Ba	233.527	7.5120	0.00000	9.1500 -1.6380
		7.4680	0.00000	8.9830 -1.5150
		7.4300	0.00000	9.0730 -1.6430
\$Mn	257.610	3.9440	0.00000	0.00000 3.9440
		3.9610	0.00000	0.00000 3.9610
		3.9400	0.00000	0.00000 3.9400
\$Fe	259.940	0.67200	0.65100	0.00000 0.02100
		0.67400	0.65200	0.00000 0.02200
		0.67400	0.65300	0.00000 0.02100
\$Mg	279.079	2.6190	0.00000	2.6320-0.01300
		2.6290	0.00000	2.5920 0.03700
		2.6220	0.00000	2.6120 0.01000
\$V	292.402	5.0990	5.1460	0.00000-0.04700

Raw Data

3/6/95

98

(Continued from CLP run)

* 9500.355

* 9500.377

} TCLP

~~9500.394~~

0 9500.351 } TCLP (except Ag)

0 9500.371 }

~~9500.401 - PB TCLP~~

* PBW 609 LCS (3/2)

0 PBW 603 LCS (3/1) *kr 3/8/95*

* 9500.355

2 SAMPLES MISSING

EXTRACTION CODES

21820 & 21821 (STICP)...

kr 3/8/95

(To Bill on 3/8/95)

kr 3/8/95
98

		5.0890	5.1510	0.00000	-0.06200
		5.0980	5.1520	0.00000	-0.05400
\$Be	313.042	20.412	11.684	0.00000	8.7280
		20.515	11.772	0.00000	8.7430
		20.482	11.725	0.00000	8.7570
\$Ca	317.933	1.0000	0.00000	1.0690	-0.06900
		1.0050	0.00000	1.0690	-0.06400
		1.0020	0.00000	1.0690	-0.06700
\$Cu	324.754	15.344	14.832	0.00000	0.51200
		15.330	14.891	0.00000	0.43900
		15.390	14.839	0.00000	0.55100
\$Ag	328.068	37.274	38.452	0.00000	-1.1780
		37.310	38.513	0.00000	-1.2030
		37.296	38.456	0.00000	-1.1600
\$Al	396.152	10.411	10.208	0.00000	0.20300
		10.432	10.258	0.00000	0.17400
		10.438	10.219	0.00000	0.21900
\$Na	589.592	90.612	0.00000	0.00000	90.612
		90.825	0.00000	0.00000	90.825
		90.748	0.00000	0.00000	90.748
\$K	766.490	6.2330	5.7780	0.00000	0.45500
		6.2570	5.7910	0.00000	0.46600
		6.2400	5.7810	0.00000	0.45900

-----12:29:32 3/ 6/95 -----

Results for STDLOW # Measures :3 (R)

EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma
As\$	-0.28333/ 30%	Se\$	-0.22033/ 15%	Cr\$	0.36433/ 20%	Zn\$	0.08567/ 26%
Sb\$	-0.44333/ 5.9%	Pb\$	-0.20133/ 82%	Cd\$	-0.28467/ 48%	Co\$	0.67600/ 43%
Ni\$	1.6813/ 3.2%	Ba\$	-1.5987/ 4.5%	Mn\$	3.9483/ 0.28%	Fe\$	0.02133/ 2.7%
Mg\$	0.01133/ 220%	V \$	-0.05433/ 14%	Be\$	8.7427/ 0.17%	Ca\$	-0.06667/ 3.8%
Cu\$	0.50067/ 11%	Ag\$	-1.1803/ 1.8%	Al\$	0.19867/ 11%	Na\$	90.728/ 0.12%
K \$	0.46000/ 1.2%						

Measures :STDHIGH

Elements of SIMULTANEOUS

\$As	188.979	11.379	0.00000	4.5510	6.8280
		11.337	0.00000	4.4590	6.8780
		11.446	0.00000	4.4790	6.9670

\$Se	196.026	14.164	0.00000	7.8860	6.2780
		14.204	0.00000	7.8830	6.3210
		14.210	0.00000	7.7950	6.4150
\$Cr	205.559	73.241	0.00000	8.0680	65.173
		73.157	0.00000	8.2040	64.953
		72.973	0.00000	8.1960	64.777
\$Zn	213.856	208.81	0.00000	13.225	195.59
		208.49	0.00000	13.235	195.26
		208.66	0.00000	13.193	195.47
\$Sb	217.581	13.444	0.00000	6.4820	6.9620
		13.514	0.00000	6.3450	7.1690
		13.454	0.00000	6.3840	7.0700
\$Pb	220.353	59.866	21.539	0.00000	38.327
		59.482	21.382	0.00000	38.100
		60.033	21.387	0.00000	38.646
\$Cd	226.502	191.77	0.00000	14.004	177.77
		191.76	0.00000	13.981	177.78
		191.37	0.00000	13.759	177.61
\$Co	228.616	224.48	26.735	0.00000	197.75
		224.27	26.924	0.00000	197.35
		224.28	26.792	0.00000	197.49
\$Ni	231.604	70.332	15.233	0.00000	55.099
		70.277	15.495	0.00000	54.782
		69.955	15.396	0.00000	54.559
\$Ba	233.527	125.43	0.00000	9.4960	115.94
		125.58	0.00000	9.3730	116.21
		125.57	0.00000	9.5290	116.04
\$Mn	257.610	165.73	0.00000	0.00000	165.73
		165.77	0.00000	0.00000	165.77
		165.59	0.00000	0.00000	165.59
\$V	292.402	32.090	5.6920	0.00000	26.398
		32.123	5.6840	0.00000	26.439
		32.134	5.7270	0.00000	26.407
\$Be	313.042	1626.0	13.750	0.00000	1612.2
		1622.5	13.710	0.00000	1608.8
		1619.6	13.718	0.00000	1605.9
\$Cu	324.754	85.484	15.031	0.00000	70.453
		85.455	15.113	0.00000	70.342
		85.237	15.027	0.00000	70.210
\$Ag	328.068	163.56	43.730	0.00000	119.83
		163.47	43.942	0.00000	119.53
		163.32	43.846	0.00000	119.48
\$Al	396.152	16.788	10.263	0.00000	6.5250
		16.762	10.305	0.00000	6.4570
		16.734	10.269	0.00000	6.4650

-----12:35:46 3/ 6/95 -----

Results for STDHIGH # Measures :3 (R)

EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma
As\$	6.8910/ 1.0%	Se\$	6.3380/ 1.1%	Cr\$	64.968/ 0.31%	Zn\$	195.44/ 0.09%
Sb\$	7.0670/ 1.5%	Pb\$	38.358/ 0.72%	Cd\$	177.72/ 0.05%	Co\$	197.53/ 0.10%
Ni\$	54.813/ 0.50%	Ba\$	116.06/ 0.12%	Mn\$	165.69/ 0.06%	V \$	26.415/ 0.08%
Be\$	1609.0/ 0.20%	Cu\$	70.335/ 0.17%	Ag\$	119.61/ 0.16%	Al\$	6.4823/ 0.57%

Measures :STD2

Elements of SIMULTANEOUS

\$As	188.979	78.214	0.00000	5.0510	73.163
		78.136	0.00000	4.9980	73.138
		78.236	0.00000	5.0610	73.175
\$Se	196.026	75.344	0.00000	8.9710	66.373
		75.045	0.00000	8.9640	66.081
		75.207	0.00000	9.0260	66.181
\$Fe	259.940	30.394	0.80700	0.00000	29.587
		30.272	0.80800	0.00000	29.464
		30.370	0.80600	0.00000	29.564

-----12:41:54 3/ 6/95 -----

Results for STD2 # Measures :3 (R)

EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma
As\$	73.159/ 0.03%	Se\$	66.212/ 0.22%	Fe\$	29.538/ 0.22%

Measures :STD3

Elements of SIMULTANEOUS

\$Mg	279.079	122.66	0.00000	10.125	112.54
		122.40	0.00000	10.130	112.27
		122.24	0.00000	10.131	112.11
\$Ca	317.933	250.25	0.00000	1.7640	248.49
		249.45	0.00000	1.7480	247.71
		249.18	0.00000	1.7440	247.44

\$Na	589.592	387.87	0.00000	0.00000	387.87
		387.19	0.00000	0.00000	387.19
		387.63	0.00000	0.00000	387.63

\$K	766.490	31.874	5.9020	0.00000	25.972
		31.839	5.8820	0.00000	25.957
		31.882	5.8800	0.00000	26.002

-----12:46:39 3/ 6/95 -----

Results for STD3 # Measures :3 (R)

EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma
Mg\$	112.30/ 0.19%	Ca\$	247.88/ 0.22%	Na\$	387.57/ 0.09%	K \$	25.977/ 0.09%

Intensities for Recalibration:

El	Wave	LOW	HI
As\$	188.979	STDLOW: -0.2833	STDHIGH: 6.8910
Se\$	196.026	STDLOW: -0.2203	STDHIGH: 6.3380
Cr\$	205.559	STDLOW: 0.3643	STDHIGH: 64.9677
Zn\$	213.856	STDLOW: 0.0857	STDHIGH: 195.4393
Sb\$	217.581	STDLOW: -0.4433	STDHIGH: 7.0670
Pb\$	220.353	STDLOW: -0.2013	STDHIGH: 38.3577
Cd\$	226.502	STDLOW: -0.2847	STDHIGH: 177.7170
Co\$	228.616	STDLOW: 0.6760	STDHIGH: 197.5300
Ni\$	231.604	STDLOW: 1.6813	STDHIGH: 54.8133
Ba\$	233.527	STDLOW: -1.5987	STDHIGH: 116.0617
Mn\$	257.610	STDLOW: 3.9483	STDHIGH: 165.6937
Fe\$	259.940	STDLOW: 0.0213	STD2: 29.5383
Mg\$	279.079	STDLOW: 0.0113	STD3: 112.3040
V \$	292.402	STDLOW: -0.0543	STDHIGH: 26.4147
Be\$	313.042	STDLOW: 8.7427	STDHIGH: 1608.9647
Ca\$	317.933	STDLOW: -0.0667	STD3: 247.8770
Cu\$	324.754	STDLOW: 0.5007	STDHIGH: 70.3350
Ag\$	328.068	STDLOW: -1.1803	STDHIGH: 119.6143
Al\$	396.152	STDLOW: 0.1987	STDHIGH: 6.4823
Na\$	589.592	STDLOW: 90.7283	STD3: 387.5653
K \$	766.490	STDLOW: 0.4600	STD3: 25.9770

Measurements for CALBLK-

-

1

Elements of SIMULTANEOUS

\$As	188.979	4.2330	0.00000	4.4540-0.22100	1.9922	ppb
		4.3130	0.00000	4.4610-0.14800	2.9852	ppb
		4.2380	0.00000	4.4700-0.23200	1.8426	ppb
\$Se	196.026	7.5770	0.00000	7.9490-0.37200	-1.6498	ppb
		7.6220	0.00000	7.8710-0.24900	0.20064	ppb
		7.6600	0.00000	7.8200-0.16000	1.5396	ppb
\$Cr	205.559	7.3330	0.00000	7.0250 0.30800-0.08720		ppb
		7.3990	0.00000	6.9220 0.47700 0.17440		ppb
		7.3300	0.00000	6.9750 0.35500-0.01445		ppb

\$Zn	213.856	13.013	0.00000	12.930	0.08300-0.00137	ppb
		13.153	0.00000	12.973	0.18000 0.04829	ppb
		13.004	0.00000	12.919	0.08500-0.00034	ppb
\$Sb	217.581	5.9960	0.00000	6.3560-0.36000	2.2192	ppb
		5.9700	0.00000	6.3690-0.39900	1.1806	ppb
		5.9900	0.00000	6.3390-0.34900	2.5121	ppb
\$Pb	220.353	20.967	21.045	0.00000-0.07800	0.63971	ppb
		20.673	21.077	0.00000-0.40400	-1.0512	ppb
		20.963	21.045	0.00000-0.08200	0.61896	ppb
\$Cd	226.502	13.317	0.00000	13.560-0.24300	0.02341	ppb
		13.369	0.00000	13.563-0.19400	0.05094	ppb
		13.422	0.00000	13.692-0.27000	0.00824	ppb
\$Co	228.616	27.466	26.950	0.00000	0.51600-0.08128	ppb
		27.742	26.866	0.00000	0.87600 0.10160	ppb
		27.703	26.672	0.00000	1.0310 0.18034	ppb
\$Ni	231.604	16.761	15.297	0.00000	1.4640-0.40904	ppb
		16.944	15.304	0.00000	1.6400-0.07779	ppb
		16.849	15.196	0.00000	1.6530-0.05333	ppb
\$Ba	233.527	7.6080	0.00000	9.1820	-1.5740 0.02096	ppb
		7.6400	0.00000	9.0870	-1.4470 0.12890	ppb
		7.5870	0.00000	9.2110	-1.6240-0.02153	ppb
\$Mn	257.610	3.9980	0.00000	0.00000	3.9980 0.03071	ppb
		4.0080	0.00000	0.00000	4.0080 0.03689	ppb
		4.0040	0.00000	0.00000	4.0040 0.03442	ppb
\$Fe	259.940	0.67100	0.65800	0.00000	0.01300-0.28232	ppb
		0.67200	0.65500	0.00000	0.01700-0.14681	ppb
		0.66900	0.65700	0.00000	0.01200-0.31620	ppb
\$Mg	279.079	2.6510	0.00000	2.6620-0.01100	-1.9888	ppb
		2.6570	0.00000	2.6520	0.00500-0.56400	ppb
		2.6650	0.00000	2.6540	0.01100-0.02968	ppb
\$V	292.402	5.1990	5.2350	0.00000-0.03600	0.06926	ppb
		5.1940	5.2240	0.00000-0.03000	0.09193	ppb
		5.2250	5.1990	0.00000	0.02600 0.30350	ppb
\$Be	313.042	20.959	11.982	0.00000	8.9770 0.01464	ppb
		20.936	11.954	0.00000	8.9820 0.01496	ppb
		20.950	11.896	0.00000	9.0540 0.01946	ppb
\$Ca	317.933	0.98900	0.00000	1.0800-0.09100-0.98141	ppb	
		0.99100	0.00000	1.0810-0.09000-0.94107	ppb	
		0.98400	0.00000	1.0820-0.09800	-1.2637	ppb
\$Cu	324.754	15.674	15.193	0.00000	0.48100-0.02816	ppb
		15.722	15.144	0.00000	0.57800 0.11074	ppb
		15.658	15.099	0.00000	0.55900 0.08353	ppb
\$Ag	328.068	37.967	39.219	0.00000	-1.2520-0.05933	ppb
		38.024	39.271	0.00000	-1.2470-0.05519	ppb
		37.940	39.082	0.00000	-1.1420 0.03173	ppb

\$Al	396.152	10.570	10.453	0.00000	0.11700	-1.2997	ppb
		10.549	10.410	0.00000	0.13900	-0.94955	ppb
		10.577	10.388	0.00000	0.18900	-0.15384	ppb
\$Na	589.592	92.542	0.00000	0.00000	92.542	61.100	ppb
		92.582	0.00000	0.00000	92.582	62.447	ppb
		92.570	0.00000	0.00000	92.570	62.043	ppb
\$K	766.490	6.3770	5.8790	0.00000	0.49800	14.892	ppb
		6.3690	5.8600	0.00000	0.50900	19.203	ppb
		6.3790	5.8570	0.00000	0.52200	24.298	ppb

12:52:59 3/ 6/95 ----- Method: ILM0201

Sample CALBLK- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 f
or Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	2.273/	27%	\$Se	0.0301/+o***%		\$Cr	0.0243/	560%	\$Zn	0.0156/	180%
\$Sb	1.971/	36%	\$Pb	0.0696/+o***%		\$Cd	0.0276/	78%	\$Co	0.0668/	200%
\$Ni	-0.1801/	110%	\$Ba	0.0428/	180%	\$Mn	0.0340/	9.2%	\$Fe	-0.2484/	36%
\$Mg	-0.8608/	120%	\$V	0.1547/	83%	\$Be	0.0164/	16%	\$Ca	-1.062/	17%
\$Cu	0.0553/	130%	\$Ag	-0.0276/	190%	\$Al	-0.8010/	73%	\$Na	61.86/	1.1%
\$K	19.46/	24%									

Measurements for CCVS- - 1

Elements of SIMULTANEOUS

\$As	188.979	11.610	0.00000	4.7760	6.8340	979.56	ppb
		11.461	0.00000	4.6820	6.7790	972.08	ppb
		11.547	0.00000	4.7910	6.7560	968.95	ppb
\$Se	196.026	14.298	0.00000	8.1260	6.1720	968.01	ppb
		14.497	0.00000	8.0800	6.4170	1004.9	ppb
		14.493	0.00000	8.0510	6.4420	1008.6	ppb
\$Cr	205.559	38.832	0.00000	7.7260	31.106	475.85	ppb
		38.930	0.00000	7.6580	31.272	478.42	ppb
		38.986	0.00000	7.7110	31.275	478.47	ppb
\$Zn	213.856	108.24	0.00000	13.250	94.995	485.83	ppb
		107.60	0.00000	13.275	94.325	482.40	ppb
		108.29	0.00000	13.322	94.966	485.68	ppb
\$Sb	217.581	9.6910	0.00000	6.4770	3.2140	973.95	ppb
		9.8200	0.00000	6.4580	3.3620	1013.4	ppb
		9.7860	0.00000	6.4460	3.3400	1007.5	ppb
\$Pb	220.353	39.475	21.550	0.00000	17.925	940.19	ppb
		39.480	21.729	0.00000	17.751	931.16	ppb

		39.436	21.798	0.00000	17.638	925.30	ppb
\$Cd	226.502	99.351	0.00000	13.920	85.431	481.54	ppb
		99.004	0.00000	13.943	85.061	479.47	ppb
		99.209	0.00000	14.022	85.187	480.17	ppb
\$Co	228.616	119.70	27.513	0.00000	92.191	464.89	ppb
		119.51	27.204	0.00000	92.303	465.46	ppb
		119.36	27.333	0.00000	92.028	464.06	ppb
\$Ni	231.604	42.230	15.532	0.00000	26.698	470.84	ppb
		42.269	15.481	0.00000	26.788	472.53	ppb
		41.876	15.573	0.00000	26.303	463.41	ppb
\$Ba	233.527	63.831	0.00000	9.4230	54.408	476.00	ppb
		63.702	0.00000	9.4850	54.217	474.38	ppb
		63.818	0.00000	9.4200	54.398	475.92	ppb
\$Mn	257.610	80.326	0.00000	0.00000	80.326	472.21	ppb
		80.070	0.00000	0.00000	80.070	470.63	ppb
		80.296	0.00000	0.00000	80.296	472.02	ppb
\$Fe	259.940	2.0810	0.66400	0.00000	1.4170	472.83	ppb
		2.0770	0.66200	0.00000	1.4150	472.16	ppb
		2.0780	0.66700	0.00000	1.4110	470.80	ppb
\$Mg	279.079	61.250	0.00000	6.5970	54.653	48660	ppb
		61.083	0.00000	6.6500	54.433	48464	ppb
		61.265	0.00000	6.6120	54.653	48660	ppb
\$V	292.402	18.499	5.5350	0.00000	12.964	491.83	ppb
		18.442	5.5000	0.00000	12.942	491.00	ppb
		18.497	5.5140	0.00000	12.983	492.55	ppb
\$Be	313.042	795.80	12.898	0.00000	782.90	483.78	ppb
		792.09	12.777	0.00000	779.31	481.54	ppb
		793.82	12.789	0.00000	781.03	482.61	ppb
\$Ca	317.933	123.59	0.00000	1.4100	122.18	49305	ppb
		123.17	0.00000	1.4060	121.76	49136	ppb
		123.38	0.00000	1.4040	121.97	49222	ppb
\$Cu	324.754	48.225	15.137	0.00000	33.088	466.64	ppb
		48.103	15.145	0.00000	32.958	464.78	ppb
		48.108	15.039	0.00000	33.069	466.37	ppb
\$Ag	328.068	96.897	41.448	0.00000	55.449	468.81	ppb
		96.681	41.334	0.00000	55.347	467.96	ppb
		96.923	41.403	0.00000	55.520	469.39	ppb
\$Al	396.152	16.279	13.030	0.00000	3.2490	485.44	ppb
		16.295	13.069	0.00000	3.2260	481.78	ppb
		16.248	13.051	0.00000	3.1970	477.16	ppb
\$Na	589.592	234.11	0.00000	0.00000	234.11	48302	ppb
		233.67	0.00000	0.00000	233.67	48157	ppb
		234.13	0.00000	0.00000	234.13	48310	ppb
\$K	766.490	18.601	5.8610	0.00000	12.740	48125	ppb
		18.580	5.8520	0.00000	12.728	48078	ppb

18.627 5.8400 0.00000 12.787 48309 ppb

12:59:21 3/ 6/95 ----- Method: ILMO201

Sample CCVS-
Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 for

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	973.5/	0.56%	\$Se	993.8/	2.3%	\$Cr	477.6/	0.31%	\$Zn	484.6/	0.40%
\$Sb	998.3/	2.1%	\$Pb	931.9/	0.80%	\$Cd	480.3/	0.22%	\$Co	464.9/	0.15%
\$Ni	469.0/	1.0%	\$Ba	475.4/	0.19%	\$Mn	471.7/	0.18%	\$Fe	471.9/	0.22%
\$Mg	48600/	0.23%	\$V	492.1/	0.16%	\$Be	482.6/	0.23%	\$Ca	49220/	0.17%
\$Cu	466.0/	0.22%	\$Ag	468.8/	0.15%	\$Al	481.5/	0.86%	\$Na	48260/	0.18%
\$K	48170/	0.25%									

----- 13:11:47 3/ 6/95 ----- Method: ILMO201

Sample PBW609-
or Simul.

mg/L

1 #MEAS.= 3 for Seq., #MEAS.= 3 f

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1.412/	41%	\$Se	0.5617/	190%	\$Cr	0.0232/	330%	\$Pb	0.7364/	100%
\$Cd	-0.0129/	210%	\$Ba	0.0983/	20%	\$Fe	0.1355/	52%	\$Ag	0.1993/	18%
\$Al	0.1485/	390%									

13:17:52 3/ 6/95 ----- Method: ILMO201

Sample LCS(3/2)-
for Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1032/	0.97%	\$Se	1013/	2.4%	\$Cr	1015/	0.54%	\$Pb	971.5/	0.42%
\$Cd	1016/	0.41%	\$Ba	1011/	0.27%	\$Fe	999.3/	0.38%	\$Ag	919.9/	0.44%
\$Al	981.7/	0.34%									

KE 3/8/95

(9500.355)

13:23:55 3/ 6/95 ----- Method: ILMO201

Sample 21816-
r Simul.

mg/L

1 #MEAS.= 3 for Seq., #MEAS.= 3 fo

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	14.30/	87%	\$Se	3.059/	380%	\$Cr	1.006/	200%	\$Pb	9.843/	36%
\$Cd	0.3323/	260%	\$Ba	661.1/	0.68%	\$Fe	39.30/	1.3%	\$Ag	3.708/	9.7%

\$A1 134.4/ 9.9%

----- 13:29:58 3/ 6/95 ----- Method: ILM0201

Sample 21817- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050	
\$As	6.910/	37%	\$Se	-5.967/	200%	\$Cr	0.4489/	230%	\$Pb	-7.033/	57%
	<0.005			0.95						<0.010	
\$Cd	-0.2927/	240%	\$Ba	951.8/	0.09%	\$Fe	3.162/	27%	\$Ag	0.7567/	380%

\$A1 108.9/ 6.0%

----- 13:36:02 3/ 6/95 ----- Method: ILM0201

Sample 21820- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050	
\$As	7.907/	150%	\$Se	-8.625/	120%	\$Cr	0.9081/	40%	\$Pb	2.053/	260%
	<0.005			0.96						<0.010	
\$Cd	0.0423/	940%	\$Ba	955.9/	0.16%	\$Fe	4.517/	8.7%	\$Ag	3.514/	55%

\$A1 122.5/ 4.6%

----- 13:42:05 3/ 6/95 ----- Method: ILM0201

Sample 21821- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.10			<0.050	
\$As	-1.297/	790%	\$Se	-1.755/	280%	\$Cr	-0.9855/	43%	\$Pb	6.427/	120%
	<0.005			0.63						<0.010	
\$Cd	0.3380/	79%	\$Ba	633.6/	0.98%	\$Fe	27.89/	2.8%	\$Ag	-1.250/	170%

\$A1 151.4/ 6.5%

(9500.377)

----- 13:48:09 3/ 6/95 ----- Method: ILM0201

Sample 21934- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			0.040			4.21	
\$As	-5.106/	140%	\$Se	-22.01/	78%	\$Cr	40.38/	3.3%	\$Pb	4207/	0.18%
	0.068			0.76						<0.010	
\$Cd	67.64/	0.85%	\$Ba	762.9/	0.31%	\$Fe	61250/	0.18%	\$Ag	7.219/	26%

\$A1 1835/ 0.82%

----- 13:54:10 3/ 6/95 ----- Method: ILMO201

Sample 21935- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.19			<0.10			0.014			0.39	
\$As	6.093/	200%	\$Se	-4.312/	85%	\$Cr	14.25/	11%	\$Pb	391.1/	3.1%
	0.006			0.85						<0.010	
\$Cd	6.397/	0.74%	\$Ba	852.5/	0.55%	\$Fe	406.2/	0.17%	\$Ag	-8.959/	41%
\$Al	517.3/	1.4%									

----- 14:00:13 3/ 6/95 ----- Method: ILMO201

Sample 21936- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			0.012			4.17	
\$As	-6.602/	120%	\$Se	-26.13/	42%	\$Cr	12.21/	3.8%	\$Pb	4166/	0.15%
	0.028			0.75						<0.010	
\$Cd	27.70/	3.0%	\$Ba	749.5/	0.14%	\$Fe	22800/	0.19%	\$Ag	1.078/	73%
\$Al	855.6/	0.87%									

(9500.394) ----- 14:06:15 3/ 6/95 ----- Method: ILMO201

Sample 22059- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050	
\$As	7.544/	56%	\$Se	0.8530/+o***		\$Cr	7.002/	21%	\$Pb	3.266/	140%
	<0.005			0.94						<0.010	
\$Cd	-0.4489/	32%	\$Ba	936.9/	0.51%	\$Fe	151.1/	2.3%	\$Ag	2.470/	65%
\$Al	205.1/	9.0%									

----- 14:12:16 3/ 6/95 ----- Method: ILMO201

Sample CALBLK- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1.162/	90%	\$Se	-0.0852/	700%	\$Cr	0.0542/	140%	\$Pb	0.2782/	110%
\$Cd	0.0251/	130%	\$Ba	-0.0643/	96%	\$Fe	0.1355/	180%	\$Ag	0.1306/	110%
\$Al	0.3342/	9.9%									

----- 14:22:18 3/ 6/95 ----- Method: ILMO201

Sample C CVS- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	998.4/	4.8%	\$Se	1023/	5.2%	\$Cr	471.9/	2.9%	\$Pb	998.5/	6.3%
\$Cd	487.5/	3.1%	\$Ba	473.5/	2.7%	\$Fe	466.3/	2.9%	\$Ag	459.0/	3.3%
\$Al	529.1/	14%									

----- 14:29:31 3/ 6/95 ----- Method: ILMO201

Sample 22060- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	<0.10 8.406/	50%	\$Se	<0.10 14.39/	51%	\$Cr	<0.010 1.316/	86%	\$Pb	<0.050 15.95/	26%
\$Cd	<0.005 -0.0864/	210%	\$Ba	0.23 229.4/	0.45%	\$Fe	111.5/	1.6%	\$Ag	<0.010 1.145/	120%
\$Al	189.3/	3.4%									

----- 14:35:34 3/ 6/95 ----- Method: ILMO201

Sample CALBLT- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1.158/	50%	\$Se	1.665/	25%	\$Cr	0.0010/+o****		\$Pb	-0.5681/	230%
\$Cd	-0.0910/	110%	\$Ba	0.0096/	540%	\$Fe	-0.0791/	160%	\$Ag	-0.0803/	93%
\$Al	-1.199/	48%									

----- 14:41:39 3/ 6/95 ----- Method: ILMO201

Sample CCVS- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	968.0/	3.2%	\$Se	986.1/	5.2%	\$Cr	464.4/	1.6%	\$Pb	955.2/	4.2%
\$Cd	478.2/	2.3%	\$Ba	468.5/	1.5%	\$Fe	459.5/	2.2%	\$Ag	449.9/	2.3%
\$Al	498.7/	10%									

----- 14:47:42 3/ 6/95 ----- Method: ILMO201

Sample ICS- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	35.02/	26%	\$Se	-18.20/	140%	\$Cr	452.2/	0.25%	\$Pb	965.1/	0.50%

\$Cd 754.4/ 0.22% \$Ba 442.6/ 0.36% \$Fe 162400/ 0.12% \$Ag 788.2/ 0.06%
 \$Al 437800/ 0.12%

EL	Alpha	Beta
As 188.979	1.0050	-0.0344
Se 196.026	0.9950	0.0314
Cr 205.559	1.0009	-0.0584
Zn 213.856	1.0011	-0.2120
Sb 217.581	1.0073	-0.0515
Pb 220.353	0.9992	0.0292
Cd 226.502	1.0000	0.0063
Co 228.616	1.0000	-0.0003
Ni 231.604	0.9972	0.1547
Ba 233.527	0.9994	0.0641
Mn 257.610	1.0003	-0.0567
Fe 259.940	0.9998	0.0053
Mg 279.079	0.9999	0.0147
V 292.402	0.9997	0.0086
Be 313.042	1.0001	-0.1589
Ca 317.933	0.9999	0.0297
Cu 324.754	1.0001	-0.0074
Ag 328.068	0.9995	0.0541
Al 396.152	0.9932	0.0441
Na 589.592	1.0096	-3.7328
K 766.490	1.0010	-0.0258

----- 15:22:04 3/ 6/95 ----- Method: ILMO201

Sample STDLOW- or Simul. - 1 #MEAS.= 3 for Seq., #MEAS.= 3 f

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-0.2477/	15%	\$Se	-0.2530/	31%	\$Cr	0.4223/	20%	\$Zn	0.2973/	23%
\$Sb	-0.3890/	20%	\$Pb	-0.2307/	100%	\$Cd	-0.2910/	20%	\$Co	0.6763/	20%
\$Ni	1.531/	9.0%	\$Ba	-1.664/	0.62%	\$Mn	4.004/	0.12%	\$Fe	0.0160/	6.2%
\$Mg	-0.0033/	570%	\$V	-0.0630/	72%	\$Be	8.901/	0.92%	\$Ca	-0.0963/	2.2%
\$Cu	0.5080/	4.1%	\$Ag	-1.235/	5.7%	\$Al	0.1557/	22%	\$Na	93.56/	0.08%
\$K	0.4853/	1.2%									

EL	Alpha	Beta
As 188.979	1.0115	-0.0328
Se 196.026	1.0076	0.0346
Cr 205.559	1.0218	-0.0672
Zn 213.856	1.0246	-0.2190
Sb 217.581	1.0084	-0.0511
Pb 220.353	1.0283	0.0359
Cd 226.502	1.0193	0.0120
Co 228.616	1.0243	-0.0168
Ni 231.604	1.0231	0.1149

Ba	233.527	1.0109	0.0831
Mn	257.610	1.0227	-0.1461
V	292.402	1.0116	0.0094
Be	313.042	1.0206	-0.3411
Cu	324.754	1.0188	-0.0169
Ag	328.068	1.0240	0.0843
Al	396.152	1.0250	0.0391

----- 15:28:26 3/ 6/95 ----- Method: ILMO201

Sample STDHIGH- - 1 #MEAS.= 3 for Seq., #MEAS.= 3
for Simul.

EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma
\$As	6.845/ 1.2%	\$Se	6.256/ 0.72%	\$Cr	63.65/ 0.24%	\$Zn	191.0/ 0.35%
\$Sb	7.059/ 1.3%	\$Pb	37.27/ 0.58%	\$Cd	174.3/ 0.14%	\$Co	192.9/ 0.53%
\$Ni	53.46/ 0.06%	\$Ba	114.7/ 0.23%	\$Mn	162.2/ 0.20%	\$V	26.10/ 0.20%
\$Be	1577/ 0.37%	\$Cu	69.05/ 0.11%	\$Ag	116.7/ 0.22%	\$Al	6.286/ 0.67%

EL	Alpha	Beta
Fe 259.940	1.0256	0.0049

----- 15:34:40 3/ 6/95 ----- Method: ILMO201

Sample STD2- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for
Simul.

EL	CONC/ sigma
\$Fe	28.80/ 0.04%

----- 15:38:19 3/ 6/95 ----- Method: ILMO201

Sample CALBLK- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 f
or Simul.

EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma
\$As	1.199/ 21%	\$Se	1.092/ 62%	\$Cr	-0.0543/ 170%	\$Zn	0.1173/ 39%
\$Sb	1.522/ 54%	\$Pb	1.287/ 77%	\$Cd	0.0611/ 110%	\$Co	0.1674/ 62%
\$Ni	0.3068/ 5.7%	\$Ba	0.0341/ 170%	\$Mn	0.0531/ 6.5%	\$Fe	-0.0579/ 92%
\$V	0.1350/ 6.6%	\$Be	0.0280/ 6.7%	\$Cu	0.1580/ 37%	\$Ag	0.0090/ 520%
\$Al	0.6688/ 51%						

----- 15:44:35 3/ 6/95 ----- Method: ILMO201

Sample CCVS-
Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 for

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	964.0/	0.37%	\$Se	994.7/	1.5%	\$Cr	476.7/	0.55%	\$Zn	488.4/	0.15%
\$Sb	978.9/	0.64%	\$Pb	936.8/	1.3%	\$Cd	480.4/	0.21%	\$Co	467.9/	0.51%
\$Ni	474.6/	0.61%	\$Ba	475.3/	0.25%	\$Mn	473.5/	0.20%	\$Fe	482.3/	0.12%
\$V	493.3/	0.28%	\$Be	485.2/	0.19%	\$Cu	468.2/	0.41%	\$Ag	470.1/	0.18%
\$Al	489.7/	0.78%									

----- 15:50:51 3/ 6/95 ----- Method: ILMO201

Sample PBW603-
or Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 f

mg/L PBW1

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	<i><0.10</i>	1.066/	88%	\$Se	<i><0.10</i>	0.6926/	99%	\$Cr	<i><0.010</i>	0.1582/	56%
\$Sb	0.3133/	650%	\$Pb	<i><0.050</i>	-0.1959/	350%	\$Cd	<i><0.005</i>	0.0286/	250%	
\$Ni	0.4971/	28%	\$Ba	<i><0.020</i>	0.1105/	64%	\$Mn	0.0879/	6.8%	\$Fe	1.309/
\$V	-0.0653/	47%	\$Be	0.0115/	36%	\$Cu	0.1627/	64%	\$Ag	<i><0.010</i>	0.0475/
\$Al	0.5437/	89%									200%

----- 15:57:07 3/ 6/95 ----- Method: ILMO201

Sample LCS(3/1)-
for Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3

LCSW1

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	<i>104%</i>	1040/	0.21%	\$Se	<i>103%</i>	1027/	0.70%	\$Cr	<i>104%</i>	1038/	0.29%
\$Sb	<i>104%</i>	1037/	2.3%	\$Pb	<i>102%</i>	1020/	1.2%	\$Cd	<i>106%</i>	1060/	0.24%
\$Ni	<i>104%</i>	1037/	0.31%	\$Ba	<i>103%</i>	1034/	0.23%	\$Mn	<i>103%</i>	1028/	0.13%
\$V	<i>90.9%</i>	909.4/	0.20%	\$Be	<i>107%</i>	1069/	0.15%	\$Cu	<i>102%</i>	1018/	0.14%
\$Al	<i>104%</i>	1045/	0.44%								

(9500.351)

----- 16:06:18 3/ 6/95 ----- Method: ILMO201

Sample 21807-
r Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 fo

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050			<0.010	
\$As	-16.35/	49%	\$Se	-24.35/	50%	\$Cr	5.931/	6.1%	\$Pb	-8.039/	150%			
	<0.005			0.35										
\$Cd	0.2079/	260%	\$Ba	350.5/	0.70%	\$Fe	12.28/	7.1%	\$Ag	0.7145/	240%			
\$Al	183.7/	1.0%												

----- 16:12:21 3/ 6/95 ----- Method: ILM0201

Sample 21808- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 fo
r Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050				
\$As	17.77/	67%	\$Se	16.12/	66%	\$Cr	4.581/	14%	\$Pb	26.25/	45%			
	<0.005			4.89						<0.010				
\$Cd	0.4114/	96%	\$Ba	4889/	0.23%	\$Fe	117.4/	0.78%	\$Ag	-0.0443/	+0****			
\$Al	10890/	0.09%												

(9500.371)
----- 16:18:24 3/ 6/95 ----- Method: ILM0201

Sample 21915- TP1 1 #MEAS.= 3 for Seq., #MEAS.= 3 fo
r Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050				
\$As	-7.268/	150%	\$Se	3.691/	350%	\$Cr	1.829/	100%	\$Pb	15.71/	44%			
	0.37			0.86						0.027				
\$Cd	372.8/	0.32%	\$Ba	856.8/	0.24%	\$Fe	26.99/	2.7%	\$Ag	27.04/	4.7%			
\$Al	280.1/	1.2%												

----- 16:24:28 3/ 6/95 ----- Method: ILM0201

Sample 21916- TP2 1 #MEAS.= 3 for Seq., #MEAS.= 3 fo
r Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050				
\$As	-4.287/	320%	\$Se	14.86/	34%	\$Cr	7.001/	4.9%	\$Pb	16.85/	6.5%			
	0.015			0.72						<0.010				
\$Cd	15.04/	2.7%	\$Ba	721.7/	0.35%	\$Fe	228.7/	1.0%	\$Ag	1.995/	42%			
\$Al	337.5/	1.2%												

----- 16:30:31 3/ 6/95 ----- Method: ILM0201

Sample 21916D- TP2 (DUP) 1 #MEAS.= 3 for Seq., #MEAS.= 3 f
or Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.010			<0.050				
\$As	-6.626/	35%	\$Se	13.49/	73%	\$Cr	6.284/	36%	\$Pb	27.32/	85%			

0.015 0.73 29.010
 \$Cd 14.97/ 3.6% \$Ba 729.5/ 0.14% \$Fe 223.4/ 0.00% \$Ag 2.107/ 9.2%
 \$Al 335.9/ 1.3%

----- 16:36:35 3/ 6/95 ----- Method: ILMO201

Sample 21916S- TP2(SPIKE) 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma
\$As	92.8% 4641/ 0.40%	\$Se	94.1% 4703/ 0.41%	\$Cr	83.4% 4170/ 0.24%	\$Pb	83.6% 4178/ 0.26%
\$Cd	84.1% 856.2/ 0.32%	\$Ba	80.7% 41090/ 0.13%	\$Fe	4.401/ 28%	\$Ag	33.2% 331.8/ 0.25%
\$Al	274.0/ 2.3%						

----- 16:42:38 3/ 6/95 ----- Method: ILMO201

Sample 21917- TP3 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma
\$As	<0.10 10.53/ 38%	\$Se	<0.10 3.388/ 390%	\$Cr	<0.010 1.381/ 150%	\$Pb	<0.050 43.00/ 5.8%
\$Cd	<0.005 -1.267/ 78%	\$Ba	0.64 637.0/ 0.32%	\$Fe	545.3/ 0.20%	\$Ag	<0.010 7.052/ 15%
\$Al	518.8/ 1.6%						

----- 16:48:39 3/ 6/95 ----- Method: ILMO201

Sample 21918- TP4 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma
\$As	<0.10 27.08/ 30%	\$Se	<0.10 18.95/ 93%	\$Cr	<0.10 3.785/ 29%	\$Pb	<0.050 38.14/ 33%
\$Cd	<0.005 -0.0173/+0****	\$Ba	0.71 709.3/ 0.71%	\$Fe	349.0/ 2.9%	\$Ag	<0.010 3.729/ 62%
\$Al	469.3/ 3.3%						

----- 16:54:43 3/ 6/95 ----- Method: ILMO201

Sample FLUSH- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

8/17/95

EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma	EL	CONC/ sigma
\$As	10.11/ 140%	\$Se	9.401/ 160%	\$Cr	-0.7275/ 72%	\$Pb	-12.49/ 130%
\$Cd	-0.6597/ 23%	\$Ba	0.0802/ 670%	\$Fe	62.77/ 0.32%	\$Ag	-0.4706/ 170%
\$Al	-5.981/ 110%						

----- 17:00:44 3/ 6/95 ----- Method: ILMO201

Sample CALBLK-
or Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 f

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-0.0618/+o***%		\$Se	-0.4596/	140%	\$Cr	0.0965/	85%	\$Pb	0.0055/+o***%	
\$Cd	-0.0947/	68%	\$Ba	-0.0487/	71%	\$Fe	0.0347/	270%	\$Ag	-0.0161/	570%
\$Al	-0.2501/	180%									

----- 17:06:46 3/ 6/95 ----- Method: ILMO201

Sample CCVS-
Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 for

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	958.8/	0.22%	\$Se	975.2/	1.3%	\$Cr	454.2/	0.19%	\$Pb	946.4/	0.91%
\$Cd	477.1/	0.27%	\$Ba	460.6/	0.29%	\$Fe	454.0/	0.09%	\$Ag	438.5/	0.09%
\$Al	456.6/	1.0%									

----- 17:12:47 3/ 6/95 ----- Method: ILMO201

Sample 22098-
r Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 fo

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-13.55/	20%	\$Se	-17.28/	44%	\$Cr	0.5746/	230%	\$Pb	77.45/	23%
\$Cd	-2.103/	42%	\$Ba	1349/	0.49%	\$Fe	117.8/	1.0%	\$Ag	4.327/	27%
\$Al	167.0/	9.9%									

----- 17:18:48 3/ 6/95 ----- Method: ILMO201

Sample 22098D-
or Simul.

1 #MEAS.= 3 for Seq., #MEAS.= 3 f

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-7.177/	46%	\$Se	-3.332/	120%	\$Cr	2.678/	30%	\$Pb	51.57/	16%
\$Cd	-0.4404/	100%	\$Ba	1340/	0.82%	\$Fe	120.5/	3.6%	\$Ag	2.754/	76%
\$Al	147.9/	6.8%									

----- 17:24:50 3/ 6/95 ----- Method: ILMO201

Sample 220983-

1 #MEAS.= 3 for Seq., #MEAS.= 3 f

or Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	4952/	1.1%	\$Se	5066/	0.51%	\$Cr	4312/	0.99%	\$Pb	4704/	1.1%
\$Cd	936.4/	0.91%	\$Ba	43946/	0.83%	\$Fe	17.03/	2.0%	\$Ag	802.4/	1.2%
\$Al	112.8/	5.6%									

----- 17:30:51 3/ 6/95 ----- Method: ILMO201

Sample 22100-
r Simul. - 1 #MEAS.= 3 for Seq., #MEAS.= 3 fo

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-6.076/	130%	\$Se	-0.2499/+o****		\$Cr	0.7381/	630%	\$Pb	264.6/	3.7%
\$Cd	15.64/	2.3%	\$Ba	1043/	0.45%	\$Fe	61.85/	0.97%	\$Ag	4.248/	14%
\$Al	223.8/	4.4%									

----- 17:36:52 3/ 6/95 ----- Method: ILMO201

Sample FLUSH-
r Simul. - 1 #MEAS.= 3 for Seq., #MEAS.= 3 fo

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	12.22/	40%	\$Se	5.157/	110%	\$Cr	0.2478/	130%	\$Pb	1.400/	170%
\$Cd	-0.0401/+o****		\$Ba	0.0716/+o****		\$Fe	0.2316/	87%	\$Ag	0.7234/	190%
\$Al	7.884/	16%									

----- 17:42:54 3/ 6/95 ----- Method: ILMO201

Sample CALBLK-
or Simul. - 1 #MEAS.= 3 for Seq., #MEAS.= 3 f

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1.167/	14%	\$Se	1.749/	140%	\$Cr	0.0817/	97%	\$Pb	-1.384/	19%
\$Cd	-0.0156/	470%	\$Ba	-0.0484/	43%	\$Fe	0.9845/	8.9%	\$Ag	-0.3660/	16%
\$Al	-1.876/	24%									

----- 17:48:53 3/ 6/95 ----- Method: ILMO201

Sample CCVS-
Simul. - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
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Run #2

ANALYZE

A $\bar{A}$ A $\bar{A}$

03/07/95

05:15:20

Method Name: 9503070515 Read delay: 40 Rinse time: 0
 Format Name: clpf Replicates: 2 Data Disp: SPEC4
 Comments: Standard Condition Default Values

Entered
 Copied
 3/8/95 *RL*

Result Name: 9503070515 Store Result: **Yes** No Append
 Spectr Name: 9503070515 Store Spectrum: **Yes** No Append
 Source Name: XL Global Source: **Yes** No
 IEC Name: stdcond InterElem Corr: **Off** On

Resolution: Low **Normal** High
 Scanning: **Off** On
 Processing Mode: Peak Area **Multcomp.Spec.Fit**
 Integration Mode: **Auto** Manual
 Auto Int Samp Time: Min: 2 Max: **50**

RAW DATA
 3/7/95
 CLB/JCM

Command?	F5	F6	F7	F8	F9	F10	F11	F12
	Manual			Calib Spectrum	Repro- cessing	MSF Data	IEC Data	Optimize

Δ ~~9500.355~~ TCLP *Ag only*

Δ ~~9500.377~~

ϕ 9500.351

ϕ 9500.371

* 21918 (TCLP) NOT ON
 Run. See 9503071252
 for data. *JCM* 3/7/95

Δ PBW 609 Lcs $\frac{3}{2}$
 ϕ PBW 603 Lcs $\frac{3}{1}$

Rev *JCM* 3/7/95 **118**

Rev. Jlm 3/7/95

03/07/95 05:18

blank

rep	1	AG	sf	-123.3
rep	1	ASILM	sf	-1.9
rep	1	BA	sf	-16.3
rep	1	CD	sf	7.0
rep	1	CR	sf	-2.3
rep	1	PBILM	sf	9.1
rep	1	SEILM	sf	1.7
rep	2	AG	sf	-118.8
rep	2	ASILM	sf	-4.8
rep	2	BA	sf	-15.0
rep	2	CD	sf	9.1
rep	2	CR	sf	-6.4
rep	2	PBILM	sf	8.2
rep	2	SEILM	sf	1.0

03/07/95 05:20

blank

AG	av	-121.02	sf	sd	3.164	%cv	2.61
ASILM	av	-3.36	sf	sd	1.988	%cv	59.24
BA	av	-15.65	sf	sd	0.956	%cv	6.11
CD	av	8.04	sf	sd	1.475	%cv	18.35
CR	av	-4.30	sf	sd	2.900	%cv	67.40
PBILM	av	8.62	sf	sd	0.666	%cv	7.72
SEILM	av	1.36	sf	sd	0.480	%cv	35.35

03/07/95 05:24

#1 standard

rep	1	AG	sf	71140.2
rep	1	ASILM	sf	678.9
rep	1	BA	sf	29009.2
rep	1	CD	sf	17970.8
rep	1	CR	sf	7683.7
rep	1	PBILM	sf	3109.9
rep	1	SEILM	sf	410.5
rep	2	AG	sf	71404.3
rep	2	ASILM	sf	674.5
rep	2	BA	sf	29071.4
rep	2	CD	sf	18025.0
rep	2	CR	sf	7713.7
rep	2	PBILM	sf	3102.0
rep	2	SEILM	sf	403.0

03/07/95 05:26

#1 standard

AG	av	71272.21	sf	sd	186.759	%cv	0.26	conc	1000.0
ASILM	av	676.70	sf	sd	3.148	%cv	0.47	conc	1000.0
BA	av	29040.27	sf	sd	44.005	%cv	0.15	conc	1000.0
CD	av	17997.89	sf	sd	38.308	%cv	0.21	conc	1000.0
CR	av	7698.67	sf	sd	21.197	%cv	0.28	conc	1000.0
PBILM	av	3105.97	sf	sd	5.541	%cv	0.18	conc	2000.0
SEILM	av	406.72	sf	sd	5.305	%cv	1.30	conc	1000.0

03/07/95 05:30

1&2 ppm

rep	1	AG	conc	1005.63	ppb
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1&2 ppm

rep	1	AG	conc	1005.63	ppb
rep	1	ASILM	conc	1007.60	ppb

rep	1	BA	conc	1005.74	ppb
rep	1	CD	conc	1004.22	ppb
rep	1	CR	conc	1007.83	ppb
rep	1	PBILM	conc	2003.12	ppb
rep	1	SEILM	conc	995.05	ppb

rep	2	AG	conc	1004.84	ppb
rep	2	ASILM	conc	569.48	ppb
rep	2	BA	conc	1004.55	ppb
rep	2	CD	conc	1004.64	ppb
rep	2	CR	conc	1008.31	ppb
rep	2	PBILM	conc	1132.44	ppb
rep	2	SEILM	conc	560.70	ppb

03/07/95 05:31

1&2 ppm

AG	av	1005.24	ppb	sd	0.554	%cv	0.06
ASILM	av	788.54	ppb	sd	309.800	%cv	39.29
BA	av	1005.15	ppb	sd	0.843	%cv	0.08
CD	av	1004.43	ppb	sd	0.298	%cv	0.03
CR	av	1008.07	ppb	sd	0.336	%cv	0.03
PBILM	av	1567.78	ppb	sd	615.661	%cv	39.27
SEILM	av	777.87	ppb	sd	307.131	%cv	39.48

Den 3/1/95

03/07/95 05:34

1&2 ppm

rep	1	AG	conc	1004.96	ppb
rep	1	ASILM	conc	1010.85	ppb
rep	1	BA	conc	1005.41	ppb
rep	1	CD	conc	1004.35	ppb
rep	1	CR	conc	1004.87	ppb
rep	1	PBILM	conc	2011.22	ppb
rep	1	SEILM	conc	1003.57	ppb

rep	2	AG	conc	1002.02	ppb
rep	2	ASILM	conc	1004.74	ppb
rep	2	BA	conc	1001.06	ppb
rep	2	CD	conc	1001.83	ppb
rep	2	CR	conc	1002.75	ppb
rep	2	PBILM	conc	2005.68	ppb
rep	2	SEILM	conc	999.13	ppb

03/07/95 05:36

1&2 ppm

AG	av	1003.49	ppb	sd	2.079	%cv	0.21
ASILM	av	1007.79	ppb	sd	4.324	%cv	0.43
BA	av	1003.23	ppb	sd	3.075	%cv	0.31
CD	av	1003.09	ppb	sd	1.783	%cv	0.18
CR	av	1003.81	ppb	sd	1.498	%cv	0.15
PBILM	av	2008.45	ppb	sd	3.920	%cv	0.20
SEILM	av	1001.35	ppb	sd	3.142	%cv	0.31

03/07/95 05:39

CALBLK

rep	1	AG	conc	0.00	ppb
rep	1	ASILM	conc	-1.66	ppb
rep	1	BA	conc	0.09	ppb
rep	1	CD	conc	0.04	ppb
rep	1	CR	conc	0.20	ppb

rep	1	CD	conc	0.04	ppb
rep	1	CR	conc	0.20	ppb
rep	1	PBILM	conc	1.73	ppb

rep	1	SEILM	conc	-3.11	ppb
rep	2	AG	conc	-0.04	ppb
rep	2	ASILM	conc	-1.91	ppb
rep	2	BA	conc	-0.10	ppb
rep	2	CD	conc	0.09	ppb
rep	2	CR	conc	0.12	ppb
rep	2	PBILM	conc	0.75	ppb
rep	2	SEILM	conc	-3.89	ppb

03/07/95 05:41

CALBLK

AG	av	-0.02	ppb	sd	0.027	%cv	165.5
ASILM	av	-1.79	ppb	sd	0.172	%cv	9.64
BA	av	0.00	ppb	sd	0.139	%cv	3517.
CD	av	0.06	ppb	sd	0.033	%cv	52.01
CR	av	0.16	ppb	sd	0.061	%cv	37.88
PBILM	av	1.24	ppb	sd	0.696	%cv	56.22
SEILM	av	-3.50	ppb	sd	0.551	%cv	15.76

03/07/95 05:46

CCVS

rep	1	AG	conc	463.43	ppb
rep	1	ASILM	conc	978.28	ppb
rep	1	BA	conc	463.98	ppb
rep	1	CD	conc	467.81	ppb
rep	1	CR	conc	468.12	ppb
rep	1	PBILM	conc	936.35	ppb
rep	1	SEILM	conc	950.98	ppb
rep	2	AG	conc	461.95	ppb
rep	2	ASILM	conc	981.95	ppb
rep	2	BA	conc	463.46	ppb
rep	2	CD	conc	467.53	ppb
rep	2	CR	conc	470.38	ppb
rep	2	PBILM	conc	942.41	ppb
rep	2	SEILM	conc	962.55	ppb

03/07/95 05:48

CCVS

AG	av	462.69	ppb	sd	1.042	%cv	0.23
ASILM	av	980.11	ppb	sd	2.589	%cv	0.26
BA	av	463.72	ppb	sd	0.369	%cv	0.08
CD	av	467.67	ppb	sd	0.196	%cv	0.04
CR	av	469.25	ppb	sd	1.599	%cv	0.34
PBILM	av	939.38	ppb	sd	4.285	%cv	0.46
SEILM	av	956.76	ppb	sd	8.177	%cv	0.85

03/07/95 05:51

ICSAB

rep	1	AG	conc	803.91	ppb
rep	1	ASILM	conc	12.48	ppb
rep	1	BA	conc	446.23	ppb
rep	1	CD	conc	783.88	ppb
rep	1	CR	conc	428.15	ppb
rep	1	PBILM	conc	724.93	ppb
rep	1	SEILM	conc	-71.70	ppb

rep	2	AG	conc	806.44	ppb
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rep	2	AG	conc	806.44	ppb
rep	2	ASILM	conc	2.18	ppb

rep	2	BA	conc	446.49	ppb
rep	2	CD	conc	784.78	ppb
rep	2	CR	conc	425.92	ppb
rep	2	PBILM	conc	725.54	ppb
rep	2	SEILM	conc	-76.84	ppb

03/07/95 05:53
ICSAB

AG	av	805.18	ppb	sd	1.786	%cv	0.22
ASILM	av	7.33	ppb	sd	7.282	%cv	99.37
BA	av	446.36	ppb	sd	0.179	%cv	0.04
CD	av	784.33	ppb	sd	0.638	%cv	0.08
CR	av	427.04	ppb	sd	1.579	%cv	0.37
PBILM	av	725.24	ppb	sd	0.431	%cv	0.06
SEILM	av	-74.27	ppb	sd	3.638	%cv	4.90

03/07/95 05:56
PBW609

rep	1	AG	conc	0.00	ppb
rep	1	ASILM	conc	0.16	ppb
rep	1	BA	conc	0.04	ppb
rep	1	CD	conc	0.10	ppb
rep	1	CR	conc	0.24	ppb
rep	1	PBILM	conc	1.68	ppb
rep	1	SEILM	conc	-2.74	ppb
rep	2	AG	conc	-0.09	ppb
rep	2	ASILM	conc	0.36	ppb
rep	2	BA	conc	0.11	ppb
rep	2	CD	conc	0.20	ppb
rep	2	CR	conc	0.30	ppb
rep	2	PBILM	conc	2.69	ppb
rep	2	SEILM	conc	-3.29	ppb

03/07/95 05:58
PBW609

AG	av	-0.05	ppb <10.0	sd	0.062	%cv	133.3
ASILM	av	0.26	ppb <5.00	sd	0.142	%cv	54.08
BA	av	0.07	ppb <20.0	sd	0.055	%cv	73.44
CD	av	0.15	ppb <6.00	sd	0.073	%cv	48.14
CR	av	0.27	ppb <10.0	sd	0.048	%cv	17.86
PBILM	av	2.19	ppb <5.00	sd	0.716	%cv	32.75
SEILM	av	-3.02	ppb <5.00	sd	0.391	%cv	12.97

03/07/95 06:01
LCS(3/02)GEM

rep	1	AG	conc	972.65	ppb
rep	1	ASILM	conc	1112.38	ppb
rep	1	BA	conc	1046.60	ppb
rep	1	CD	conc	1056.61	ppb
rep	1	CR	conc	1065.33	ppb
rep	1	PBILM	conc	1065.06	ppb
rep	1	SEILM	conc	1066.10	ppb
rep	2	AG	conc	973.50	ppb
rep	2	ASILM	conc	1106.85	ppb
rep	2	BA	conc	1045.88	ppb
rep	2	CD	conc	1056.94	ppb
rep	2	CR	conc	1063.47	ppb

rep	2	LD	conc	1056.94	ppb
rep	2	CR	conc	1063.47	ppb
rep	2	PBILM	conc	1061.06	ppb

rep	2	SEILM	conc	1056.88	ppb
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03/07/95 06:02
LCS(3/02)GEM

AG	av	973.07	ppb	sd	0.606	%cv	0.06
ASILM	av	1109.62	ppb	sd	3.911	%cv	0.35
BA	av	1046.24	ppb	sd	0.514	%cv	0.05
CD	av	1056.77	ppb	sd	0.234	%cv	0.02
CR	av	1064.40	ppb	sd	1.319	%cv	0.12
PBILM	av	1063.06	ppb	sd	2.827	%cv	0.27
SEILM	av	1061.49	ppb	sd	6.522	%cv	0.61

9500.355

03/07/95 06:06
21816.030800

rep	1	AG	conc	1.70	ppb
rep	1	ASILM	conc	9.30	ppb
rep	1	BA	conc	794.30	ppb
rep	1	CD	conc	1.79	ppb
rep	1	CR	conc	-0.70	ppb
rep	1	PBILM	conc	5.82	ppb
rep	1	SEILM	conc	7.26	ppb

rep	2	AG	conc	1.89	ppb
rep	2	ASILM	conc	17.08	ppb
rep	2	BA	conc	791.54	ppb
rep	2	CD	conc	1.50	ppb
rep	2	CR	conc	-0.54	ppb
rep	2	PBILM	conc	5.96	ppb
rep	2	SEILM	conc	9.05	ppb

03/07/95 06:07
21816.030800

AG	av	1.80	ppb<0.030	sd	0.137	%cv	7.61
ASILM	av	13.19	ppb<0.300	sd	5.500	%cv	41.69
BA	av	792.92	ppb 0.713	sd	1.953	%cv	0.25
CD	av	1.64	ppb<0.015	sd	0.207	%cv	12.63
CR	av	-0.62	ppb<0.030	sd	0.109	%cv	17.61
PBILM	av	5.89	ppb<0.050	sd	0.102	%cv	1.73
SEILM	av	8.15	ppb<0.300	sd	1.267	%cv	15.54

03/07/95 06:12
21817.030800

rep	1	AG	conc	2.09	ppb
rep	1	ASILM	conc	10.84	ppb
rep	1	BA	conc	671.40	ppb
rep	1	CD	conc	1.42	ppb
rep	1	CR	conc	-0.95	ppb
rep	1	PBILM	conc	7.60	ppb
rep	1	SEILM	conc	13.83	ppb

rep	2	AG	conc	2.20	ppb
rep	2	ASILM	conc	15.88	ppb
rep	2	BA	conc	668.62	ppb
rep	2	CD	conc	1.41	ppb
rep	2	CR	conc	-1.02	ppb
rep	2	PBILM	conc	6.05	ppb
rep	2	SEILM	conc	14.09	ppb

03/07/95 06:14

03/07/95 06:14
21817.030800

AG	av	2.14	ppb < 0.030	sd	0.075	%cv	3.51
ASILM	av	13.36	ppb < 0.300	sd	3.567	%cv	26.69
BA	av	670.01	ppb 0.670	sd	1.968	%cv	0.29
CD	av	1.41	ppb < 0.015	sd	0.008	%cv	0.58
CR	av	-0.98	ppb < 0.030	sd	0.053	%cv	5.41
PBILM	av	6.83	ppb < 0.50	sd	1.098	%cv	16.09
SEILM	av	13.96	ppb < 0.300	sd	0.181	%cv	1.30

9500.317

03/07/95 06:17
21934.010800

rep	1	AG	conc	0.40	ppb
rep	1	ASILM	conc	18.18	ppb
rep	1	BA	conc	766.58	ppb
rep	1	CD	conc	74.69	ppb
rep	1	CR	conc	26.44	ppb
rep	1	PBILM	conc	4137.01	ppb
rep	1	SEILM	conc	-18.33	ppb

rep	2	AG	conc	0.49	ppb
rep	2	ASILM	conc	15.42	ppb
rep	2	BA	conc	770.30	ppb
rep	2	CD	conc	74.67	ppb
rep	2	CR	conc	26.74	ppb
rep	2	PBILM	conc	4154.99	ppb
rep	2	SEILM	conc	-16.20	ppb

03/07/95 06:19
21934.010800

AG	av	0.44	ppb < 0.030	sd	0.060	%cv	13.46
ASILM	av	16.80	ppb < 0.300	sd	1.956	%cv	11.64
BA	av	768.44	ppb 0.768	sd	2.630	%cv	0.34
CD	av	74.68	ppb 0.075	sd	0.013	%cv	0.02
CR	av	26.59	ppb < 0.030	sd	0.211	%cv	0.79
PBILM	av	4146.00	ppb 4.15	sd	12.712	%cv	0.31
SEILM	av	-17.26	ppb < 0.300	sd	1.502	%cv	8.70

03/07/95 06:24
21935.010800

rep	1	AG	conc	0.39	ppb
rep	1	ASILM	conc	15.84	ppb
rep	1	BA	conc	872.56	ppb
rep	1	CD	conc	6.83	ppb
rep	1	CR	conc	10.82	ppb
rep	1	PBILM	conc	422.48	ppb
rep	1	SEILM	conc	11.35	ppb

rep	2	AG	conc	0.40	ppb
rep	2	ASILM	conc	13.80	ppb
rep	2	BA	conc	871.39	ppb
rep	2	CD	conc	6.53	ppb
rep	2	CR	conc	10.86	ppb
rep	2	PBILM	conc	417.39	ppb
rep	2	SEILM	conc	6.94	ppb

03/07/95 06:26
21935.010800

AG	av	0.40	ppb < 0.030	sd	0.007	%cv	1.88
ASILM	av	14.82	ppb < 0.300	sd	1.441	%cv	9.73
BA	av	871.98	ppb 0.872	sd	0.833	%cv	0.10
CD	av	6.53	ppb 0.075	sd	0.013	%cv	0.02

ASILM	av	14.82	ppb < 0.300	sd	1.441	%cv	9.73
BA	av	871.98	ppb 0.872	sd	0.833	%cv	0.10
CD	av	6.68	ppb < 0.015	sd	0.216	%cv	3.23

CR	av	10.84	ppb < 0.030	sd	0.029	%cv	0.27
PBILM	av	419.93	ppb 0.419	sd	3.597	%cv	0.86
SEILM	av	9.15	ppb < 0.500	sd	3.118	%cv	34.08

03/07/95 06:30
21936.010800

rep	1	AG	conc	0.37	ppb
rep	1	ASILM	conc	14.98	ppb
rep	1	BA	conc	761.92	ppb
rep	1	CD	conc	31.71	ppb
rep	1	CR	conc	8.76	ppb
rep	1	PBILM	conc	4195.46	ppb
rep	1	SEILM	conc	4.55	ppb
rep	2	AG	conc	0.22	ppb
rep	2	ASILM	conc	13.05	ppb
rep	2	BA	conc	751.90	ppb
rep	2	CD	conc	31.69	ppb
rep	2	CR	conc	8.88	ppb
rep	2	PBILM	conc	4129.92	ppb
rep	2	SEILM	conc	0.08	ppb

03/07/95 06:31
21936.010800

AG	av	0.30	ppb < 0.030	sd	0.101	%cv	33.96
ASILM	av	14.01	ppb < 0.300	sd	1.368	%cv	9.76
BA	av	756.91	ppb 0.757	sd	7.082	%cv	0.94
CD	av	31.70	ppb 0.032	sd	0.017	%cv	0.05
CR	av	8.82	ppb < 0.030	sd	0.082	%cv	0.93
PBILM	av	4162.69	ppb 4.16	sd	46.339	%cv	1.11
SEILM	av	2.32	ppb < 0.030	sd	3.155	%cv	136.2

03/07/95 06:39
PBW603

rep	1	AG	conc	0.09	ppb
rep	1	ASILM	conc	-0.70	ppb
rep	1	BA	conc	1.08	ppb
rep	1	CD	conc	-0.09	ppb
rep	1	CR	conc	1.79	ppb
rep	1	PBILM	conc	2.94	ppb
rep	1	SEILM	conc	-4.01	ppb
rep	2	AG	conc	-0.09	ppb
rep	2	ASILM	conc	2.12	ppb
rep	2	BA	conc	1.00	ppb
rep	2	CD	conc	0.13	ppb
rep	2	CR	conc	1.97	ppb
rep	2	PBILM	conc	4.74	ppb
rep	2	SEILM	conc	-8.67	ppb

03/07/95 06:41
PBW603

AG	av	0.00	ppb < 10.0	sd	0.122	%cv	14134
ASILM	av	0.71	ppb < 5.00	sd	1.996	%cv	281.1
BA	av	1.01	ppb < 20.0	sd	0.013	%cv	1.33
CD	av	0.02	ppb < 5.00	sd	0.154	%cv	648.7
CR	av	1.88	ppb < 10.0	sd	0.132	%cv	7.05
PBILM	av	3.84	ppb < 5.00	sd	1.269	%cv	33.07
SEILM	av	-6.34	ppb < 5.00	sd	3.297	%cv	51.98

PBILM	av	3.84	ppb	4.00	sd	1.269	%cv	33.07
SEILM	av	-6.34	ppb	45.00	sd	3.297	%cv	51.98

03/07/95 06:44
LCS(3/01)GEM

rep	1	AG	conc	1053.31	ppb
rep	1	ASILM	conc	1122.79	ppb
rep	1	BA	conc	1065.39	ppb
rep	1	CD	conc	1102.52	ppb
rep	1	CR	conc	1079.16	ppb
rep	1	PBILM	conc	1087.00	ppb
rep	1	SEILM	conc	1264.47	ppb
rep	2	AG	conc	1040.32	ppb
rep	2	ASILM	conc	1108.37	ppb
rep	2	BA	conc	1053.31	ppb
rep	2	CD	conc	1091.32	ppb
rep	2	CR	conc	1066.92	ppb
rep	2	PBILM	conc	1084.52	ppb
rep	2	SEILM	conc	1256.71	ppb

03/07/95 06:45
LCS(3/01)GEM

LCSW1

12 3/8/95

AG	av	1046.82	ppb	105%	sd	9.185	%cv	0.88
ASILM	av	1115.58	ppb		sd	10.196	%cv	0.91
BA	av	1059.35	ppb		sd	8.541	%cv	0.81
CD	av	1096.92	ppb		sd	7.924	%cv	0.72
CR	av	1073.04	ppb		sd	8.657	%cv	0.81
PBILM	av	1085.76	ppb		sd	1.759	%cv	0.16
SEILM	av	1260.59	ppb		sd	5.488	%cv	0.44

see reanalysis. Ben 7/1/95

03/07/95 06:49
CALBLK

rep	1	AG	conc	0.06	ppb
rep	1	ASILM	conc	1.59	ppb
rep	1	BA	conc	0.02	ppb
rep	1	CD	conc	0.07	ppb
rep	1	CR	conc	0.24	ppb
rep	1	PBILM	conc	2.26	ppb
rep	1	SEILM	conc	-3.18	ppb
rep	2	AG	conc	0.10	ppb
rep	2	ASILM	conc	-0.94	ppb
rep	2	BA	conc	0.07	ppb
rep	2	CD	conc	0.00	ppb
rep	2	CR	conc	0.22	ppb
rep	2	PBILM	conc	1.75	ppb
rep	2	SEILM	conc	-3.55	ppb

03/07/95 06:50
CALBLK

AG	av	0.08	ppb	sd	0.030	%cv	36.57
ASILM	av	0.33	ppb	sd	1.788	%cv	546.8
BA	av	0.05	ppb	sd	0.029	%cv	63.43
CD	av	0.03	ppb	sd	0.054	%cv	159.6
CR	av	0.23	ppb	sd	0.012	%cv	5.24
PBILM	av	2.00	ppb	sd	0.360	%cv	17.95
SEILM	av	-3.36	ppb	sd	0.262	%cv	7.80

03/07/95 06:54
CCVS

rep	1	AG	conc	462.33	ppb
rep	1	ASILM	conc	206.25	ppb

CCVS

rep	1	AG	conc	462.33	ppb
rep	1	ASILM	conc	996.05	ppb

rep	1	BA	conc	465.32	ppb
rep	1	CD	conc	472.59	ppb
rep	1	CR	conc	470.05	ppb
rep	1	PBILM	conc	941.82	ppb
rep	1	SEILM	conc	973.86	ppb

rep	2	AG	conc	461.71	ppb
rep	2	ASILM	conc	998.00	ppb
rep	2	BA	conc	465.09	ppb
rep	2	CD	conc	472.29	ppb
rep	2	CR	conc	471.62	ppb
rep	2	PBILM	conc	943.49	ppb
rep	2	SEILM	conc	970.19	ppb

03/07/95 06:55

CCVS

AG	av	462.02	ppb	sd	0.443	%cv	0.10
ASILM	av	997.03	ppb	sd	1.382	%cv	0.14
BA	av	465.21	ppb	sd	0.161	%cv	0.03
CD	av	472.44	ppb	sd	0.211	%cv	0.04
CR	av	470.83	ppb	sd	1.110	%cv	0.24
PBILM	av	942.65	ppb	sd	1.181	%cv	0.13
SEILM	av	972.03	ppb	sd	2.598	%cv	0.27

03/07/95 06:58

LCS(3/01)GEM

rep	1	SEILM	conc	1229.87	ppb
rep	2	SEILM	conc	1239.57	ppb

03/07/95 06:58

LCS(3/01)GEM

SEILM	av	1234.72	ppb	sd	6.861	%cv	0.56
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4500.351

03/07/95 07:02

21807.010800

rep	1	AG	conc	0.56	ppb
rep	1	ASILM	conc	15.04	ppb
rep	1	BA	conc	345.71	ppb
rep	1	CD	conc	0.60	ppb
rep	1	CR	conc	1.38	ppb
rep	1	PBILM	conc	-2.30	ppb
rep	1	SEILM	conc	19.47	ppb

rep	2	AG	conc	0.70	ppb
rep	2	ASILM	conc	13.50	ppb
rep	2	BA	conc	346.72	ppb
rep	2	CD	conc	0.67	ppb
rep	2	CR	conc	1.04	ppb
rep	2	PBILM	conc	-0.73	ppb
rep	2	SEILM	conc	16.52	ppb

03/07/95 07:04

21807.010800

AG	av	0.63	ppb	<0.030	ms	sd	0.100	%cv	15.89
ASILM	av	14.27	ppb	<0.300	ms	sd	1.091	%cv	7.65
BA	av	346.22	ppb	<0.346	ms	sd	0.714	%cv	0.21
CD	av	0.64	ppb	<0.015	ms	sd	0.047	%cv	7.45
CR	av	1.21	ppb	<0.530	ms	sd	0.244	%cv	20.17

CD	av	0.64	ppb < 0.015	sd	0.047	%cv	7.45
CR	av	1.21	ppb < 0.030	sd	0.244	%cv	20.17
PBILM	av	1.51	ppb < 0.030	sd	1.107	%cv	73.23

< 0.150

SEILM	av	18.00	ppb < 0.300	sd	2.089	%cv	11.61
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03/07/95 07:06

21808.010800

rep	1	AG	conc	4.26	ppb
rep	1	ASILM	conc	13.54	ppb
rep	1	BA	conc	4868.93	ppb
rep	1	CD	conc	0.90	ppb
rep	1	CR	conc	2.99	ppb
rep	1	PBILM	conc	30.32	ppb
rep	1	SEILM	conc	10.22	ppb

rep	2	AG	conc	4.29	ppb
rep	2	ASILM	conc	14.10	ppb
rep	2	BA	conc	4779.27	ppb
rep	2	CD	conc	0.91	ppb
rep	2	CR	conc	2.84	ppb
rep	2	PBILM	conc	31.62	ppb
rep	2	SEILM	conc	11.42	ppb

03/07/95 07:07

21808.010800

AG	av	4.27	ppb < 0.030	sd	0.022	%cv	0.51
ASILM	av	13.82	ppb < 0.300	sd	0.394	%cv	2.85
BA	av	4824.10	ppb < 4.82	sd	63.397	%cv	1.31
CD	av	0.90	ppb < 0.015	sd	0.011	%cv	1.23
CR	av	2.92	ppb < 0.030	sd	0.104	%cv	3.56
PBILM	av	30.97	ppb < 0.150	sd	0.917	%cv	2.96
SEILM	av	10.82	ppb < 0.300	sd	0.852	%cv	7.87

9500.371

03/07/95 07:12

21915.010800

rep	1	AG	conc	27.99	ppb
rep	1	ASILM	conc	12.97	ppb
rep	1	BA	conc	837.03	ppb
rep	1	CD	conc	353.87	ppb
rep	1	CR	conc	0.59	ppb
rep	1	PBILM	conc	4.30	ppb
rep	1	SEILM	conc	20.68	ppb

rep	2	AG	conc	27.91	ppb
rep	2	ASILM	conc	15.94	ppb
rep	2	BA	conc	834.78	ppb
rep	2	CD	conc	351.63	ppb
rep	2	CR	conc	0.83	ppb
rep	2	PBILM	conc	6.34	ppb
rep	2	SEILM	conc	18.23	ppb

03/07/95 07:13

21915.010800

AG	av	27.95	ppb < 0.030	sd	0.062	%cv	0.22
ASILM	av	14.46	ppb < 0.300	sd	2.100	%cv	14.52
BA	av	835.91	ppb < 0.836	sd	1.592	%cv	0.19
CD	av	352.75	ppb < 0.353	sd	1.588	%cv	0.45
CR	av	0.71	ppb < 0.030	sd	0.168	%cv	23.67
PBILM	av	5.32	ppb < 0.150	sd	1.441	%cv	27.08
SEILM	av	19.46	ppb < 0.300	sd	1.732	%cv	8.90

03/07/95 07:17

21016.010800

03/07/95 07:17
21916.010800

rep	1	AG	conc	3.22	ppb
rep	1	ASILM	conc	13.79	ppb
rep	1	BA	conc	711.95	ppb
rep	1	CD	conc	15.69	ppb
rep	1	CR	conc	4.89	ppb
rep	1	PBILM	conc	19.48	ppb
rep	1	SEILM	conc	17.49	ppb

rep	2	AG	conc	3.26	ppb
rep	2	ASILM	conc	15.42	ppb
rep	2	BA	conc	710.21	ppb
rep	2	CD	conc	15.68	ppb
rep	2	CR	conc	4.90	ppb
rep	2	PBILM	conc	18.27	ppb
rep	2	SEILM	conc	16.01	ppb

03/07/95 07:18 TPZ
21916.010800

AG	av	3.24	ppb	<0.030	mg	sd	0.030	%cv	0.94
ASILM	av	14.60	ppb	<0.300	mg	sd	1.150	%cv	7.87
BA	av	711.08	ppb	0.74		sd	1.230	%cv	0.17
CD	av	15.69	ppb	0.016		sd	0.007	%cv	0.05
CR	av	4.89	ppb	<0.030		sd	0.009	%cv	0.18
PBILM	av	18.88	ppb	<0.150		sd	0.857	%cv	4.54
SEILM	av	16.75	ppb	<0.300		sd	1.043	%cv	6.23

03/07/95 07:22
21916D

rep	1	AG	conc	3.46	ppb
rep	1	ASILM	conc	16.01	ppb
rep	1	BA	conc	719.97	ppb
rep	1	CD	conc	15.74	ppb
rep	1	CR	conc	3.78	ppb
rep	1	PBILM	conc	16.40	ppb
rep	1	SEILM	conc	11.24	ppb

rep	2	AG	conc	3.36	ppb
rep	2	ASILM	conc	16.92	ppb
rep	2	BA	conc	719.97	ppb
rep	2	CD	conc	15.57	ppb
rep	2	CR	conc	3.57	ppb
rep	2	PBILM	conc	17.78	ppb
rep	2	SEILM	conc	18.75	ppb

03/07/95 07:23
21916D

AG	av	3.41	ppb	<0.030	mg	sd	0.067	%cv	1.95
ASILM	av	16.47	ppb	<0.300	mg	sd	0.643	%cv	3.90
BA	av	719.97	ppb	0.120		sd	0.001	%cv	0.00
CD	av	15.66	ppb	0.016		sd	0.124	%cv	0.79
CR	av	3.67	ppb	<0.030		sd	0.152	%cv	4.14
PBILM	av	17.09	ppb	<0.150		sd	0.978	%cv	5.72
SEILM	av	15.00	ppb	<0.300		sd	5.314	%cv	35.43

03/07/95 07:26
21916S

rep	1	AG	conc	349.02	ppb
rep	1	ASILM	conc	5084.77	ppb
rep	1	BA	conc	38718.55	ppb

rep	1	ASILM	conc	5084.77	ppb
rep	1	BA	conc	38718.55	ppb
rep	1	CD	conc	833.70	ppb

rep	1	CR	conc	4194.26	ppb
rep	1	PBILM	conc	4180.01	ppb
rep	1	SEILM	conc	5159.63	ppb

rep	2	AG	conc	347.45	ppb
rep	2	ASILM	conc	5073.04	ppb
rep	2	BA	conc	38663.29	ppb
rep	2	CD	conc	829.32	ppb
rep	2	CR	conc	4176.05	ppb
rep	2	PBILM	conc	4160.58	ppb
rep	2	SEILM	conc	5171.30	ppb

03/07/95 07:27 TP2(SPIKE)

21916S

AG	av	348.23	ppb	0.34	mg	sd	1.111	%cv	0.32
ASILM	av	5078.90	ppb	5.08	mg	sd	8.298	%cv	0.16
BA	av	38690.91	ppb	386.91	mg	sd	39.078	%cv	0.10
CD	av	831.51	ppb	0.831	mg	sd	3.102	%cv	0.37
CR	av	4185.15	ppb	4.18	mg	sd	12.874	%cv	0.31
PBILM	av	4170.29	ppb	4.17	mg	sd	13.738	%cv	0.33
SEILM	av	5165.46	ppb	5.16	mg	sd	8.252	%cv	0.16

03/07/95 07:29

21916S(1:10)

rep	1	BA	conc	4572.24	ppb
rep	2	BA	conc	4569.06	ppb

03/07/95 07:29

21916S(1:10)

BA	av	4570.65	ppb	45.7	mg	sd	2.252	%cv	0.05
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03/07/95 07:33

21917.010800

rep	1	AG	conc	0.94	ppb
rep	1	ASILM	conc	31.62	ppb
rep	1	BA	conc	659.11	ppb
rep	1	CD	conc	0.92	ppb
rep	1	CR	conc	1.81	ppb
rep	1	PBILM	conc	14.87	ppb
rep	1	SEILM	conc	14.36	ppb

rep	2	AG	conc	0.95	ppb
rep	2	ASILM	conc	31.65	ppb
rep	2	BA	conc	656.25	ppb
rep	2	CD	conc	1.06	ppb
rep	2	CR	conc	1.75	ppb
rep	2	PBILM	conc	16.59	ppb
rep	2	SEILM	conc	8.89	ppb

03/07/95 07:35

21917.010800

AG	av	0.95	ppb	<0.030	mg	sd	0.003	%cv	0.36
ASILM	av	31.64	ppb	<0.300	mg	sd	0.021	%cv	0.07
BA	av	657.68	ppb	0.657	mg	sd	2.022	%cv	0.31
CD	av	0.99	ppb	<0.015	mg	sd	0.102	%cv	10.34
CR	av	1.78	ppb	<0.030	mg	sd	0.041	%cv	2.28
PBILM	av	15.73	ppb	<0.150	mg	sd	1.215	%cv	7.72
SEILM	av	11.63	ppb	<0.300	mg	sd	3.868	%cv	33.27

PBILM	av	15.73 ppb	sd	1.215 %cv	7.72
SEILM	av	11.63 ppb	sd	3.868 %cv	33.27

03/07/95 07:39
CALBLK

rep	1	AG	conc	-0.08 ppb
rep	1	ASILM	conc	1.65 ppb
rep	1	BA	conc	0.07 ppb
rep	1	CD	conc	-0.09 ppb
rep	1	CR	conc	0.06 ppb
rep	1	PBILM	conc	2.00 ppb
rep	1	SEILM	conc	-0.14 ppb
rep	2	AG	conc	0.09 ppb
rep	2	ASILM	conc	-0.84 ppb
rep	2	BA	conc	0.16 ppb
rep	2	CD	conc	0.03 ppb
rep	2	CR	conc	0.17 ppb
rep	2	PBILM	conc	2.71 ppb
rep	2	SEILM	conc	-4.76 ppb

03/07/95 07:40
CALBLK

AG	av	0.01 ppb	sd	0.121 %cv	2370.
ASILM	av	0.40 ppb	sd	1.758 %cv	437.5
BA	av	0.12 ppb	sd	0.063 %cv	54.07
CD	av	-0.03 ppb	sd	0.090 %cv	297.7
CR	av	0.12 ppb	sd	0.081 %cv	69.91
PBILM	av	2.35 ppb	sd	0.500 %cv	21.26
SEILM	av	-2.45 ppb	sd	3.268 %cv	133.5

03/07/95 07:43
CCVS

rep	1	AG	conc	461.44 ppb
rep	1	ASILM	conc	1007.50 ppb
rep	1	BA	conc	466.32 ppb
rep	1	CD	conc	472.88 ppb
rep	1	CR	conc	472.44 ppb
rep	1	PBILM	conc	945.32 ppb
rep	1	SEILM	conc	975.59 ppb
rep	2	AG	conc	462.63 ppb
rep	2	ASILM	conc	1002.37 ppb
rep	2	BA	conc	467.59 ppb
rep	2	CD	conc	474.80 ppb
rep	2	CR	conc	473.86 ppb
rep	2	PBILM	conc	952.61 ppb
rep	2	SEILM	conc	974.76 ppb

03/07/95 07:45
CCVS

AG	av	462.04 ppb	sd	0.842 %cv	0.18
ASILM	av	1004.94 ppb	sd	3.627 %cv	0.36
BA	av	466.95 ppb	sd	0.899 %cv	0.19
CD	av	473.84 ppb	sd	1.352 %cv	0.29
CR	av	473.15 ppb	sd	1.007 %cv	0.21
PBILM	av	948.96 ppb	sd	5.155 %cv	0.54
SEILM	av	975.18 ppb	sd	0.590 %cv	0.06

03/07/95 07:47
21916 MSA

rep	1	AG	conc	3.32 ppb
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21916 MSA

rep 1 AG conc 3.32 ppb

rep 2 AG conc 3.18 ppb

MSA for Ag
not required.

JCM 3/1/95

03/07/95 07:48

21916 MSA

AG

av 3.25 ppb sd 0.094 %cv 2.91

03/07/95 07:58

21916+50ppb

rep 1 AG conc 7.78 ppb

03/07/95 08:03

21916+50ppb

rep 1 AG conc 47.79 ppb

rep 2 AG conc 47.53 ppb

03/07/95 08:03

21916+50ppb

AG

av 47.66 ppb sd 0.185 %cv 0.39

03/07/95 08:05

21916+100ppb

rep 1 AG conc 100.82 ppb

rep 2 AG conc 101.35 ppb

03/07/95 08:05

21916+100ppb

AG

av 101.09 ppb sd 0.372 %cv 0.37

03/07/95 08:09

21916+150ppb

rep 1 AG conc 133.53 ppb

rep 2 AG conc 132.46 ppb

03/07/95 08:09

21916+150ppb

AG

av 133.00 ppb sd 0.757 %cv 0.57

03/07/95 08:12

LCS(3/01)GEM

sample capillary removed prematurely. JCM 3/1/95

rep 1 SEILM conc 1234.97 ppb

rep 2 SEILM conc 703.62 ppb

03/07/95 08:13

LCS(3/01)GEM

SEILM

av 969.30 ppb sd 375.720 %cv 38.76

03/07/95 08:15

LCS(3/01)GEM

rep 1 SEILM conc 1020.07 ppb

rep 2 SEILM conc 1018.38 ppb

03/07/95 08:16

LCS(3/01)GEM

SEILM

av 1019.22 ppb sd 1.198 %cv 0.12

LCS(3/01)GEM

SEILM

av

1019.22 ppb

sd

1.198 %cv

0.12

03/07/95 08:19

CALBLK

rep	1	AG	conc	0.09	ppb
rep	1	ASILM	conc	3.09	ppb
rep	1	BA	conc	0.27	ppb
rep	1	CD	conc	-0.10	ppb
rep	1	CR	conc	0.35	ppb
rep	1	PBILM	conc	0.42	ppb
rep	1	SEILM	conc	-4.01	ppb
rep	2	AG	conc	0.13	ppb
rep	2	ASILM	conc	-1.84	ppb
rep	2	BA	conc	0.09	ppb
rep	2	CD	conc	0.11	ppb
rep	2	CR	conc	0.15	ppb
rep	2	PBILM	conc	1.36	ppb
rep	2	SEILM	conc	-2.80	ppb

03/07/95 08:21

CALBLK

AG	av	0.11	ppb	sd	0.028	%cv	24.63
ASILM	av	0.63	ppb	sd	3.486	%cv	553.7
BA	av	0.18	ppb	sd	0.125	%cv	70.61
CD	av	0.00	ppb	sd	0.149	%cv	7052.
CR	av	0.25	ppb	sd	0.141	%cv	56.40
PBILM	av	0.89	ppb	sd	0.666	%cv	74.75
SEILM	av	-3.40	ppb	sd	0.854	%cv	25.12

03/07/95 08:23

CCVS

rep	1	AG	conc	454.22	ppb
rep	1	ASILM	conc	974.21	ppb
rep	1	BA	conc	456.38	ppb
rep	1	CD	conc	460.52	ppb
rep	1	CR	conc	459.92	ppb
rep	1	PBILM	conc	923.17	ppb
rep	1	SEILM	conc	949.41	ppb
rep	2	AG	conc	454.30	ppb
rep	2	ASILM	conc	975.99	ppb
rep	2	BA	conc	456.84	ppb
rep	2	CD	conc	460.30	ppb
rep	2	CR	conc	462.85	ppb
rep	2	PBILM	conc	927.63	ppb
rep	2	SEILM	conc	950.67	ppb

03/07/95 08:25

CCVS

AG	av	454.26	ppb	sd	0.056	%cv	0.01
ASILM	av	975.10	ppb	sd	1.255	%cv	0.13
BA	av	456.61	ppb	sd	0.321	%cv	0.07
CD	av	460.41	ppb	sd	0.154	%cv	0.03
CR	av	461.38	ppb	sd	2.072	%cv	0.45
PBILM	av	925.40	ppb	sd	3.158	%cv	0.34
SEILM	av	950.04	ppb	sd	0.890	%cv	0.09

03/07/95 08:28

ICSAB

rep	1	AG	conc	764.10	ppb
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rep	1	AG	conc	764.10	ppb
rep	1	ASILM	conc	5.12	ppb

rep	1	BA	conc	420.24	ppb
rep	1	CD	conc	732.94	ppb
rep	1	CR	conc	403.31	ppb
rep	1	PBILM	conc	688.41	ppb
rep	1	SEILM	conc	-61.72	ppb

rep	2	AG	conc	767.82	ppb
rep	2	ASILM	conc	4.43	ppb
rep	2	BA	conc	421.78	ppb
rep	2	CD	conc	733.87	ppb
rep	2	CR	conc	400.66	ppb
rep	2	PBILM	conc	684.08	ppb
rep	2	SEILM	conc	-69.28	ppb

03/07/95 08:30

ICSAB

AG	av	765.96	ppb	sd	2.624	%cv	0.34
ASILM	av	4.77	ppb	sd	0.489	%cv	10.24
BA	av	421.01	ppb	sd	1.093	%cv	0.26
CD	av	733.40	ppb	sd	0.663	%cv	0.09
CR	av	401.99	ppb	sd	1.878	%cv	0.47
PBILM	av	686.25	ppb	sd	3.062	%cv	0.45
SEILM	av	-65.50	ppb	sd	5.343	%cv	8.16

Run# 3

ANALYZE

A F Ar A

03/07/95

12:52:35

Method Name: 9503071252 Read delay: 50 Rinse time: 0
 Format Name: clpf Replicates: 2 Data Disp: SPEC4
 Comments: Standard Condition Default Values

Entered
 &
 Copied
 3/10/95 KR

Result Name: 9503071252 Store Result: **Yes** No Append
 Spectr Name: 9503071252 Store Spectrum: **Yes** No Append
 Source Name: XL Global Source: **Yes** No
 IEC Name: stdcond InterElem Corr: **Off** On

Resolution: Low **Normal** High
 Scanning: **Off** On
 Processing Mode: Peak Area **Multcomp.Spec.Fit**
 Integration Mode: **Auto** Manual
 Auto Int Samp Time: Min: 2 Max: **50**

Raw Data
 3/07/95
 GEM

Command?

F5	F6	F7	F8	F9	F10	F11	F12
Manual			Calib Spectrum	Repro- cessing	MSF Data	IEC Data	Optimize

Ø 9500.358 - As, Cd, Cr and Pb (SW846 Water)

Ø 9500.362 - Fe, Mn and Pb (SW846 Water)

Ø 9500.414 - Fe, Mn and Pb (SW846 Water)

Ø 9500.400 - As, Pb, Se and Ti (SW846 Water)

Ø 9500.431 - (22313) - Cd, Fe and Pb (SW846 Water)

Ø 9500.431 - (22315) - Cd, Cu, Fe, Pb and V (SW846 Water)

Ø 9500.431 - (22317 and 22318) - Ag, As, Ba, Cd, Cr, Fe, Pb and Se (SW846 Water)

ALREADY STATUS "8" → 103/08/95 Ø 9500.371 - TCLP metals - Ag only

Ø 9500.367 - As, Pb, Se, Ti and P.P. Metals (SW846 Water)

Ø 9500.426 - (22298) - As, Pb, Se and P.P. Metals (SW846 Water)

Reviewed by evs on 3/08/95
 135

Ø PBW6/6 and LCS(3/06) and LCS(3/06)2200

Ø FBW6/6 and LCS(3/06) and LCS (3/06) 2222

03/07/95 12:56

blank

rep	1	AG	sf	-118.6
rep	1	ASILM	sf	-2.5
rep	1	BA	sf	-13.0
rep	1	BE	sf	-10552.5
rep	1	CD	sf	5.1
rep	1	CR	sf	-3.9
rep	1	CU	sf	395.6
rep	1	FE	em	-92.4
rep	1	MN	sf	-104.3
rep	1	NI	sf	54.8
rep	1	PBILM	sf	6.8
rep	1	SB	sf	-17.2
rep	1	SEILM	sf	0.8
rep	1	TL	sf	-4.9
rep	1	VZ	sf	-208.7
rep	1	ZN	sf	-54.4

rep	2	AG	sf	-118.5
rep	2	ASILM	sf	-1.4
rep	2	BA	sf	-14.4
rep	2	BE	sf	-10562.2
rep	2	CD	sf	7.3
rep	2	CR	sf	-3.8
rep	2	CU	sf	405.3
rep	2	FE	em	-89.8
rep	2	MN	sf	-104.1
rep	2	NI	sf	60.4
rep	2	PBILM	sf	8.4
rep	2	SB	sf	-20.5
rep	2	SEILM	sf	0.7
rep	2	TL	sf	-1.6
rep	2	VZ	sf	-194.3
rep	2	ZN	sf	-55.0

03/07/95 12:57

blank

AG	av	-118.56	sf	sd	0.046	%cv	0.04
ASILM	av	-1.95	sf	sd	0.765	%cv	39.32
BA	av	-13.70	sf	sd	0.984	%cv	7.18
BE	av	-10557.35	sf	sd	6.919	%cv	0.07
CD	av	6.21	sf	sd	1.600	%cv	25.76
CR	av	-3.84	sf	sd	0.075	%cv	1.95
CU	av	400.42	sf	sd	6.866	%cv	1.71
FE	av	-91.07	em	sd	1.834	%cv	2.01
MN	av	-104.20	sf	sd	0.162	%cv	0.16
NI	av	57.61	sf	sd	3.953	%cv	6.86
PBILM	av	7.59	sf	sd	1.111	%cv	14.64
SB	av	-18.84	sf	sd	2.382	%cv	12.65
SEILM	av	0.72	sf	sd	0.097	%cv	13.48
TL	av	-3.24	sf	sd	2.282	%cv	70.52
VZ	av	-201.49	sf	sd	10.165	%cv	5.04
ZN	av	-54.69	sf	sd	0.468	%cv	0.86

03/07/95 13:00

#1 standard

rep	1	AG	sf	67510.8
rep	1	ASILM	sf	647.1
rep	1	BA	sf	28038.9

rep	1	BE	sf	2650146.8
rep	1	CD	sf	17281.2
rep	1	CR	sf	7377.7
rep	1	CU	sf	108070.4
rep	1	MN	sf	142688.3
rep	1	NI	sf	7113.3
rep	1	PBILM	sf	2996.7
rep	1	SEILM	sf	403.7
rep	1	VZ	sf	72505.8
rep	1	ZN	sf	19333.1
rep	2	AG	sf	66988.8
rep	2	ASILM	sf	651.8
rep	2	BA	sf	27655.6
rep	2	BE	sf	2662713.8
rep	2	CD	sf	17218.2
rep	2	CR	sf	7327.8
rep	2	CU	sf	106356.2
rep	2	MN	sf	141892.7
rep	2	NI	sf	7109.7
rep	2	PBILM	sf	2989.5
rep	2	SEILM	sf	401.9
rep	2	VZ	sf	71933.3
rep	2	ZN	sf	19207.8

03/07/95 13:01

#1 standard

AG	av	67249.79	sf	sd	369.129	%cv	0.55	conc	1000.0
ASILM	av	649.47	sf	sd	3.309	%cv	0.51	conc	1000.0
BA	av	27847.25	sf	sd	271.010	%cv	0.97	conc	1000.0
BE	av	2656430.	sf	sd	8886.181	%cv	0.33	conc	1000.0
CD	av	17249.70	sf	sd	44.602	%cv	0.26	conc	1000.0
CR	av	7352.72	sf	sd	35.289	%cv	0.48	conc	1000.0
CU	av	107213.3	sf	sd	1212.161	%cv	1.13	conc	1000.0
MN	av	142290.4	sf	sd	562.580	%cv	0.40	conc	1000.0
NI	av	7111.51	sf	sd	2.513	%cv	0.04	conc	1000.0
PBILM	av	2993.12	sf	sd	5.100	%cv	0.17	conc	2000.0
SEILM	av	402.82	sf	sd	1.306	%cv	0.32	conc	1000.0
VZ	av	72219.57	sf	sd	404.849	%cv	0.56	conc	1000.0
ZN	av	19270.45	sf	sd	88.578	%cv	0.46	conc	1000.0

03/07/95 13:03

1&2PPM

rep	1	AG	conc	1000.17	ppb
rep	1	ASILM	conc	1002.37	ppb
rep	1	BA	conc	998.19	ppb
rep	1	BE	conc	994.10	ppb
rep	1	CD	conc	999.62	ppb
rep	1	CR	conc	1000.81	ppb
rep	1	CU	conc	1004.72	ppb
rep	1	FE	em	560.9	
rep	1	MN	conc	999.69	ppb
rep	1	NI	conc	997.02	ppb
rep	1	PBILM	conc	1998.99	ppb
rep	1	SB	sf	2028.8	
rep	1	SEILM	conc	994.46	ppb
rep	1	TL	sf	1276.1	
rep	1	VZ	conc	999.14	ppb
rep	1	ZN	conc	994.76	ppb

rep	2	AG	conc	996.77	ppb
rep	2	ASILM	conc	1007.70	ppb
rep	2	BA	conc	995.78	ppb
rep	2	BE	conc	985.32	ppb
rep	2	CD	conc	1001.77	ppb
rep	2	CR	conc	994.19	ppb
rep	2	CU	conc	998.65	ppb
rep	2	FE	em	558.9	
rep	2	MN	conc	995.50	ppb
rep	2	NI	conc	994.39	ppb
rep	2	PBILM	conc	1994.40	ppb
rep	2	SB	sf	2020.7	
rep	2	SEILM	conc	1006.40	ppb
rep	2	TL	sf	1285.7	
rep	2	VZ	conc	998.00	ppb
rep	2	ZN	conc	994.50	ppb

03/07/95 13:04

1&2PPM

AG	av	998.47	ppb	sd	2.404	%cv	0.24
ASILM	av	1005.04	ppb	sd	3.769	%cv	0.38
BA	av	996.98	ppb	sd	1.708	%cv	0.17
BE	av	989.71	ppb	sd	6.212	%cv	0.63
CD	av	1000.69	ppb	sd	1.525	%cv	0.15
CR	av	997.50	ppb	sd	4.681	%cv	0.47
CU	av	1001.69	ppb	sd	4.291	%cv	0.43
FE	av	559.09	em	sd	1.391	%cv	0.25
MN	av	997.59	ppb	sd	2.962	%cv	0.30
NI	av	995.71	ppb	sd	1.861	%cv	0.19
PBILM	av	1996.70	ppb	sd	3.246	%cv	0.16
SB	av	2024.75	sf	sd	5.671	%cv	0.28
SEILM	av	1000.43	ppb	sd	8.440	%cv	0.84
TL	av	1280.92	sf	sd	6.828	%cv	0.53
VZ	av	998.57	ppb	sd	0.812	%cv	0.08
ZN	av	994.63	ppb	sd	0.179	%cv	0.02

Not Calibrated
con 3/08/95
Not Calibrated
con 3/08/95
Not Calibrated
con 3/08/95

03/07/95 13:09

#1 standard

rep	1	SB	sf	2032.9
rep	1	TL	sf	1270.7
rep	2	SB	sf	2019.8
rep	2	TL	sf	1282.7

03/07/95 13:10

#1 standard

SB	av	2026.37	sf	sd	9.245	%cv	0.46	conc	1000.0
TL	av	1276.70	sf	sd	8.487	%cv	0.66	conc	1000.0

03/07/95 13:12

#1 standard

rep	1	SB	sf	2032.2
rep	2	SB	sf	2018.3

03/07/95 13:12

#1 standard

SB	av	2025.27	sf	sd	9.792	%cv	0.48	conc	2000.0
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03/07/95 13:14

1PPM

rep	1	SB	conc	1662.63 ppb
rep	1	TL	conc	1010.53 ppb
rep	2	SB	conc	1655.45 ppb
rep	2	TL	conc	1007.32 ppb

03/07/95 13:15

1PPM

Recalibrate on 3/08/95

SB	av	1659.04 ppb	sd	5.081 %cv	0.31
TL	av	1008.92 ppb	sd	2.269 %cv	0.22

03/07/95 13:18

#1 standard

rep	1	SB	sf	2024.6
rep	2	SB	sf	2028.0

03/07/95 13:19

#1 standard

SB	av	2026.27 sf	sd	2.424 %cv	0.12 conc	2000.0
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03/07/95 13:20

2PPM

rep	1	SB	conc	1985.28 ppb
rep	2	SB	conc	1986.24 ppb

03/07/95 13:20

2PPM

SB	av	1985.76 ppb	sd	0.675 %cv	0.03
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03/07/95 13:22

#2 standard

rep	1	FE	em	6329.5
rep	2	FE	em	6389.7

03/07/95 13:22

#2 standard

FE	av	6359.6 em	sd	42.60 %cv	0.67 conc	10000.
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03/07/95 13:23

10PPM

rep	1	FE	conc	9952.9 ppb
rep	2	FE	conc	9948.0 ppb

03/07/95 13:23

10PPM

FE	av	9950.5 ppb	sd	3.47 %cv	0.03
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03/07/95 13:28

CALBLK

rep	1	AG	conc	0.09 ppb
rep	1	ASILM	conc	-2.37 ppb
rep	1	BA	conc	-0.02 ppb
rep	1	BE	conc	0.04 ppb
rep	1	CD	conc	0.49 ppb
rep	1	CR	conc	0.24 ppb

rep	1	CU	conc	0.05	ppb
rep	1	FE	conc	3.4	ppb
rep	1	MN	conc	0.05	ppb
rep	1	NI	conc	0.20	ppb
rep	1	PBILM	conc	1.08	ppb
rep	1	SB	conc	2.87	ppb
rep	1	SEILM	conc	-1.14	ppb
rep	1	TL	conc	-0.32	ppb
rep	1	VZ	conc	-0.05	ppb
rep	1	ZN	conc	0.41	ppb

rep	2	AG	conc	0.01	ppb
rep	2	ASILM	conc	0.02	ppb
rep	2	BA	conc	-0.04	ppb
rep	2	BE	conc	0.03	ppb
rep	2	CD	conc	0.31	ppb
rep	2	CR	conc	0.32	ppb
rep	2	CU	conc	0.12	ppb
rep	2	FE	conc	-2.9	ppb
rep	2	MN	conc	0.00	ppb
rep	2	NI	conc	0.08	ppb
rep	2	PBILM	conc	1.43	ppb
rep	2	SB	conc	0.40	ppb
rep	2	SEILM	conc	2.32	ppb
rep	2	TL	conc	0.48	ppb
rep	2	VZ	conc	0.07	ppb
rep	2	ZN	conc	0.35	ppb

03/07/95 13:30

CALBLK

AG	av	0.05	ppb	sd	0.056	%cv	119.5
ASILM	av	-1.17	ppb	sd	1.689	%cv	143.8
BA	av	-0.03	ppb	sd	0.015	%cv	50.07
BE	av	0.03	ppb	sd	0.012	%cv	36.69
CD	av	0.40	ppb	sd	0.128	%cv	31.74
CR	av	0.28	ppb	sd	0.055	%cv	19.58
CU	av	0.08	ppb	sd	0.051	%cv	62.57
FE	av	0.3	ppb	sd	4.42	%cv	1677.
MN	av	0.02	ppb	sd	0.031	%cv	129.5
NI	av	0.14	ppb	sd	0.083	%cv	57.86
PBILM	av	1.25	ppb	sd	0.250	%cv	19.96
SB	av	1.63	ppb	sd	1.746	%cv	107.0
SEILM	av	0.59	ppb	sd	2.448	%cv	412.7
TL	av	0.08	ppb	sd	0.567	%cv	678.1
VZ	av	0.01	ppb	sd	0.087	%cv	650.6
ZN	av	0.38	ppb	sd	0.044	%cv	11.59

03/07/95 13:32

CCVS

rep	1	AG	conc	449.87	ppb
rep	1	ASILM	conc	514.81	ppb
rep	1	BA	conc	467.77	ppb
rep	1	BE	conc	479.18	ppb
rep	1	CD	conc	469.32	ppb
rep	1	CR	conc	469.57	ppb
rep	1	CU	conc	480.37	ppb
rep	1	FE	conc	5252.9	ppb
rep	1	MN	conc	468.54	ppb
rep	1	NI	conc	461.44	ppb
rep	1	PBILM	conc	948.96	ppb

rep	1	SB	conc	951.01	ppb
rep	1	SEILM	conc	470.62	ppb
rep	1	TL	conc	478.45	ppb
rep	1	VZ	conc	496.54	ppb
rep	1	ZN	conc	470.02	ppb

rep	2	AG	conc	444.26	ppb
rep	2	ASILM	conc	517.61	ppb
rep	2	BA	conc	462.19	ppb
rep	2	BE	conc	475.68	ppb
rep	2	CD	conc	462.07	ppb
rep	2	CR	conc	470.61	ppb
rep	2	CU	conc	479.17	ppb
rep	2	FE	conc	5276.8	ppb
rep	2	MN	conc	464.74	ppb
rep	2	NI	conc	461.81	ppb
rep	2	PBILM	conc	950.03	ppb
rep	2	SB	conc	950.28	ppb
rep	2	SEILM	conc	480.10	ppb
rep	2	TL	conc	490.99	ppb
rep	2	VZ	conc	492.26	ppb
rep	2	ZN	conc	465.10	ppb

03/07/95 13:33
CCVS

AG	av	447.06	ppb	sd	3.964	%cv	0.89
ASILM	av	516.21	ppb	sd	1.984	%cv	0.38
BA	av	464.98	ppb	sd	3.947	%cv	0.85
BE	av	477.43	ppb	sd	2.477	%cv	0.52
CD	av	465.69	ppb	sd	5.131	%cv	1.10
CR	av	470.09	ppb	sd	0.732	%cv	0.16
CU	av	479.77	ppb	sd	0.846	%cv	0.18
FE	av	5264.9	ppb	sd	16.90	%cv	0.32
MN	av	466.64	ppb	sd	2.688	%cv	0.58
NI	av	461.63	ppb	sd	0.264	%cv	0.06
PBILM	av	949.50	ppb	sd	0.753	%cv	0.08
SB	av	950.64	ppb	sd	0.516	%cv	0.05
SEILM	av	475.36	ppb	sd	6.703	%cv	1.41
TL	av	484.72	ppb	sd	8.872	%cv	1.83
VZ	av	494.40	ppb	sd	3.023	%cv	0.61
ZN	av	467.56	ppb	sd	3.474	%cv	0.74

03/07/95 13:36
ICSAB

rep	1	AG	conc	906.77	ppb
rep	1	ASILM	conc	-0.05	ppb
rep	1	BA	conc	425.12	ppb
rep	1	BE	conc	437.39	ppb
rep	1	CD	conc	842.82	ppb
rep	1	CR	conc	405.22	ppb
rep	1	CU	conc	467.41	ppb
rep	1	FE	conc	216637.5	ppb
rep	1	MN	conc	457.49	ppb
rep	1	NI	conc	779.62	ppb
rep	1	PBILM	conc	790.27	ppb
rep	1	SB	conc	5.76	ppb
rep	1	SEILM	conc	-70.43	ppb
rep	1	TL	conc	-5.37	ppb
rep	1	VZ	conc	427.68	ppb
rep	1	ZN	conc	888.57	ppb

rep	2	AG	conc	903.06	ppb
rep	2	ASILM	conc	3.45	ppb
rep	2	BA	conc	426.37	ppb
rep	2	BE	conc	436.43	ppb
rep	2	CD	conc	839.79	ppb
rep	2	CR	conc	406.73	ppb
rep	2	CU	conc	466.56	ppb
rep	2	FE	conc	215039.0	ppb
rep	2	MN	conc	457.72	ppb
rep	2	NI	conc	781.72	ppb
rep	2	PBILM	conc	794.82	ppb
rep	2	SB	conc	12.78	ppb
rep	2	SEILM	conc	-71.17	ppb
rep	2	TL	conc	-3.27	ppb
rep	2	VZ	conc	423.62	ppb
rep	2	ZN	conc	881.39	ppb

03/07/95 13:37

ICSAB

AG	av	904.91	ppb	sd	2.622	%cv	0.29
ASILM	av	1.70	ppb	sd	2.472	%cv	145.3
BA	av	425.74	ppb	sd	0.885	%cv	0.21
BE	av	436.91	ppb	sd	0.676	%cv	0.15
CD	av	841.31	ppb	sd	2.145	%cv	0.26
CR	av	405.98	ppb	sd	1.065	%cv	0.26
CU	av	466.98	ppb	sd	0.603	%cv	0.13
FE	av	215838.3	ppb	sd	1130.29	%cv	0.52
MN	av	457.60	ppb	sd	0.167	%cv	0.04
NI	av	780.67	ppb	sd	1.487	%cv	0.19
PBILM	av	792.54	ppb	sd	3.220	%cv	0.41
SB	av	9.27	ppb	sd	4.966	%cv	53.59
SEILM	av	-70.80	ppb	sd	0.518	%cv	0.73
TL	av	-4.32	ppb	sd	1.485	%cv	34.36
VZ	av	425.65	ppb	sd	2.869	%cv	0.67
ZN	av	884.98	ppb	sd	5.084	%cv	0.57

03/07/95 13:41

PBW 616

rep	1	ASILM	conc	-0.36	ppb
rep	1	BA	conc	0.00	ppb
rep	1	BE	conc	-0.03	ppb
rep	1	CD	conc	0.35	ppb
rep	1	CR	conc	-0.18	ppb
rep	1	CU	conc	-0.04	ppb
rep	1	FE	conc	2.3	ppb
rep	1	MN	conc	-0.02	ppb
rep	1	NI	conc	-1.14	ppb
rep	1	PBILM	conc	0.08	ppb
rep	1	SB	conc	3.44	ppb
rep	1	SEILM	conc	-1.67	ppb
rep	1	TL	conc	3.16	ppb
rep	1	VZ	conc	-0.10	ppb
rep	1	ZN	conc	-0.01	ppb

rep	2	ASILM	conc	0.60	ppb
rep	2	BA	conc	0.10	ppb
rep	2	BE	conc	-0.04	ppb
rep	2	CD	conc	0.21	ppb
rep	2	CR	conc	-0.05	ppb

rep	2	CU	conc	-0.04	ppb
rep	2	FE	conc	-0.9	ppb
rep	2	MN	conc	0.01	ppb
rep	2	NI	conc	-0.77	ppb
rep	2	PBILM	conc	1.03	ppb
rep	2	SB	conc	1.34	ppb
rep	2	SEILM	conc	1.22	ppb
rep	2	TL	conc	1.70	ppb
rep	2	VZ	conc	-0.10	ppb
rep	2	ZN	conc	-0.01	ppb

03/07/95 13:43

PBW 616

ASILM	av	0.12	ppb	<5.00	sd	0.681	%cv	567.0
BA	av	0.05	ppb	<20.0	sd	0.070	%cv	146.0
BE	av	-0.03	ppb	<5.00	sd	0.004	%cv	12.43
CD	av	0.28	ppb	<5.00	sd	0.098	%cv	34.89
CR	av	-0.12	ppb	<10.0	sd	0.092	%cv	78.23
CU	av	-0.04	ppb	<20.0	sd	0.003	%cv	6.37
FE	av	0.7	ppb	<50.0	sd	2.28	%cv	308.8
MN	av	0.00	ppb	<10.0	sd	0.024	%cv	646.7
NI	av	-0.96	ppb	<20.0	sd	0.260	%cv	27.11
PBILM	av	0.55	ppb	<5.00	sd	0.665	%cv	119.9
SB	av	2.39	ppb	<60.0	sd	1.484	%cv	61.98
SEILM	av	-0.23	ppb	<5.00	sd	2.040	%cv	904.4
TL	av	2.43	ppb	<5.00	sd	1.032	%cv	42.39
VZ	av	-0.10	ppb	<20.0	sd	0.000	%cv	0.00
ZN	av	-0.01	ppb	<10.0	sd	0.003	%cv	28.95

Ag Ran at
14:24.

cus 3/08/95

03/07/95 13:45

LCS 3/6

rep	1	ASILM	conc	1150.04	ppb
rep	1	BA	conc	1063.03	ppb
rep	1	BE	conc	1106.53	ppb
rep	1	CD	conc	1076.68	ppb
rep	1	CR	conc	1121.42	ppb
rep	1	CU	conc	1074.99	ppb
rep	1	FE	conc	1144.3	ppb
rep	1	MN	conc	1075.99	ppb
rep	1	NI	conc	1070.63	ppb
rep	1	PBILM	conc	1073.26	ppb
rep	1	SB	conc	1048.61	ppb
rep	1	SEILM	conc	1065.78	ppb
rep	1	TL	conc	1052.25	ppb
rep	1	VZ	conc	1064.59	ppb
rep	1	ZN	conc	1096.93	ppb

rep	2	ASILM	conc	1149.17	ppb
rep	2	BA	conc	1052.54	ppb
rep	2	BE	conc	1108.35	ppb
rep	2	CD	conc	1072.56	ppb
rep	2	CR	conc	1105.59	ppb
rep	2	CU	conc	1064.97	ppb
rep	2	FE	conc	1147.3	ppb
rep	2	MN	conc	1076.43	ppb
rep	2	NI	conc	1073.43	ppb
rep	2	PBILM	conc	1077.37	ppb
rep	2	SB	conc	1046.02	ppb
rep	2	SEILM	conc	1056.23	ppb
rep	2	TL	conc	1076.60	ppb

rep	2	VZ	conc	1059.45 ppb
rep	2	ZN	conc	1090.62 ppb

03/07/95 13:46

LCS 3/6

ASILM	av	1149.61 ppb	115%	sd	0.619 %cv	0.05
BA	av	1057.79 ppb	106%	sd	7.417 %cv	0.70
BE	av	1107.44 ppb	111%	sd	1.292 %cv	0.12
CD	av	1074.62 ppb	107%	sd	2.911 %cv	0.27
CR	av	1113.51 ppb	111%	sd	11.199 %cv	1.01
CU	av	1069.98 ppb	107%	sd	7.090 %cv	0.66
FE	av	1145.8 ppb	115%	sd	2.10 %cv	0.18
MN	av	1076.21 ppb	108%	sd	0.315 %cv	0.03
NI	av	1072.03 ppb	107%	sd	1.979 %cv	0.18
PBILM	av	1075.31 ppb	108%	sd	2.907 %cv	0.27
SB	av	1047.32 ppb	105%	sd	1.833 %cv	0.17
SEILM	av	1061.00 ppb	106%	sd	6.752 %cv	0.64
TL	av	1064.42 ppb	106%	sd	17.217 %cv	1.62
VZ	av	1062.02 ppb	106%	sd	3.634 %cv	0.34
ZN	av	1093.77 ppb	109%	sd	4.459 %cv	0.41

Ag ran at

14:26.

CUS 3/08/95

03/07/95 13:49

LCS 3/6 (2200)

rep	1	ASILM	conc	50.70 ppb
rep	1	PBILM	conc	23.67 ppb
rep	1	SEILM	conc	20.05 ppb
rep	1	TL	conc	48.40 ppb
rep	2	ASILM	conc	49.02 ppb
rep	2	PBILM	conc	25.82 ppb
rep	2	SEILM	conc	17.02 ppb
rep	2	TL	conc	51.24 ppb

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LCS 3/6 (2200)

ASILM	av	49.86 ppb	99.7%	sd	1.188 %cv	2.38
PBILM	av	24.75 ppb	99.0%	sd	1.517 %cv	6.13
SEILM	av	18.53 ppb	99.0%	sd	2.145 %cv	11.57
TL	av	49.82 ppb	99.6%	sd	2.008 %cv	4.03

03/07/95 13:53

21848

rep	1	ASILM	conc	0.77 ppb
rep	1	CD	conc	1.30 ppb
rep	1	CR	conc	3.03 ppb
rep	1	PBILM	conc	1.80 ppb
rep	2	ASILM	conc	-2.88 ppb
rep	2	CD	conc	1.21 ppb
rep	2	CR	conc	3.05 ppb
rep	2	PBILM	conc	2.05 ppb

(9500.358)

03/07/95 13:54

21848

ASILM	av	-1.06 ppb	<5.00	sd	2.580 %cv	243.8
CD	av	1.25 ppb	<5.00	sd	0.067 %cv	5.33
CR	av	3.04 ppb	<10.0	sd	0.010 %cv	0.34
PBILM	av	1.92 ppb	<5.00	sd	0.176 %cv	9.16

03/07/95 13:57

21850

rep	1	ASILM	conc	-0.55	ppb
rep	1	CD	conc	0.27	ppb
rep	1	CR	conc	0.82	ppb
rep	1	PBILM	conc	1.21	ppb
rep	2	ASILM	conc	-1.36	ppb
rep	2	CD	conc	0.48	ppb
rep	2	CR	conc	0.72	ppb
rep	2	PBILM	conc	0.69	ppb

03/07/95 13:58

21850

ASILM	$\frac{\mu S}{L}$	av	-0.96 ppb <5.00	sd	0.578 %cv	60.47
CD		av	0.37 ppb <5.00	sd	0.147 %cv	39.30
CR		av	0.77 ppb <10.0	sd	0.068 %cv	8.86
PBILM		av	0.95 ppb <5.00	sd	0.371 %cv	39.03

03/07/95 14:01

21878

rep	1	FE	conc	6422.2	ppb
rep	1	MN	conc	42.50	ppb
rep	1	PBILM	conc	1.42	ppb
rep	2	FE	conc	6438.5	ppb
rep	2	MN	conc	42.21	ppb
rep	2	PBILM	conc	2.88	ppb

(9500.362)

03/07/95 14:03

21878

FE	$\frac{\mu S}{L}$	av	6430.3 ppb	sd	11.57 %cv	0.18
MN		av	42.36 ppb	sd	0.204 %cv	0.48
PBILM		av	2.15 ppb <5.00	sd	1.030 %cv	47.94

03/07/95 14:05

22269

rep	1	FE	conc	66.3	ppb
rep	1	MN	conc	1.56	ppb
rep	1	PBILM	conc	3.16	ppb
rep	2	FE	conc	64.6	ppb
rep	2	MN	conc	1.45	ppb
rep	2	PBILM	conc	2.51	ppb

(9500.414)

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22269

FE	$\frac{\mu S}{L}$	av	65.5 ppb	sd	1.22 %cv	1.87
MN		av	1.50 ppb <10.0	sd	0.080 %cv	5.34
PBILM		av	2.84 ppb <5.00	sd	0.463 %cv	16.32

03/07/95 14:08

22095

rep	1	ASILM	conc	1.45	ppb
rep	1	PBILM	conc	1.53	ppb
rep	1	SEILM	conc	-1.28	ppb
rep	1	TL	conc	0.98	ppb
rep	2	ASILM	conc	-1.59	ppb
rep	2	PBILM	conc	0.95	ppb
rep	2	SEILM	conc	-3.53	ppb

(9500.400)

rep 2 TL conc 0.58 ppb

03/07/95 14:09

22095

ASILM	$\frac{ug}{L}$ av	-0.07 ppb <5.00	sd	2.149 %cv	3031.
PBILM	av	1.24 ppb	sd	0.412 %cv	33.12
SEILM	av	-2.40 ppb	sd	1.595 %cv	66.33
TL	av	0.78 ppb	sd	0.279 %cv	35.73

03/07/95 14:12

22313

rep	1	CD	conc	1.94 ppb
rep	1	FE	conc	53.5 ppb
rep	1	PBILM	conc	0.35 ppb

rep	2	CD	conc	2.05 ppb
rep	2	FE	conc	52.4 ppb
rep	2	PBILM	conc	0.15 ppb

(9500.431)

03/07/95 14:13

22313

CD	$\frac{ug}{L}$ av	2.00 ppb <5.00	sd	0.077 %cv	3.85
FE	av	52.9 ppb	sd	0.76 %cv	1.44
PBILM	av	0.25 ppb <5.00	sd	0.136 %cv	54.44

03/07/95 14:16

CALBLK

rep	1	AG	conc	0.02 ppb
rep	1	ASILM	conc	0.33 ppb
rep	1	BA	conc	0.09 ppb
rep	1	BE	conc	-0.06 ppb
rep	1	CD	conc	0.22 ppb
rep	1	CR	conc	0.30 ppb
rep	1	CU	conc	-0.01 ppb
rep	1	FE	conc	3.6 ppb
rep	1	MN	conc	0.05 ppb
rep	1	NI	conc	-0.42 ppb
rep	1	PBILM	conc	-1.25 ppb
rep	1	SB	conc	0.61 ppb
rep	1	SEILM	conc	-2.44 ppb
rep	1	TL	conc	0.52 ppb
rep	1	VZ	conc	-0.04 ppb
rep	1	ZN	conc	0.63 ppb

rep	2	AG	conc	-0.07 ppb
rep	2	ASILM	conc	-2.56 ppb
rep	2	BA	conc	0.09 ppb
rep	2	BE	conc	-0.05 ppb
rep	2	CD	conc	0.04 ppb
rep	2	CR	conc	0.11 ppb
rep	2	CU	conc	-0.01 ppb
rep	2	FE	conc	-0.6 ppb
rep	2	MN	conc	0.04 ppb
rep	2	NI	conc	-0.15 ppb
rep	2	PBILM	conc	0.43 ppb
rep	2	SB	conc	3.35 ppb
rep	2	SEILM	conc	0.58 ppb
rep	2	TL	conc	0.00 ppb
rep	2	VZ	conc	-0.10 ppb
rep	2	ZN	conc	0.37 ppb

03/07/95 14:18

CALBLK

AG	av	-0.02	ppb	sd	0.062	%cv	279.1
ASILM	av	-1.12	ppb	sd	2.043	%cv	182.5
BA	av	0.09	ppb	sd	0.003	%cv	3.94
BE	av	-0.05	ppb	sd	0.003	%cv	5.26
CD	av	0.13	ppb	sd	0.127	%cv	99.12
CR	av	0.20	ppb	sd	0.136	%cv	66.64
CU	av	-0.01	ppb	sd	0.005	%cv	50.42
FE	av	1.5	ppb	sd	2.97	%cv	192.5
MN	av	0.05	ppb	sd	0.001	%cv	2.67
NI	av	-0.29	ppb	sd	0.190	%cv	66.37
PBILM	av	-0.41	ppb	sd	1.188	%cv	288.1
SB	av	1.98	ppb	sd	1.933	%cv	97.71
SEILM	av	-0.93	ppb	sd	2.131	%cv	229.0
TL	av	0.26	ppb	sd	0.367	%cv	143.8
VZ	av	-0.07	ppb	sd	0.042	%cv	56.83
ZN	av	0.50	ppb	sd	0.181	%cv	36.30

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CCVS

rep	1	AG	conc	459.94	ppb
rep	1	ASILM	conc	520.52	ppb
rep	1	BA	conc	471.87	ppb
rep	1	BE	conc	481.42	ppb
rep	1	CD	conc	469.25	ppb
rep	1	CR	conc	478.45	ppb
rep	1	CU	conc	476.26	ppb
rep	1	FE	conc	5161.0	ppb
rep	1	MN	conc	472.16	ppb
rep	1	NI	conc	469.80	ppb
rep	1	PBILM	conc	966.93	ppb
rep	1	SB	conc	977.20	ppb
rep	1	SEILM	conc	480.59	ppb
rep	1	TL	conc	493.55	ppb
rep	1	VZ	conc	499.69	ppb
rep	1	ZN	conc	469.80	ppb

rep	2	AG	conc	461.86	ppb
rep	2	ASILM	conc	522.30	ppb
rep	2	BA	conc	472.41	ppb
rep	2	BE	conc	483.40	ppb
rep	2	CD	conc	473.45	ppb
rep	2	CR	conc	480.44	ppb
rep	2	CU	conc	476.77	ppb
rep	2	FE	conc	5206.0	ppb
rep	2	MN	conc	473.33	ppb
rep	2	NI	conc	472.22	ppb
rep	2	PBILM	conc	970.02	ppb
rep	2	SB	conc	977.41	ppb
rep	2	SEILM	conc	481.26	ppb
rep	2	TL	conc	496.00	ppb
rep	2	VZ	conc	503.05	ppb
rep	2	ZN	conc	472.70	ppb

03/07/95 14:21

CCVS

AG	av	460.90	ppb	sd	1.357	%cv	0.29
ASILM	av	521.41	ppb	sd	1.261	%cv	0.24

BA	av	472.14	ppb	sd	0.386	%cv	0.08
BE	av	482.41	ppb	sd	1.401	%cv	0.29
CD	av	471.35	ppb	sd	2.970	%cv	0.63
CR	av	479.45	ppb	sd	1.408	%cv	0.29
CU	av	476.52	ppb	sd	0.364	%cv	0.08
FE	av	5183.5	ppb	sd	31.82	%cv	0.61
MN	av	472.74	ppb	sd	0.829	%cv	0.18
NI	av	471.01	ppb	sd	1.707	%cv	0.36
PBILM	av	968.48	ppb	sd	2.181	%cv	0.23
SB	av	977.31	ppb	sd	0.154	%cv	0.02
SEILM	av	480.93	ppb	sd	0.479	%cv	0.10
TL	av	494.78	ppb	sd	1.738	%cv	0.35
VZ	av	501.37	ppb	sd	2.375	%cv	0.47
ZN	av	471.25	ppb	sd	2.052	%cv	0.44

03/07/95 14:23
PBW 616

rep	1	AG	conc	0.12	ppb
rep	2	AG	conc	0.01	ppb

03/07/95 14:24
PBW 616 $\frac{us}{L}$
AG

av	410.0	sd	0.080	%cv	116.8
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03/07/95 14:26
LCS 3/6

rep	1	AG	conc	1093.77	ppb
rep	2	AG	conc	1096.92	ppb

03/07/95 14:26
LCS 3/6 $\frac{us}{L}$
AG

av	1102	sd	2.227	%cv	0.20
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03/07/95 14:28
LCS 3/6 (2200)

rep	1	SEILM	conc	24.23	ppb
rep	2	SEILM	conc	17.16	ppb

03/07/95 14:29 $\frac{us}{L}$
LCS 3/6 (2200)
SEILM

av	82.87	sd	4.996	%cv	24.15
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03/07/95 14:33
22315

rep	1	CD	conc	1.86	ppb
rep	1	CU	conc	1.38	ppb
rep	1	FE	conc	217.5	ppb
rep	1	PBILM	conc	2.08	ppb
rep	1	VZ	conc	0.66	ppb
rep	2	CD	conc	2.24	ppb
rep	2	CU	conc	1.45	ppb
rep	2	FE	conc	209.8	ppb
rep	2	PBILM	conc	2.19	ppb
rep	2	VZ	conc	0.63	ppb

03/07/95 14:34

22315
 CD ^{ug} av 2.05 ppb < 5.00 sd 0.267 %cv 13.01
 CU ¹ av 1.41 ppb < 20.0 sd 0.046 %cv 3.28
 FE av 213.6 ppb sd 5.47 %cv 2.56
 PBILM av 2.14 ppb < 5.00 sd 0.076 %cv 3.57
 VZ av 0.64 ppb < 20.0 sd 0.017 %cv 2.64

03/07/95 14:38

22317

rep 1 AG conc 0.20 ppb
 rep 1 ASILM conc -2.96 ppb
 rep 1 BA conc 1.64 ppb
 rep 1 CD conc 0.09 ppb
 rep 1 CR conc 0.29 ppb
 rep 1 FE conc 6.2 ppb
 rep 1 PBILM conc 1.81 ppb
 rep 1 SEILM conc 14.05 ppb

rep 2 AG conc 0.32 ppb
 rep 2 ASILM conc -1.84 ppb
 rep 2 BA conc 1.41 ppb
 rep 2 CD conc 0.28 ppb
 rep 2 CR conc 0.32 ppb
 rep 2 FE conc 14.0 ppb
 rep 2 PBILM conc 2.76 ppb
 rep 2 SEILM conc 7.43 ppb

03/07/95 14:40

10ml → 100ml

22317

AG ^{ug} av 0.26 ppb ^{see GFA} sd < 100 0.089 %cv 34.43
 ASILM ¹ av -2.40 ppb < 5.00 sd < 50.0 0.789 %cv 32.85
 BA av 1.52 ppb < 20.0 sd < 200 0.161 %cv 10.54
 CD av 0.18 ppb < 5.00 sd < 50.0 0.135 %cv 74.41
 CR av 0.30 ppb < 10.0 sd < 100 0.021 %cv 6.79
 FE av 10.1 ppb < 50.0 sd < 500 5.54 %cv 54.90
 PBILM av 2.29 ppb < 5.00 sd < 50.0 0.668 %cv 29.24
 SEILM av 10.74 ppb sd 4.684 %cv 43.62

03/07/95 14:43

22318

rep 1 AG conc 0.09 ppb
 rep 1 ASILM conc -2.27 ppb
 rep 1 BA conc 1.29 ppb
 rep 1 CD conc 0.32 ppb
 rep 1 CR conc 0.50 ppb
 rep 1 FE conc 21.0 ppb
 rep 1 PBILM conc 1.15 ppb
 rep 1 SEILM conc 3.02 ppb

rep 2 AG conc 0.16 ppb
 rep 2 ASILM conc -2.76 ppb
 rep 2 BA conc 1.37 ppb
 rep 2 CD conc 0.17 ppb
 rep 2 CR conc 0.48 ppb
 rep 2 FE conc 23.6 ppb
 rep 2 PBILM conc 1.63 ppb
 rep 2 SEILM conc 0.44 ppb

03/07/95 14:45

22318

10mL → 100 3/8/95

AG	av	0.13	ppb	<10.0	sd	4100	0.049	%cv	38.55
ASILM	av	-2.52	ppb	<5.0	sd	450.0	0.349	%cv	13.85
BA	av	1.33	ppb	<20.0	sd	4200	0.061	%cv	4.58
CD	av	0.24	ppb	<5.0	sd	450.0	0.111	%cv	45.27
CR	av	0.49	ppb	<10.0	sd	4100	0.013	%cv	2.56
FE	av	22.3	ppb	<5.0	sd	4500	1.84	%cv	8.22
PBILM	av	1.39	ppb	<5.0	sd	450.0	0.334	%cv	24.05
SEILM	av	1.73	ppb	<5.0	sd	450.0	1.825	%cv	105.2

03/07/95 14:48
21918

rep	1	AG	conc	1.15	ppb
rep	1	ASILM	conc	45.08	ppb
rep	1	BA	conc	745.05	ppb
rep	1	CD	conc	0.59	ppb
rep	1	CR	conc	1.11	ppb
rep	1	PBILM	conc	11.67	ppb
rep	1	SEILM	conc	17.07	ppb

rep	2	AG	conc	1.08	ppb
rep	2	ASILM	conc	49.75	ppb
rep	2	BA	conc	735.77	ppb
rep	2	CD	conc	0.46	ppb
rep	2	CR	conc	1.17	ppb
rep	2	PBILM	conc	9.41	ppb
rep	2	SEILM	conc	14.48	ppb

(9500.371)

03/07/95 14:50
21918

AG	av	1.11	ppb	<0.010	sd	0.048	%cv	4.31
ASILM	av	47.42	ppb	<0.100	sd	3.303	%cv	6.97
BA	av	740.41	ppb	0.740	sd	6.566	%cv	0.89
CD	av	0.52	ppb	<0.015	sd	0.095	%cv	18.06
CR	av	1.14	ppb	<0.010	sd	0.046	%cv	4.06
PBILM	av	10.54	ppb	<0.050	sd	1.599	%cv	15.16
SEILM	av	15.77	ppb	<0.100	sd	1.834	%cv	11.63

03/07/95 14:54
21904

rep	1	AG	conc	0.12	ppb
rep	1	ASILM	conc	-0.41	ppb
rep	1	BE	conc	0.01	ppb
rep	1	CD	conc	0.22	ppb
rep	1	CR	conc	1.88	ppb
rep	1	CU	conc	15.78	ppb
rep	1	NI	conc	1.82	ppb
rep	1	PBILM	conc	3.23	ppb
rep	1	SB	conc	-0.78	ppb
rep	1	SEILM	conc	0.06	ppb
rep	1	TL	conc	1.10	ppb
rep	1	ZN	conc	1.72	ppb

rep	2	AG	conc	0.04	ppb
rep	2	ASILM	conc	0.62	ppb
rep	2	BE	conc	0.01	ppb
rep	2	CD	conc	0.12	ppb
rep	2	CR	conc	2.09	ppb
rep	2	CU	conc	15.74	ppb
rep	2	NI	conc	1.33	ppb
rep	2	PBILM	conc	2.40	ppb

(9500.367)

rep	2	SB	conc	2.18 ppb
rep	2	SEILM	conc	-0.28 ppb
rep	2	TL	conc	-0.83 ppb
rep	2	ZN	conc	1.75 ppb

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21904

AG	av	0.08 ppb	<10.0	sd	0.053 %cv	64.25
ASILM	av	0.11 ppb	<5.00	sd	0.727 %cv	689.4
BE	av	0.01 ppb	<5.00	sd	0.000 %cv	5.67
CD	av	0.17 ppb	<5.00	sd	0.073 %cv	42.98
CR	av	1.98 ppb	<10.0	sd	0.145 %cv	7.33
CU	av	15.76 ppb	<20.0	sd	0.022 %cv	0.14
NI	av	1.57 ppb	<20.0	sd	0.342 %cv	21.73
PBILM	av	2.82 ppb	<5.00	sd	0.588 %cv	20.86
SB	av	0.70 ppb	<60.0	sd	2.091 %cv	300.0
SEILM	av	-0.11 ppb	<5.00	sd	0.240 %cv	220.9
TL	av	0.13 ppb	<5.00	sd	1.365 %cv	1046.
ZN	av	1.73 ppb	<10.0	sd	0.022 %cv	1.26

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22297

rep	1	AG	conc	-3.69 ppb
rep	1	ASILM	conc	18.67 ppb
rep	1	BE	conc	2.09 ppb
rep	1	CD	conc	14.33 ppb
rep	1	CR	conc	79.83 ppb
rep	1	CU	conc	123.16 ppb
rep	1	NI	conc	112.89 ppb
rep	1	PBILM	conc	85.12 ppb
rep	1	SB	conc	2.00 ppb
rep	1	SEILM	conc	-42.50 ppb
rep	1	TL	conc	-6.85 ppb
rep	1	ZN	conc	1317.79 ppb

rep	2	AG	conc	-3.76 ppb
rep	2	ASILM	conc	22.23 ppb
rep	2	BE	conc	2.07 ppb
rep	2	CD	conc	14.71 ppb
rep	2	CR	conc	79.20 ppb
rep	2	CU	conc	122.90 ppb
rep	2	NI	conc	112.49 ppb
rep	2	PBILM	conc	83.80 ppb
rep	2	SB	conc	2.92 ppb
rep	2	SEILM	conc	-42.21 ppb
rep	2	TL	conc	-7.15 ppb
rep	2	ZN	conc	1304.41 ppb

(9500.426)

03/07/95 15:00

22297

AG	av	-3.73 ppb	<10.0	sd	0.048 %cv	1.30
ASILM	av	20.45 ppb		sd	2.513 %cv	12.29
BE	av	2.08 ppb	<5.00	sd	0.017 %cv	0.80
CD	av	14.52 ppb		sd	0.274 %cv	1.88
CR	av	79.51 ppb		sd	0.442 %cv	0.56
CU	av	123.03 ppb		sd	0.185 %cv	0.15
NI	av	112.69 ppb		sd	0.283 %cv	0.25
PBILM	av	84.46 ppb		sd	0.937 %cv	1.11
SB	av	2.46 ppb	<60.0	sd	0.646 %cv	26.26
SEILM	av	-42.35 ppb	<5.00	sd	0.204 %cv	0.48

Renr cvs 3/08/95

Recan 3/8/95

TL	av	-7.00 ppb < 5.00	sd	0.218 %cv	3.12
ZN	av	1311.10 ppb	sd	9.457 %cv	0.72

03/07/95 15:03
22298

rep	1	AG	conc	0.07 ppb
rep	1	ASILM	conc	-0.41 ppb
rep	1	BE	conc	-0.01 ppb
rep	1	CD	conc	0.21 ppb
rep	1	CR	conc	1.36 ppb
rep	1	CU	conc	1.24 ppb
rep	1	NI	conc	0.60 ppb
rep	1	PBILM	conc	2.39 ppb
rep	1	SB	conc	-0.26 ppb
rep	1	SEILM	conc	0.49 ppb
rep	1	TL	conc	-0.43 ppb
rep	1	ZN	conc	2.76 ppb

rep	2	AG	conc	0.04 ppb
rep	2	ASILM	conc	1.00 ppb
rep	2	BE	conc	-0.02 ppb
rep	2	CD	conc	0.07 ppb
rep	2	CR	conc	1.30 ppb
rep	2	CU	conc	1.23 ppb
rep	2	NI	conc	0.01 ppb
rep	2	PBILM	conc	0.87 ppb
rep	2	SB	conc	3.61 ppb
rep	2	SEILM	conc	-0.44 ppb
rep	2	TL	conc	-1.60 ppb
rep	2	ZN	conc	2.70 ppb

(9500.426)

03/07/95 15:05
22298

AG	av	0.06 ppb < 10.0	sd	0.022 %cv	40.40
ASILM	av	0.30 ppb < 5.00	sd	0.999 %cv	338.6
BE	av	-0.01 ppb < 5.00	sd	0.007 %cv	62.64
CD	av	0.14 ppb < 5.00	sd	0.096 %cv	67.79
CR	av	1.33 ppb < 10.0	sd	0.040 %cv	3.03
CU	av	1.23 ppb < 10.0	sd	0.004 %cv	0.33
NI	av	0.30 ppb < 10.0	sd	0.418 %cv	137.5
PBILM	av	1.63 ppb < 5.00	sd	1.080 %cv	66.29
SB	av	1.67 ppb < 5.00	sd	2.731 %cv	163.1
SEILM	av	0.03 ppb < 5.00	sd	0.658 %cv	2628.
TL	av	-1.02 ppb < 5.00	sd	0.823 %cv	81.07
ZN	av	2.73 ppb < 10.0	sd	0.039 %cv	1.41

03/07/95 15:08
CALBLK

rep	1	AG	conc	0.16 ppb
rep	1	ASILM	conc	2.43 ppb
rep	1	BA	conc	0.13 ppb
rep	1	BE	conc	-0.02 ppb
rep	1	CD	conc	0.09 ppb
rep	1	CR	conc	0.34 ppb
rep	1	CU	conc	-0.22 ppb
rep	1	FE	conc	0.1 ppb
rep	1	MN	conc	0.08 ppb
rep	1	NI	conc	-0.21 ppb
rep	1	PBILM	conc	0.76 ppb
rep	1	SB	conc	1.37 ppb

Recan 3/8/95

OK CUB 3/08/95

rep	1	SEILM	conc	-1.78	ppb
rep	1	TL	conc	-0.40	ppb
rep	1	VZ	conc	-0.02	ppb
rep	1	ZN	conc	0.38	ppb

rep	2	AG	conc	0.11	ppb
rep	2	ASILM	conc	-1.78	ppb
rep	2	BA	conc	-0.01	ppb
rep	2	BE	conc	-0.03	ppb
rep	2	CD	conc	-0.01	ppb
rep	2	CR	conc	0.03	ppb
rep	2	CU	conc	-0.16	ppb
rep	2	FE	conc	1.0	ppb
rep	2	MN	conc	0.05	ppb
rep	2	NI	conc	-0.20	ppb
rep	2	PBILM	conc	1.01	ppb
rep	2	SB	conc	0.99	ppb
rep	2	SEILM	conc	-1.03	ppb
rep	2	TL	conc	0.66	ppb
rep	2	VZ	conc	0.05	ppb
rep	2	ZN	conc	0.55	ppb

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CALBLK

AG	av	0.13	ppb	sd	0.039	%cv	29.02
ASILM	av	0.32	ppb	sd	2.977	%cv	924.0
BA	av	0.06	ppb	sd	0.102	%cv	164.6
BE	av	-0.03	ppb	sd	0.002	%cv	6.20
CD	av	0.04	ppb	sd	0.075	%cv	182.1
CR	av	0.18	ppb	sd	0.221	%cv	121.4
CU	av	-0.19	ppb	sd	0.042	%cv	21.78
FE	av	0.5	ppb	sd	0.65	%cv	122.1
MN	av	0.06	ppb	sd	0.019	%cv	29.10
NI	av	-0.20	ppb	sd	0.007	%cv	3.28
PBILM	av	0.88	ppb	sd	0.179	%cv	20.24
SB	av	1.18	ppb	sd	0.267	%cv	22.61
SEILM	av	-1.41	ppb	sd	0.532	%cv	37.80
TL	av	0.13	ppb	sd	0.751	%cv	592.3
VZ	av	0.01	ppb	sd	0.055	%cv	371.1
ZN	av	0.46	ppb	sd	0.120	%cv	25.94

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CCVS

rep	1	AG	conc	475.21	ppb
rep	1	ASILM	conc	524.95	ppb
rep	1	BA	conc	479.48	ppb
rep	1	BE	conc	486.86	ppb
rep	1	CD	conc	481.04	ppb
rep	1	CR	conc	481.01	ppb
rep	1	CU	conc	479.68	ppb
rep	1	FE	conc	5253.8	ppb
rep	1	MN	conc	478.02	ppb
rep	1	NI	conc	472.88	ppb
rep	1	PBILM	conc	971.74	ppb
rep	1	SB	conc	986.23	ppb
rep	1	SEILM	conc	488.20	ppb
rep	1	TL	conc	492.08	ppb
rep	1	VZ	conc	508.44	ppb
rep	1	ZN	conc	480.88	ppb

rep	2	AG	conc	476.02	ppb
rep	2	ASILM	conc	520.78	ppb
rep	2	BA	conc	475.74	ppb
rep	2	BE	conc	484.86	ppb
rep	2	CD	conc	476.35	ppb
rep	2	CR	conc	482.97	ppb
rep	2	CU	conc	479.15	ppb
rep	2	FE	conc	5228.1	ppb
rep	2	MN	conc	477.31	ppb
rep	2	NI	conc	471.84	ppb
rep	2	PBILM	conc	973.10	ppb
rep	2	SB	conc	989.77	ppb
rep	2	SEILM	conc	482.79	ppb
rep	2	TL	conc	491.59	ppb
rep	2	VZ	conc	504.75	ppb
rep	2	ZN	conc	476.97	ppb

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CCVS

AG	av	475.62	ppb	sd	0.573	%cv	0.12
ASILM	av	522.87	ppb	sd	2.954	%cv	0.56
BA	av	477.61	ppb	sd	2.643	%cv	0.55
BE	av	485.86	ppb	sd	1.415	%cv	0.29
CD	av	478.69	ppb	sd	3.316	%cv	0.69
CR	av	481.99	ppb	sd	1.387	%cv	0.29
CU	av	479.41	ppb	sd	0.374	%cv	0.08
FE	av	5241.0	ppb	sd	18.22	%cv	0.35
MN	av	477.67	ppb	sd	0.505	%cv	0.11
NI	av	472.36	ppb	sd	0.741	%cv	0.16
PBILM	av	972.42	ppb	sd	0.956	%cv	0.10
SB	av	988.00	ppb	sd	2.500	%cv	0.25
SEILM	av	485.50	ppb	sd	3.824	%cv	0.79
TL	av	491.83	ppb	sd	0.347	%cv	0.07
VZ	av	506.60	ppb	sd	2.607	%cv	0.51
ZN	av	478.92	ppb	sd	2.766	%cv	0.58

03/07/95 15:25
CALBLK

rep	1	BE	conc	485.37	ppb
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About Wrong Solution CUS 3/08/95

03/07/95 15:28
CALBLK

rep	1	AG	conc	0.02	ppb
rep	1	ASILM	conc	-4.21	ppb
rep	1	BA	conc	0.02	ppb
rep	1	BE	conc	-0.02	ppb
rep	1	CD	conc	0.21	ppb
rep	1	CR	conc	0.06	ppb
rep	1	CU	conc	-0.27	ppb
rep	1	FE	conc	-7.4	ppb
rep	1	MN	conc	0.00	ppb
rep	1	NI	conc	0.19	ppb
rep	1	PBILM	conc	0.61	ppb
rep	1	SB	conc	-3.67	ppb
rep	1	SEILM	conc	4.59	ppb
rep	1	TL	conc	1.48	ppb
rep	1	VZ	conc	0.18	ppb
rep	1	ZN	conc	0.49	ppb
rep	2	AG	conc	-0.01	ppb

rep	2	ASILM	conc	-1.06	ppb
rep	2	BA	conc	0.08	ppb
rep	2	BE	conc	-0.07	ppb
rep	2	CD	conc	-0.04	ppb
rep	2	CR	conc	0.07	ppb
rep	2	CU	conc	-0.36	ppb
rep	2	FE	conc	4.2	ppb
rep	2	MN	conc	0.05	ppb
rep	2	NI	conc	0.22	ppb
rep	2	PBILM	conc	0.41	ppb
rep	2	SB	conc	-0.51	ppb
rep	2	SEILM	conc	-1.78	ppb
rep	2	TL	conc	0.60	ppb
rep	2	VZ	conc	0.02	ppb
rep	2	ZN	conc	0.36	ppb

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CALBLK

AG	av	0.00	ppb	sd	0.019	%cv	662.7
ASILM	av	-2.64	ppb	sd	2.228	%cv	84.49
BA	av	0.05	ppb	sd	0.040	%cv	77.81
BE	av	-0.04	ppb	sd	0.037	%cv	83.19
CD	av	0.09	ppb	sd	0.171	%cv	199.4
CR	av	0.07	ppb	sd	0.009	%cv	14.02
CU	av	-0.32	ppb	sd	0.062	%cv	19.44
FE	av	-1.6	ppb	sd	8.25	%cv	520.2
MN	av	0.02	ppb	sd	0.034	%cv	152.0
NI	av	0.21	ppb	sd	0.024	%cv	11.43
PBILM	av	0.51	ppb	sd	0.137	%cv	26.86
SB	av	-2.09	ppb	sd	2.228	%cv	106.6
SEILM	av	1.40	ppb	sd	4.509	%cv	320.9
TL	av	1.04	ppb	sd	0.620	%cv	59.56
VZ	av	0.10	ppb	sd	0.118	%cv	116.6
ZN	av	0.42	ppb	sd	0.094	%cv	22.19

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CCVS

rep	1	AG	conc	470.03	ppb
rep	1	ASILM	conc	521.77	ppb
rep	1	BA	conc	475.22	ppb
rep	1	BE	conc	481.62	ppb
rep	1	CD	conc	474.10	ppb
rep	1	CR	conc	482.61	ppb
rep	1	CU	conc	468.53	ppb
rep	1	FE	conc	5140.4	ppb
rep	1	MN	conc	473.83	ppb
rep	1	NI	conc	473.87	ppb
rep	1	PBILM	conc	976.97	ppb
rep	1	SB	conc	986.11	ppb
rep	1	SEILM	conc	473.79	ppb
rep	1	TL	conc	484.62	ppb
rep	1	VZ	conc	500.88	ppb
rep	1	ZN	conc	475.15	ppb

rep	2	AG	conc	468.96	ppb
rep	2	ASILM	conc	524.98	ppb
rep	2	BA	conc	474.57	ppb
rep	2	BE	conc	480.41	ppb
rep	2	CD	conc	473.40	ppb
rep	2	CR	conc	482.55	ppb

rep	2	CU	conc	468.10	ppb
rep	2	FE	conc	5117.6	ppb
rep	2	MN	conc	472.53	ppb
rep	2	NI	conc	474.92	ppb
rep	2	PBILM	conc	973.12	ppb
rep	2	SB	conc	977.53	ppb
rep	2	SEILM	conc	480.14	ppb
rep	2	TL	conc	494.85	ppb
rep	2	VZ	conc	499.28	ppb
rep	2	ZN	conc	472.14	ppb

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CCVS

AG	av	469.49	ppb	sd	0.759	%cv	0.16
ASILM	av	523.38	ppb	sd	2.269	%cv	0.43
BA	av	474.90	ppb	sd	0.465	%cv	0.10
BE	av	481.01	ppb	sd	0.853	%cv	0.18
CD	av	473.75	ppb	sd	0.496	%cv	0.10
CR	av	482.58	ppb	sd	0.042	%cv	0.01
CU	av	468.32	ppb	sd	0.305	%cv	0.07
FE	av	5129.0	ppb	sd	16.11	%cv	0.31
MN	av	473.18	ppb	sd	0.920	%cv	0.19
NI	av	474.40	ppb	sd	0.741	%cv	0.16
PBILM	av	975.04	ppb	sd	2.722	%cv	0.28
SB	av	981.82	ppb	sd	6.070	%cv	0.62
SEILM	av	476.96	ppb	sd	4.490	%cv	0.94
TL	av	489.73	ppb	sd	7.239	%cv	1.48
VZ	av	500.08	ppb	sd	1.129	%cv	0.23
ZN	av	473.64	ppb	sd	2.128	%cv	0.45

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PBS 614

rep	1	AG	conc	0.05	ppb
rep	1	ASILM	conc	-1.41	ppb
rep	1	BA	conc	0.03	ppb
rep	1	BE	conc	-0.03	ppb
rep	1	CD	conc	0.11	ppb
rep	1	CR	conc	0.12	ppb
rep	1	CU	conc	-0.19	ppb
rep	1	FE	conc	2.4	ppb
rep	1	MN	conc	0.03	ppb
rep	1	NI	conc	-0.85	ppb
rep	1	PBILM	conc	1.40	ppb
rep	1	SB	conc	1.59	ppb
rep	1	SEILM	conc	59.14	ppb
rep	1	TL	conc	-0.13	ppb
rep	1	VZ	conc	-0.14	ppb
rep	1	ZN	conc	0.25	ppb

rep	2	AG	conc	0.15	ppb
rep	2	ASILM	conc	-0.48	ppb
rep	2	BA	conc	0.06	ppb
rep	2	BE	conc	-0.02	ppb
rep	2	CD	conc	-0.03	ppb
rep	2	CR	conc	0.09	ppb
rep	2	CU	conc	-0.16	ppb
rep	2	FE	conc	1.4	ppb
rep	2	MN	conc	0.04	ppb
rep	2	NI	conc	0.05	ppb
rep	2	PBILM	conc	1.09	ppb

rep	2	SB	conc	3.76	ppb
rep	2	SEILM	conc	28.92	ppb
rep	2	TL	conc	0.06	ppb
rep	2	VZ	conc	-0.05	ppb
rep	2	ZN	conc	0.29	ppb

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PBS 614

AG	av	0.10	ppb	sd	0.067	%cv	67.37
ASILM	av	-0.95	ppb	sd	0.658	%cv	69.50
BA	av	0.05	ppb	sd	0.020	%cv	44.35
BE	av	-0.03	ppb	sd	0.002	%cv	7.42
CD	av	0.04	ppb	sd	0.099	%cv	281.6
CR	av	0.10	ppb	sd	0.025	%cv	24.21
CU	av	-0.18	ppb	sd	0.018	%cv	10.37
FE	av	1.9	ppb	sd	0.72	%cv	37.53
MN	av	0.03	ppb	sd	0.008	%cv	22.70
NI	av	-0.40	ppb	sd	0.632	%cv	158.0
PBILM	av	1.24	ppb	sd	0.219	%cv	17.65
SB	av	2.68	ppb	sd	1.535	%cv	57.35
SEILM	av	44.03	ppb	sd	21.366	%cv	48.53
TL	av	-0.04	ppb	sd	0.136	%cv	377.7
VZ	av	-0.09	ppb	sd	0.065	%cv	69.57
ZN	av	0.27	ppb	sd	0.028	%cv	10.50

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LCS 3/6

rep	1	AG	conc	1097.33	ppb
rep	1	ASILM	conc	1162.78	ppb
rep	1	BA	conc	1087.57	ppb
rep	1	BE	conc	1110.13	ppb
rep	1	CD	conc	1095.74	ppb
rep	1	CR	conc	1138.12	ppb
rep	1	CU	conc	1068.50	ppb
rep	1	FE	conc	1175.3	ppb
rep	1	MN	conc	1084.63	ppb
rep	1	NI	conc	1092.74	ppb
rep	1	PBILM	conc	1094.82	ppb
rep	1	SB	conc	1067.24	ppb
rep	1	SEILM	conc	1064.42	ppb
rep	1	TL	conc	1078.43	ppb
rep	1	VZ	conc	1083.42	ppb
rep	1	ZN	conc	1112.11	ppb

rep	2	AG	conc	1095.10	ppb
rep	2	ASILM	conc	1168.64	ppb
rep	2	BA	conc	1080.30	ppb
rep	2	BE	conc	1117.29	ppb
rep	2	CD	conc	1094.73	ppb
rep	2	CR	conc	1131.40	ppb
rep	2	CU	conc	1067.29	ppb
rep	2	FE	conc	1156.4	ppb
rep	2	MN	conc	1093.45	ppb
rep	2	NI	conc	1096.26	ppb
rep	2	PBILM	conc	1098.51	ppb
rep	2	SB	conc	1070.74	ppb
rep	2	SEILM	conc	1071.35	ppb
rep	2	TL	conc	1076.51	ppb
rep	2	VZ	conc	1079.93	ppb
rep	2	ZN	conc	1105.64	ppb

omit *AM* 3/8/95

03/07/95 15:44

LCS 3/6

AG	av	1096.21	ppb	sd	1.573	%cv	0.14
ASILM	av	1165.71	ppb	sd	4.141	%cv	0.36
BA	av	1083.94	ppb	sd	5.144	%cv	0.47
BE	av	1113.71	ppb	sd	5.066	%cv	0.45
CD	av	1095.24	ppb	sd	0.716	%cv	0.07
CR	av	1134.76	ppb	sd	4.747	%cv	0.42
CU	av	1067.89	ppb	sd	0.856	%cv	0.08
FE	av	1165.9	ppb	sd	13.35	%cv	1.14
MN	av	1089.04	ppb	sd	6.242	%cv	0.57
NI	av	1094.50	ppb	sd	2.487	%cv	0.23
PBILM	av	1096.67	ppb	sd	2.609	%cv	0.24
SB	av	1068.99	ppb	sd	2.474	%cv	0.23
SEILM	av	1067.89	ppb	sd	4.904	%cv	0.46
TL	av	1077.47	ppb	sd	1.352	%cv	0.13
VZ	av	1081.68	ppb	sd	2.471	%cv	0.23
ZN	av	1108.88	ppb	sd	4.580	%cv	0.41

03/07/95 15:52

LCS 3/6 (2200)

3/8/95

rep	1	ASILM	conc	47.67	ppb
rep	1	PBILM	conc	26.24	ppb
rep	1	SEILM	conc	18.15	ppb
rep	1	TL	conc	49.09	ppb
rep	2	ASILM	conc	48.75	ppb
rep	2	PBILM	conc	26.07	ppb
rep	2	SEILM	conc	18.08	ppb
rep	2	TL	conc	50.10	ppb

03/07/95 15:53

LCS 3/6 (2200)

ASILM	av	48.21	ppb	sd	0.761	%cv	1.58
PBILM	av	26.16	ppb	sd	0.122	%cv	0.47
SEILM	av	18.11	ppb	sd	0.046	%cv	0.26
TL	av	49.60	ppb	sd	0.712	%cv	1.43

03/07/95 15:55

PBS 614

rep	1	SEILM	conc	8.36	ppb
rep	2	SEILM	conc	3.89	ppb

03/07/95 15:56

PBS 614

Remn CD 3/08/95

SEILM	av	6.13	ppb	sd	3.163	%cv	51.62
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03/07/95 16:00

CALBLK

rep	1	AG	conc	0.02	ppb
rep	1	ASILM	conc	-1.64	ppb
rep	1	BA	conc	0.01	ppb
rep	1	BE	conc	-0.02	ppb
rep	1	CD	conc	0.01	ppb
rep	1	CR	conc	0.05	ppb
rep	1	CU	conc	-0.25	ppb
rep	1	FE	conc	1.2	ppb
rep	1	MN	conc	0.05	ppb

rep	1	NI	conc	-0.36	ppb
rep	1	PBILM	conc	2.96	ppb
rep	1	SB	conc	0.76	ppb
rep	1	SEILM	conc	-1.59	ppb
rep	1	TL	conc	-1.05	ppb
rep	1	VZ	conc	-0.03	ppb
rep	1	ZN	conc	0.42	ppb

rep	2	AG	conc	-0.01	ppb
rep	2	ASILM	conc	0.32	ppb
rep	2	BA	conc	-0.04	ppb
rep	2	BE	conc	-0.02	ppb
rep	2	CD	conc	-0.12	ppb
rep	2	CR	conc	0.08	ppb
rep	2	CU	conc	-0.15	ppb
rep	2	FE	conc	2.3	ppb
rep	2	MN	conc	0.05	ppb
rep	2	NI	conc	-0.49	ppb
rep	2	PBILM	conc	-0.97	ppb
rep	2	SB	conc	5.69	ppb
rep	2	SEILM	conc	-0.87	ppb
rep	2	TL	conc	3.76	ppb
rep	2	VZ	conc	-0.20	ppb
rep	2	ZN	conc	0.46	ppb

03/07/95 16:02

CALBLK

AG	av	0.00	ppb	sd	0.021	%cv	1088.
ASILM	av	-0.66	ppb	sd	1.389	%cv	211.2
BA	av	-0.02	ppb	sd	0.036	%cv	226.3
BE	av	-0.02	ppb	sd	0.002	%cv	8.80
CD	av	-0.05	ppb	sd	0.090	%cv	168.5
CR	av	0.07	ppb	sd	0.025	%cv	38.56
CU	av	-0.20	ppb	sd	0.067	%cv	33.49
FE	av	1.7	ppb	sd	0.78	%cv	44.99
MN	av	0.05	ppb	sd	0.001	%cv	2.05
NI	av	-0.43	ppb	sd	0.092	%cv	21.48
PBILM	av	0.99	ppb	sd	2.776	%cv	278.9
SB	av	3.23	ppb	sd	3.485	%cv	108.0
SEILM	av	-1.23	ppb	sd	0.510	%cv	41.39
TL	av	1.35	ppb	sd	3.400	%cv	251.2
VZ	av	-0.12	ppb	sd	0.123	%cv	106.2
ZN	av	0.44	ppb	sd	0.031	%cv	7.15

03/07/95 16:04

CCVS

rep	1	AG	conc	472.96	ppb
rep	1	ASILM	conc	520.26	ppb
rep	1	BA	conc	472.33	ppb
rep	1	BE	conc	478.21	ppb
rep	1	CD	conc	467.54	ppb
rep	1	CR	conc	475.30	ppb
rep	1	CU	conc	472.59	ppb
rep	1	FE	conc	5168.9	ppb
rep	1	MN	conc	470.39	ppb
rep	1	NI	conc	466.44	ppb
rep	1	PBILM	conc	961.45	ppb
rep	1	SB	conc	970.80	ppb
rep	1	SEILM	conc	475.06	ppb
rep	1	TL	conc	481.89	ppb

rep	1	VZ	conc	498.78	ppb
rep	1	ZN	conc	470.21	ppb
rep	2	AG	conc	473.20	ppb
rep	2	ASILM	conc	511.23	ppb
rep	2	BA	conc	472.21	ppb
rep	2	BE	conc	479.56	ppb
rep	2	CD	conc	468.74	ppb
rep	2	CR	conc	475.36	ppb
rep	2	CU	conc	474.60	ppb
rep	2	FE	conc	5175.3	ppb
rep	2	MN	conc	472.55	ppb
rep	2	NI	conc	466.52	ppb
rep	2	PBILM	conc	960.47	ppb
rep	2	SB	conc	966.53	ppb
rep	2	SEILM	conc	475.91	ppb
rep	2	TL	conc	477.80	ppb
rep	2	VZ	conc	498.77	ppb
rep	2	ZN	conc	469.95	ppb

03/07/95 16:05
CCVS

AG	av	473.08	ppb	sd	0.165	%cv	0.03
ASILM	av	515.75	ppb	sd	6.381	%cv	1.24
BA	av	472.27	ppb	sd	0.087	%cv	0.02
BE	av	478.88	ppb	sd	0.956	%cv	0.20
CD	av	468.14	ppb	sd	0.849	%cv	0.18
CR	av	475.33	ppb	sd	0.042	%cv	0.01
CU	av	473.59	ppb	sd	1.419	%cv	0.30
FE	av	5172.1	ppb	sd	4.50	%cv	0.09
MN	av	471.47	ppb	sd	1.521	%cv	0.32
NI	av	466.48	ppb	sd	0.058	%cv	0.01
PBILM	av	960.96	ppb	sd	0.692	%cv	0.07
SB	av	968.66	ppb	sd	3.024	%cv	0.31
SEILM	av	475.48	ppb	sd	0.604	%cv	0.13
TL	av	479.84	ppb	sd	2.893	%cv	0.60
VZ	av	498.77	ppb	sd	0.009	%cv	0.00
ZN	av	470.08	ppb	sd	0.188	%cv	0.04

03/07/95 16:08
ICSAB

rep	1	AG	conc	914.06	ppb
rep	1	ASILM	conc	-3.72	ppb
rep	1	BA	conc	435.58	ppb
rep	1	BE	conc	440.46	ppb
rep	1	CD	conc	851.67	ppb
rep	1	CR	conc	410.19	ppb
rep	1	CU	conc	463.39	ppb
rep	1	FE	conc	215012.3	ppb
rep	1	MN	conc	464.86	ppb
rep	1	NI	conc	788.58	ppb
rep	1	PBILM	conc	798.72	ppb
rep	1	SB	conc	11.17	ppb
rep	1	SEILM	conc	-75.71	ppb
rep	1	TL	conc	-7.99	ppb
rep	1	VZ	conc	431.06	ppb
rep	1	ZN	conc	897.64	ppb
rep	2	AG	conc	914.80	ppb
rep	2	ASILM	conc	2.04	ppb

rep	2	BA	conc	435.12	ppb
rep	2	BE	conc	441.14	ppb
rep	2	CD	conc	853.19	ppb
rep	2	CR	conc	407.51	ppb
rep	2	CU	conc	466.77	ppb
rep	2	FE	conc	215362.7	ppb
rep	2	MN	conc	465.01	ppb
rep	2	NI	conc	785.17	ppb
rep	2	PBILM	conc	796.41	ppb
rep	2	SB	conc	5.25	ppb
rep	2	SEILM	conc	-70.17	ppb
rep	2	TL	conc	-7.19	ppb
rep	2	VZ	conc	432.47	ppb
rep	2	ZN	conc	893.46	ppb

03/07/95 16:09

ICSAB

AG	av	914.43	ppb	sd	0.522	%cv	0.06
ASILM	av	-0.84	ppb	sd	4.074	%cv	486.4
BA	av	435.35	ppb	sd	0.328	%cv	0.08
BE	av	440.80	ppb	sd	0.483	%cv	0.11
CD	av	852.43	ppb	sd	1.080	%cv	0.13
CR	av	408.85	ppb	sd	1.894	%cv	0.46
CU	av	465.08	ppb	sd	2.389	%cv	0.51
FE	av	215187.5	ppb	sd	247.80	%cv	0.12
MN	av	464.94	ppb	sd	0.108	%cv	0.02
NI	av	786.87	ppb	sd	2.407	%cv	0.31
PBILM	av	797.56	ppb	sd	1.628	%cv	0.20
SB	av	8.21	ppb	sd	4.189	%cv	51.03
SEILM	av	-72.94	ppb	sd	3.919	%cv	5.37
TL	av	-7.59	ppb	sd	0.562	%cv	7.40
VZ	av	431.76	ppb	sd	0.998	%cv	0.23
ZN	av	895.55	ppb	sd	2.951	%cv	0.33

m Page No. _____

Shl. rack in: 8:30am Out 9:30am 95°C
Rack 1: 8:30am Out 9:30am 96°C
Rack 2: 9:30am Out 10:30am 94°C

Std's made
at 8:15am,
2/24/95

2/24/95
NS

Time	ID No.	B						Final	
			Read	Conc.	DF	Amt.	Unit	Conc.	
	Blank	3							r=0.9997
	0.2 ug/L	7							y=19.92x+4.18
	0.4	12							y=-0.21
	0.8	20							
	2.0	46							
	4.0	86							
	8.0	162							
13:00	ICV	113	5.46			100 ml	ug/L	5.46	TV=5 109.9 rec
13:02	ICB	3	<0.20					<0.20	
13:04	CCV	24	1.00					1.00	
13:06	CCB	4	<0.20					<0.20	
	CRA	8	0.19					0.19	
ack PBW	PBW	14	4	<0.20				<0.20	
	PBS	19	5	<0.20				<0.20	
	LCSS	138	115	5.56		0.05 g	mg/kg	11.13	TV=12.7 88.7 rec
	LCSS DUP	3	138	2.72		0.01 g		11.20	88.7 rec
						2/24/95			
500.356	21822.13	13	5	<0.20		100 ml	ug/L	<0.20	
	21822.13 MS	5	26	1.10				1.10	110.9 rec
	21822.13 MSD	91	25	1.05				1.05	105.9 rec
	21823.11	3	4	<0.20				<0.20	
	21826.01	9	4	<0.20				<0.20	purge
13:28	CCV	8	26	1.10		100 ml	ug/L	1.10	
13:30	CCB	64	4	<0.20				<0.20	
500.356	21826.01 MS	56	25	1.05		100 ml	ug/L	1.05	purge 105.9 rec
Rack 2	21826.01 MSD	16	24	1.00				1.00	purge 100.9 rec
500.368	21906.11	10	2	<0.20				<0.20	
	21907.16	93	4	<0.20				<0.20	
7500.380	21960.11	22	4	<0.20				<0.20	
7500.386	22007.11	7	4	<0.20				<0.20	

Witnessed & Understood by me.

NS

Date

2/24/95

Invented by

Recorded by

NS

Date

2/24/95

To Page No. 47

(4)

Interleaved
2.24.95 for

Project No. _____

Book No. 997

47

From Page No. 46

Rack 3: 9:30am Out 10:30am 95°C
Rack 4: 10:30am Out 11:30am 95°C

Hg

2/24/95

125

B

BS No.	ID No.	B	Read	Conc.	DF	Amnt.	Unit	Final Conc.	
Rack 2									
9500.355	21814.02	14	4	<0.20		100ml	ug/l	<0.20	purge
	21815.04	11	5	<0.20		↓	↓	<0.20	purge
9500.367	21904.05	356	5	<0.20		↓	↓	<0.20	
9500.375	21929.04	209	5	<0.20		↓	↓	<0.20	
		1							
Time: 13:52	CCV	155	22	0.89		100ml	ug/l	0.89	
13:54	CCB	59	5	<0.20		↓	↓	<0.20	
9500.375	21929.04 DUP	14	3	<0.20		100ml	ug/l	<0.20	RPD=M/c
Rack 3	21929.04 SPK	146	18	0.69		↓	↓	0.69	purge 69% rec
9500.371	21915.010500	2	4	<0.20	100x	1ml/100ml	mg/l	<0.02	TP2
	21916.010500	100	3	<0.20				<0.02	STC #6 TP2
	21916.010500 DUP	25	4	<0.20				<0.02	RPD=M/C TP2/0.02
	21916.010500 SPK	15	23	0.94				0.094	TP2/SPK 94% rec
	21917.010500	350	5	<0.20				<0.02	TP3
	21918.010500	91	5	<0.20				<0.02	TP4A
Time: 14:12	CCV	115	26	1.10		100ml	ug/l	1.10	
14:14	CCB	201	5	<0.20		↓	↓	<0.20	
9500.366	21897.02	403	5	<0.20		0.20g	mg/kg	<0.10	
	21898.02	352	5	<0.20		↓	↓	<0.10	
	21899.02	17	7	<0.20				<0.10	
Rack 4	21900.02	92	5	<0.20				<0.10	
9500.375	21926.02	87	5	<0.20				<0.10	
	21927.02	378	6	<0.20				<0.10	
	21928.02	77	6	<0.20				<0.10	
9500.371	21915.01	62	159	7.77				3.89	
	21915.01 DUP	15	157	7.67				3.84	RPD=1.3
	21915.01 SPK	105	184	9.03				4.51	4x rule

To Page No. 48

Witnessed & Understood by me.

Rm

Date

2/24/95

Invented by

Recorded by

LRS

Date

2/24/95

21826.01 ms
 purge
 21826.01 ms
 purge
 21826.01 ms 2/20/95
 CCB
 CCV
 21826.01
 purge
 21823.11
 21822.13 ms
 21822.13 ms

21822.13
 LCSS D
 LCSS I
 PBS
 PBW
 CRA
 CCB
 CCV
 ICB
 ICV
 8.6
 4.6
 2.6
 0.8
 0.4
 0.2
 Blank
 Chart speed: 10m
 Range: 5mV
 MS 2/24/95

0	10	20	30	40	50	60	70	80	90
100	90	80	70	60	50	40	30	20	10

21918.010500 TP3

21917.010500

21916.010520 SPK TP2 (SPK)

21916.010500 DUP TP2 (DUP)
TP2

21916.010500

21915.010500 TP1

21929.04 SPK

purge

21929.04 DUP

CCB

CCV

21929.04

21929.05

21815.02

21814.02

purge

22007.11

21960.11

21907.16

21906.16

21826.01 msA

purge

21826.01 msB

21826.01 ms2/2045

CCB

CCV

21826.01

21823.11

21822.13 msA

21822.13 msB

21822.13

LCSS Dup

LCSS I

PBS

90

80

70

CCB

CCV

21918.01

21917.01

21916.01

CCB

CCV

21915.0

SPK

21915.01 DOP

21915.01

21928.02

21927.02

21926.02

21900.02

21899.02

21898.02

21897.02

CCB

CCV

21918.010500 TP4A

21917.010500

21916.010520 SPK

21916.010500 DOP

21916.010500

21915.010500

21929.04 SPK

DUPRE

METALS DIGESTION/EXTRACTION CODES

- 01 E.P. TOX Extraction Metals
- 02 E.P. TOX Extraction Organics
- 03 E.P. TOX Extraction Miscellaneous
- 04 E.P. TOX Digestion ICP
- 05 TCLP Extraction Metals
- 06 TCLP Extraction Organics
- 07 TCLP ZHE Extraction Purgeables
- 08 TCLP Digestion ICP
- 09 California Wet Test Extraction Metals
- 10 California Wet Test Extraction Organics
- 11 California Wet Test Digestion/ICP
- 12 Metals Available ICP
- 13 E.P. TOX Cr +6
- 14 MMWEP Extraction Metals
- 15 MMWEP Extraction Wet Chem.
- 16 MMWEP Digestion ICP
- 17 MMWEP Digestion Furnace
- 18 Cal. Wet Test Cr +6
- 19 TCLP Cr +6
- 20
- 21 ICP/Flame
- 22 Furnace
- 23 CR +6
- 24 Total Recoverable ICP
- 25 Total Recoverable Furnace
- 26 Soluble Metals ICP
- 27 Soluble Metals Furnace
- 28 Metals on Air Filters
- 29 Miscellaneous

COLOR CODES

- R Red
- O Orange
- G Green
- Y Yellow
- B Blue
- BR Brown
- BK Black
- CL Clear

CLARITY CODES (LIQUID)

- CL Cloudy
- C Clear

TEXTURE CODES (SOLID)

- H Homogeneous
- M Mixture
- F Fine Soil
- G Granular Soil
- SL Sludge
- CY Clay
- SD Sand

COMMENTS

- 1 Reactive
- 2 Effervescent
- 3 Phase Change
- 4 Precipitation
- 5 Other (Explain)

ARTIFACTS

- 1 Rocks
- 2 Sticks, Leaves
- 3 Shavings
- 4 Other (Explain)