



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

DEC 28 1994

NYSDEC-REG. 9

EQII

REL UNREL

December 22, 1994

LAB NAME: Ecology and Environment, Inc.

CASE NUMBER: SH994

SDG NUMBER: 1212

CONTRACT NUMBER: C003181

SAMPLES IN SDG: A92101 A92102 A92103 A92104 A92105 A92106

SDG NARRATIVE:

Enclosed are the analytical results for soil samples received at the Analytical Services Center on December 15, 1994. The samples were analyzed for the following parameter according to NYSDEC Analytical Services Protocol, September 1989, Revision 12/91:

Mercury	CLP-M
TCLP Metals	Method 3111

The "B" flag on TCLP extract analyses means that the reported sample result is above the IDL but below the regulatory limit.

All reported TCLP barium sample results have been flagged "E" based on the serial dilution. A chemical/physical interference is suspected.

Due to the level of mercury detected in several of the samples, secondary dilutions were required.

The duplicate analysis of sample A92102 exceeded the RPD criteria for mercury. The reported sample results have been flagged "*".

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 signature.

Gary Hahn - Manager
Analytical Services Center
December 22, 1994

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

[illegible]

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Analyzed
19182	SED	Hg	12/15/94	12/20/94
19183				
19184				
19185				
19186				
19187				
19182		TCLP: As, Ba, Cd,		12/20/94
19183		Cr, Pb, Se, Ag, Hg		
19184				
19185				
19186				
19187				



Send This Sheet with Sample to Contract Lab

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

Part 3

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 _____ | ☐ 59. 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. Base/Neutral/Acid (B/N/A)—Water—GC/MS (ASP #89-2) | ☐ 30. B/N/A—Soils/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 Mercury ONLY |
| ☐ 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. EP Toxicity (Metals Only) | ☐ 38. Ignitability |
| ☐ 39. Corrosivity | ☐ 40. VOA—(USEPA 8240-GC/MS) | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☐ 43. TCLP | ☒ 44. TCLP (Metals Only) |
| ☐ 45. Reactivity | ☐ 46. Dioxin (USEPA 8280) | ☐ 47. Appendix IX |
| ☐ 48. Other _____ | ☐ 63. Percent Solids | ☐ 68. Metals—17 Hazardous |

MUNICIPAL SLUDGE

- | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| ☐ 49. RSGB-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:

M. HINDO / K. GLASER

TELEPHONE NUMBER:

(716) 851-7220

REGION NO:

9

CONTRACT LAB:

Ecology & Environment

COUNTY:

NIAGARA

SAMPLING DATE:

12/14/94

MILITARY TIME:

1430

SAMPLE MATRIX:

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

CASE NUMBER

S1H994

SDG NUMBER

112112

SAMPLE NUMBER

A9211011

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:**Check if field duplicate ☐

Outfall Number

Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD
MGD

4

CONTRACT LAB SAMPLE INFORMATION SHEET

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).

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

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:

M. HUNTON / K. GLASER

TELEPHONE NUMBER:

(716) 851-7220

REGION NO:

9, 4, 05

CONTRACT LAB:

Ecology & Environment

COUNTY:

NIAGARA

SAMPLING DATE:

12/14/94

MILITARY TIME:

1

SAMPLE MATRIX:

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

CASE NUMBER

51H19194

SDG NUMBER

1121121

SAMPLE NUMBER

A191211012

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:**Check if field duplicate ☐

Outfall Number

Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD
MGD 5



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Part 3

CONTRACT LAB SAMPLE INFORMATION SHEET

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) |
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| ☐ 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 _____ | ☐ 59. 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 |
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| ☐ 25. Volatile Organic Analysis VOA—Water—GC/MS(ASP #89-1) | ☐ 31. VOA—Soils/Sediments—GC/MS (ASP #89-1) |
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| ☐ 27. Metals—23 in Water | ☒ 33. Metals— in Soil/Sediment MERCURY ONLY |
| ☐ 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. EP Toxicity (Metals Only) | ☐ 38. Ignitability |
| ☐ 39. Corrosivity | ☐ 40. VOA—(USEPA 8240-GC/MS) | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☐ 43. TCLP | ☒ 44. TCLP (Metals Only) |
| ☐ 45. Reactivity | ☐ 46. Dioxin (USEPA 8280) | ☐ 47. Appendix IX |
| ☐ 48. Other _____ | ☐ 63. Percent Solids | ☐ 68. Metals—17 Hazardous |

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:

M. HINTON / K GLASER

TELEPHONE NUMBER:

(716) 851-7220

REGION NO:

9

CONTRACT LAB:

ECOLOGY & ENVIRONMENT

COUNTY:

NIAGARA

SAMPLING DATE:

12/14/94

MILITARY TIME:

1400

SAMPLE MATRIX:

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

CASE NUMBER

SH19194

SDG NUMBER

1211A

SAMPLE NUMBER

A921103

CHECK FOR MS/MD

☐ This Sample

TYPE OF SAMPLE:

☐ Composite☒ Grab☐ Term _____ hrs☐ Check if there will be more samples with this SDG sent in this calendar weekReport via Category B, unless checked ☐

SAMPLING POINT:

Check 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 3

Print legibly

CAUTION (check if applicable)

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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) |
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| ☐ 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 _____ | ☐ 59. 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 |
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| ☐ 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 <i>MERCURY ONLY</i> |
| ☐ 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. EP Toxicity (Metals Only) | ☐ 38. Ignitability |
| ☐ 39. Corrosivity | ☐ 40. VOA—(USEPA 8240-GC/MS) | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☐ 43. TCLP | ☒ 44. TCLP (Metals Only) |
| ☐ 45. Reactivity | ☐ 46. Dioxin (USEPA 8280) | ☐ 47. Appendix IX |
| ☐ 48. Other _____ | ☐ 63. Percent Solids | ☐ 68. Metals—17 Hazardous |

MUNICIPAL SLUDGE

- | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
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COLLECTED BY:

M. HINDO / K. GLASER

TELEPHONE NUMBER:

(716) 851-7220

REGION NO:

9

CONTRACT LAB:

Ecology & Environment

COUNTY:

NIAGARA

SAMPLING DATE:

12/14/94

MILITARY TIME:

1405

SAMPLE MATRIX:

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

CASE NUMBER

5141914

SDG NUMBER

112118

SAMPLE NUMBER

A92104

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:

Check if field duplicate ☐

Outfall Number

Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER

FLOW

GPD

MGD

CONTRACT LAB SAMPLE INFORMATION SHEET

Print legibly

CAUTION (check if applicable)

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| ☐ 66. Dioxin-Water (ASP #89-4) | ☐ 67. Dioxin-Soil/Sediment (ASP #89-4) |
| ☐ 35. Other _____ | |

HAZARDOUS WASTES/RCRA ANALYSIS SW-846

- | | | |
|--|--|--|
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| ☐ 48. Other _____ | ☐ 63. Percent Solids | ☐ 68. Metals—17 Hazardous |

MUNICIPAL SLUDGE

- | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
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COLLECTED BY:

M. HINTON / K GLASER

TELEPHONE NUMBER:

(716) 851-7220

REGION NO:

9

CONTRACT LAB:

Ecology & Environment

COUNTY:

NIAGARA

SAMPLING DATE:

12/14/94

MILITARY TIME:

1355

SAMPLE MATRIX:

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

CASE NUMBER

SH 19194

SDG NUMBER

1211A

SAMPLE NUMBER

A192105

CHECK FOR MS/MD

☐ This Sample

TYPE OF SAMPLE:

☐ Composite☒ Grab☐ Term _____ hrs☐ Check if there will be more samples with this SDG sent in this calendar weekReport via Category B, unless checked ☐

SAMPLING POINT:

Check 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 3

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 _____ | ☐ 59. 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. Base/Neutral/Acid (B/N/A)—Water—GC/MS (ASP #89-2) | ☐ 30. B/N/A—Soils/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— in Soil/Sediment MERCURY ONLY |
| ☐ 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. EP Toxicity (Metals Only) | ☐ 38. Ignitability |
| ☐ 39. Corrosivity | ☐ 40. VOA—(USEPA 8240-GC/MS) | ☐ 41. BNA—(USEPA 8270-GC/MS) |
| ☐ 42. Pesticides/PCB's (USEPA 8080) | ☐ 43. TCLP | ☒ 44. TCLP (Metals Only) |
| ☐ 45. Reactivity | ☐ 46. Dioxin (USEPA 8280) | ☐ 47. Appendix IX |
| ☐ 48. Other _____ | ☐ 63. Percent Solids | ☐ 68. Metals—17 Hazardous |

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:

M. HINTON / K. GLASER

TELEPHONE NUMBER:

(716) 851-7220

REGION NO:

9

CONTRACT LAB:

ECOLOGY & ENVIRONMENT

COUNTY:

NIAGARA

SAMPLING DATE:

12/14/94

MILITARY TIME:

1410

SAMPLE MATRIX:

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

CASE NUMBER

SH19194

SDG NUMBER

112118

SAMPLE NUMBER

A1921016

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:

- Check if field duplicate ☐

Outfall Number

- Check if sampling is part of inspection ☐

SPDES NUMBER/REGISTRY NUMBER**FLOW**GPD
MGD



368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060
International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

0

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

234055

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Protocol Version: ILM03.0

11

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92101

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____

Lab Code: EANDE____ Case No.: SH994 SAS No.: _____ SDG No.: 1212____

Matrix (soil/water): SOIL____ Lab Sample ID: 19182

Level (low/med): LOW____ Date Received: 12/15/94

% Solids: 70.0

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	4.5		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92102

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

Matrix (soil/water): SOIL__ Lab Sample ID: 19183

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: __71.5

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	3.9		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: __

Color After: __ Clarity After: __ Artifacts: __

Comments:

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92103

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: ____ SDG No.: 1212__

Matrix (soil/water): SOIL__ Lab Sample ID: 19184

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: __75.0

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	3.9		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: ____

Color After: ____ Clarity After: ____ Artifacts: ____

Comments:

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92104

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

Matrix (soil/water): SOIL__ Lab Sample ID: 19185

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: __67.0

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		-		NR
7440-39-3	Barium		-		NR
7440-41-7	Beryllium		-		NR
7440-43-9	Cadmium		-		NR
7440-70-2	Calcium		-		NR
7440-47-3	Chromium		-		NR
7440-48-4	Cobalt		-		NR
7440-50-8	Copper		-		NR
7439-89-6	Iron		-		NR
7439-92-1	Lead		-		NR
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury	11.2	-	*	CV
7440-02-0	Nickel		-		NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		-		NR
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: __

Color After: __ Clarity After: __ Artifacts: __

Comments:

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92105

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): SOIL Lab Sample ID: 19186

Level (low/med): LOW Date Received: 12/15/94

% Solids: 70.2

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	5.0		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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:

Color After: Clarity After: Artifacts:

Comments:

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92106

Lab Name: ECOLOGY_AND_ENVIRONMENT___ Contract: C003181___

Lab Code: EANDE___ Case No.: SH994 SAS No.: _____ SDG No.: 1212___

Matrix (soil/water): SOIL___ Lab Sample ID: 19187

Level (low/med): LOW___ Date Received: 12/15/94

% Solids: 78.2

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	8.7		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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.: SH994 SAS No.: _____ SDG No.: 1212_____
 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	5.0	5.14	102.8	1.0	0.92	92.0	0.92	92.0	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

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__
 Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212__
 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	0.85	85.0	0.99	99.0	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

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__
 Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212__
 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	0.99	99.0	0.99	99.0	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

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212__

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	1.07	107.0	1.14	114.0	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

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212____
 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	0.92	92.0	0.92	92.0	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

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____
 Lab Code: EANDE_____ Case No.: SH994 SAS No.: _____ SDG No.: 1212_____
 Preparation Blank Matrix (soil/water): SOIL_____
 Preparation Blank Concentration Units (ug/L or mg/kg): 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	0.2	U	0.100	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

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212____
 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

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212____
 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

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____
 Lab Code: EANDE_____ Case No.: SH994 SAS No.: _____ SDG No.: 1212_____
 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		-		-		-	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

5A
SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

A92102S__

Lab Code: EANDE__

Case No.: SH994

SAS No.: ____

SDG No.: 1212__

Matrix (soil/water): SOIL__

Level (low/med): LOW__

% Solids for Sample: _71.5

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		3.3567	3.9161	0.699	-80.0		CV
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR
Cyanide							NR

Comments:

FORM V (Part 1) - IN

12/91

NYSDEC ASP

6
DUPLICATES

NYSDEC SAMPLE NO.

A92102D

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

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

% Solids for Sample: _71.5 % Solids for Duplicate: _71.5

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		3.9161	4.8951	22.2	*	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.: SH994

SAS No.: _____

SDG No.: 1212__

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	10.3		8.5	17.0	81.1
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

FORM VII - IN

12/91

8
STANDARD ADDITION RESULTS

Concentration Units: ug/L

[illegible]

12/91

NYSDEC ASP

10

INSTRUMENT DETECTION LIMITS (SEMIANNUALLY)

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE__

Case No.: SH994

SAS No.: _____

SDG No.: 1212__

ICP ID Number: _____

Date: 10/18/94

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

13
PREPARATION LOG

Method: CV

[illegible]

12/91

NYSDEC ASP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: SH994_

SAS No.: _____ SDG No.:1212__

Instrument ID Number: 2380_____

Method: CV

Start Date: 12/20/94

End Date: 12/20/94

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	1945		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.2	1.00	1947		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.4	1.00	1949		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.8	1.00	1951		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S2	1.00	1953		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S4	1.00	1955		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S8	1.00	1957		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICV	1.00	2000		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICB	1.00	2002		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	2004		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	2006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2007		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBS	1.00	2009		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
LCSS	1.00	2011		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2015		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2023		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2025		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2028		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	2030		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2035		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2037		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2039		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2047		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

12/91

NYSDEC ASP
14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____
Lab Code: EANDE_ Case No.: SH994_ SAS No.: _____ SDG No.:1212_____
Instrument ID Number: 2380_____ Method: CV
Start Date: 12/20/94 End Date: 12/20/94

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	2049		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	2054		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2055		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2057		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2107		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2116		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	2118		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2119		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2121		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2127		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2131		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2133		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2135		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2140		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	2142		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2143		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2145		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2147		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2149		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

12/91

NYSDEC ASP

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: SH994_

SAS No.: _____ SDG No.:1212__

Instrument ID Number: 2380_____

Method: CV

Start Date: 12/20/94

End Date: 12/20/94

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 T	T A	V L	Z N	C N
ZZZZZZ	1.00	2153		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2155		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2157		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2159		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2201		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2204		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2206		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2207		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2209		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2211		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2213		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2215		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2221		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2223		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2225		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2228		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2230		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2231		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2233		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2235		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2237		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2239		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2241		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2243		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2245		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2248		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2250		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
A92101	1.00	2251		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
A92102	1.00	2253		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A92102D	1.00	2255		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

12/91

ANALYSIS RUN LOG

End Date: 12/20/94

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				
A92102S	1.00	2257		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
A92103	1.00	2259		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92104	1.00	2301		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92105	1.00	2303		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
A92106	1.00	2305		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
CCV	1.00	2308		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
CCB	1.00	2310		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92101	10.00	2311		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92102	10.00	2313		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92102D	10.00	2315		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92102S	10.00	2317		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92104	10.00	2319		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92105	10.00	2321		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
A92106	10.00	2323		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
CCV	1.00	2326		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
CCB	1.00	2328		--	--	--	--	--	--	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--					
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				--	--																										

35

TITLE _____

Project No. _____

Book No. 994

Run 1

15

From Page No. _____

Test Performed: WHEVIA/SHEVIB/WHEVIB/WHEVAP/WEHESA/STCHG

Method No. _____

Date: 12/20/94

Work Performed: NS

Std. rack in: 3:30pm Out 4:30pm 95°C

Rack 1 in: 3:35pm Out 4:35pm 96°C

Rack 2 in: 4:30pm Out 5:30pm 96°C

Job No.	ID No.	B/D	Read	Conc.	DF	Amnt.	Unit	Final Conc.	
	Blank		3						$r=0.9972$
	0.2 ug/L		5						$y=13.74x+4.34$
	0.4		9						$x=-0.32$
	0.8		15						
	2.0		34						
	4.0		65						
	8.0		111						
Time: 20:00	ICV		75	5.14		100ml	ug/L	5.14	$TV=5$ 103% _n
20:02	ICB		2	<0.20				<0.20	
20:04	CCV		17	0.92				0.92	
20:06	CCB		2	<0.20				<0.20	
	PBW		3	<0.20				<0.20	
Rack 1	PBS	6	3	<0.20				<0.20	NS 81% _{rec}
	LCSS	9	75	5.14		0.05g	mg/kg	10.28	
9402836	19228.10	56	3	<0.20		100ml	ug/L	<0.20	
	19228.01	23	3	<0.20				<0.20	
9402837	19229.10	16	3	<0.20				<0.20	
	19230.10	25	3	<0.20				<0.20	
	19231.10	398	2	<0.20				<0.20	purge
	19234.01	403	3	<0.20				<0.20	purge
9402841	19235.01	10	3	<0.20				<0.20	purge
Time: 20:28	CCV	13	17	0.92		100ml	ug/L	0.92	
20:30	CCB	11	3	<0.20				<0.20	
9402843	19263.10	121	4	<0.20		100ml	ug/L	<0.20	purge
Rack 2	19264.10	17	4	<0.20				<0.20	purge
	19265.10	397	3	<0.20				<0.20	
	19266.10	2	4	<0.20				<0.20	purge
	19267.10	1	4	<0.20				<0.20	purge
	19268.10	58	5	<0.20				<0.20	purge

Witnessed & Understood by me,
recycled paper

LM

Date

12/21/94

Invented by

Recorded by

NS

Date

12/20/94

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Page No. 15

From Page No. 15

Instrument: HPLC

recycled paper

Test Performed: HPLC

Method Number:

Date: 12/20/94

Work Performed By: NS

HE 116/WHG MAP/WE 116 SN/STCHG

Rack 3 in 14:35pm Out 5:35pm 95°C
Rack 4 in 5:30pm Out 6:30pm 96°C

Final

Job No.	ID No.	B	Recd	Conc.	DF	Amt	Unit	Conc.	
9402.843	19273.01	28	5	<0.20		100ml	ug/L	<0.20	purge
	19274.01	19	5	<0.20		↓	↓	<0.20	purge
	19275.01	9	5	<0.20		↓	↓	<0.20	purge
	19276.01	11	3	<0.20		↓	↓	<0.20	purge
Time 20:52	CCV	17	16	0.85		100ml	ug/L	0.85	
20:54	CCB	11	1	<0.20		↓	↓	<0.20	
9402.843	19277.01	16	3	<0.20		100ml	ug/L	<0.20	purge
9402.849	19309.10	40	3	<0.20		↓	↓	<0.20	purge
	19310.10	4	4	<0.20		↓	↓	<0.20	purge
	19311.10	271	4	<0.20		↓	↓	<0.20	
	19312.10	204	5	<0.20		↓	↓	<0.20	
	19312.10 MS	53	17	0.92		↓	↓	0.92	92% rec
	19312.10 MSD	89	16	0.85		↓	↓	0.85	85% rec
	19317.01	4	5	<0.20		↓	↓	<0.20	
	19318.01	400	5	<0.20		↓	↓	<0.20	
	19319.01	18	5	<0.20		↓	↓	<0.20	
Time 21:16	CCV	215	18	0.99		100ml	ug/L	0.99	
21:18	CCB	91	4	<0.20		↓	↓	<0.20	
9402.849	19320.01	5	5	<0.20		100ml	ug/L	<0.20	
Rack 4	19320.01 MS	13	16	0.85		↓	↓	0.85	85% rec
	19320.01 MSD	16	17	0.92		↓	↓	0.92	92% rec
9402.839	19244.05	137	21	1.21		↓	↓	1.21	purge
	19245.05	31	12	0.56		↓	↓	0.56	purge
	19246.05	304	11	0.48		↓	↓	0.48	purge
	19247.05	324	9	0.34		↓	↓	0.34	purge
	19247.05 DUP	325	9	0.34		↓	↓	0.34	purge
	19247.05 SPK	327	19	1.07		↓	↓	1.07	RPD=0.7% 73% rec
	19248.05	32	7	<0.20		↓	↓	<0.20	purge

To Page No. 153

Witnessed & Understood by me,

Date

Invented by

Date

NS

12/21/94

Recorded by

NS

12/20/94

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From Page No. 38

Test Performed: W/HGVIA/SHGVIB/W/HGVIB/W/HGVAP/W/HGSA/STCHG

Method Num.: Rack 5 in: 5:35pm Out 6:35pm 95°C

Date: 12/20/94 Rack 6 in: 6:30pm Out 7:30pm 94°C

Work Performed By: AS

Job No.	ID No.	B	DO	Road Conc.	DF	Amt.	Unit	Final	Core
Rack 4									
Time: 21:40	CCV	1252	18	0.99		100ml	ug/L	0.99	
21:42	CCB	312	4	<0.20		L	L	<0.20	
9402.794	18979.05	105	3	<0.20		100ml	ug/L	<0.20	
Rack 5	18980.05	125	4	<0.20				<0.20	
	18983.05	125	4	<0.20				<0.20	
	18984.05	3	4	<0.20				<0.20	
	18993.07	14	2	<0.20				<0.20	
	18993.07 DUP	115	3	<0.20				<0.20	RPD=N
	18993.07 SPK	113	19	1.07				1.07	107
	18995.01	21	5	<0.20				<0.20	
	18996.01	17	5	<0.20				<0.20	
	18997.01	87	5	<0.20				<0.20	
Time: 22:04	CCV	75	18	0.99		100ml	ug/L	0.99	
22:06	CCB	215	4	<0.20		L	L	<0.20	
9402.794	18998.01	182	5	<0.20		100ml	ug/L	<0.20	
Rack 6	18999.01	17	5	<0.20				<0.20	
	18999.01 DUP	84	4	<0.20				<0.20	RPD=N/C
	18999.01 SPK	114	18	0.99				0.99	99
9402.833	19212.03	55	5	<0.20				<0.20	
9402.606	17852.09	213	5	<0.20				<0.20	
	17852.09 SPK	27	18	0.99				0.99	99
9402.827	19182.01 SW	86	6	<0.20	100x	1ml/100ml	mg/L	<0.02	
	19183.01 SW	8	6	<0.20		L	L	<0.02	
	19184.01 SW	1	6	<0.20		L	L	<0.02	
Time: 22:28	CCV	182	19	1.07		100ml	ug/L	1.07	
22:30	CCB	382	5	<0.20		L	L	<0.20	

To Page No. 38

Witnessed & Understood by me,

AS

Date

12/21/94

Invented by

Recorded by

NS

Date

12/20/94

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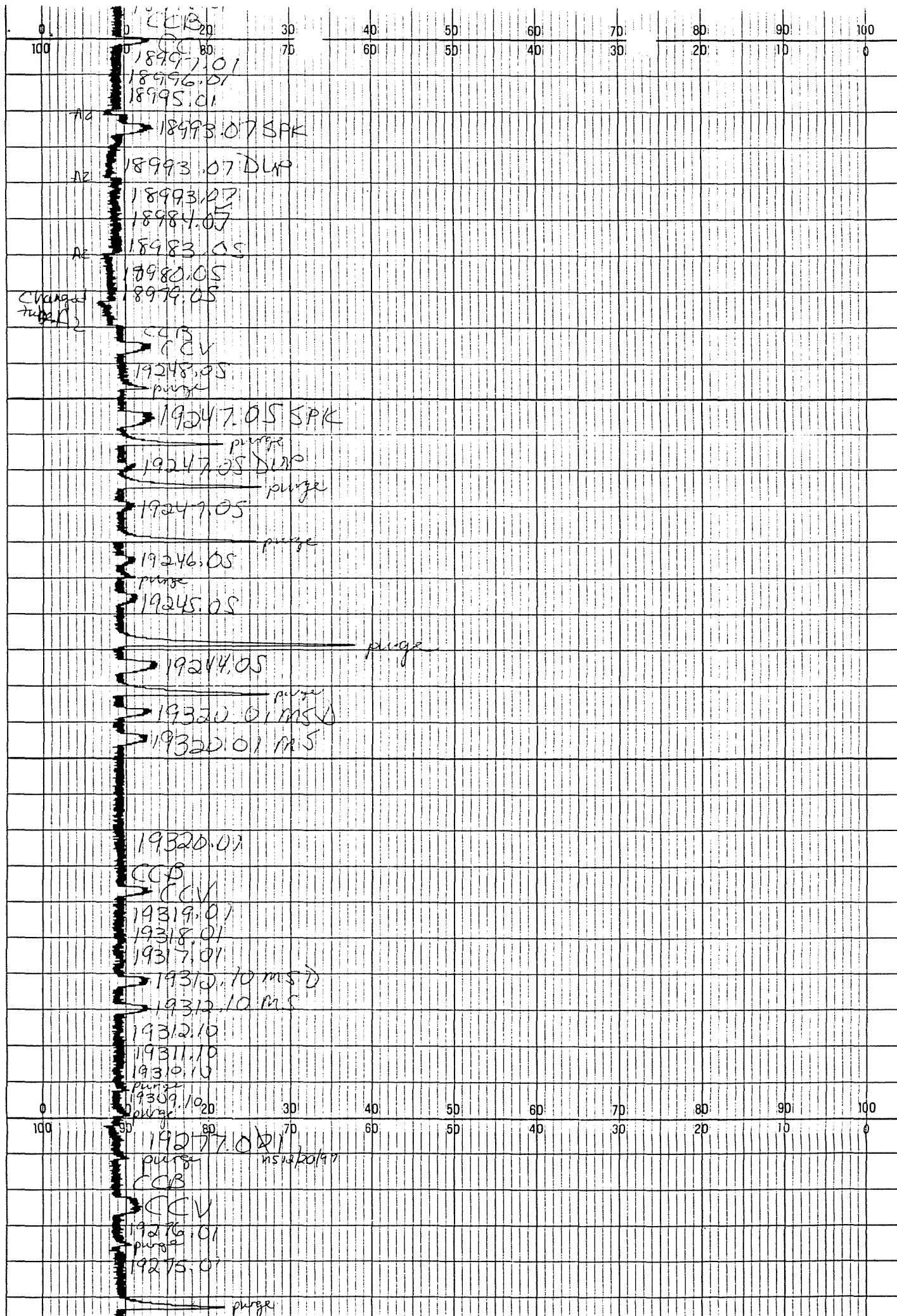
Project No. _____
Book No. **994** TITLE _____

Page No. **53**
Test Performed: **WHGVIA/SHGVIB/WHGVIB/WHGVPP/WEHGA/STCHG**

Method Number: _____
Date: **12/22/94**
Work Performed By: **MS**

Rack 7 in 6:35 pm Out 7:35 pm **95°C**
Rack 8 in 7:30 pm Out 8:00 pm **95°C**
Final

Job No.	ID No.	Read	Conc.	DF	Ampl.	Unit	Conc.	
ack 6								
102.827	19185.010500	93	536	<0.20	100 x	1ml/100ml	mg/L	<0.1002
ack 7	19186.010500	5	S	<0.20				<0.02
	19186.01 DUP	15	S	<0.20				<0.02
	19186.01 SPK	62	19	1.07				7.072
	19187.010500	401	5	<0.20				<0.02
102.829	19191.010500	68	6	<0.20				<0.02
	19192.010500	139	S	<0.20				<0.02
	19193.010500	195	4	<0.20				<0.02
22:48	CCV	20	20	1.14		100 ml	ug/L	1.14
22:50	CCB	92	5	<0.20				<0.20
22.827	19182.01	62	OR	OR		0.20g	mg/kg	-
	19183.01	11	OR	OR				-
ack 8	19183.01 DUP	83	OR	OR				-
	19183.01 SPK	26	OR	OR				-
	19184.01	393	85	5.87				2.94
	19185.01	64	268	OR				-
	19186.01	370	140	OR				-
	19187.01	3	231	OR				-
23:08	CCV	117	17	0.92		100ml	ug/L	0.92
23:10	CCB	77	3	<0.20				<0.20
2.827	19182.01	93	13	0.63	10x	Taken from adig. of 0.2g	mg/kg	3.15
	19183.01	83	12	0.56	10x			2.79
92102	19183.01 DUP	15	14	0.70				3.51
92102	19183.01 SPK	26	11	0.48				2.42
	19185.01	78	25	1.50				7.52
	19186.01	70	14	0.70				3.51
	19187.01	1150	23	1.36				6.79
23:26	CCV	5	17	0.92		100ml	ug/L	0.92
23:28	CCB	60	2	<0.20				<0.20



CCB
CCV

191817.01 10x A92106

191816.01 30 10x 40 A92105 60 70 80 90 100

191815.01 70 10x 60 A92104 40 30 20 10 0

191813.01 SPK 10x A92102 (SPK)

191813.01 DUP 10x A92102 (DUP)

191813.01 10x A92102

191812.01 10x A92101

CCB

CCV

191877.01 GR

191860.01 GR

191850.01 GR

191844.01 A92103

191830.01 GR

191820.01 GR

CCB

CCV

191930.010500

191920.010500

191910.010500

191870.010500

191860.010500 SPK

191860.010500 DUP

191860.010500

191850.010500

CCB

CCV

191840.010500

191830.010500

191820.010500

17852.09 SPK

17852.09

19212.03

18999.01 SPK

18999.01 DUP

18999.01

18999.01

18999.01

18993.07 SPK

18993.07 DUP

COVER PAGE - TCLP

[illegible]

ments:

Signature:  Name: Gary Hahn
Date: 12-22-94 Title: Laboratory Manager

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92101

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19182

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL _____ Clarity Before: C _____ Texture: _____

Color After: Clarity After: Artifacts:

Comments :

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REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92102

Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19183

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL _____ Clarity Before: C _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

A92103

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER Lab Sample ID: 19184

Level (low/med): LOW Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL_____ Clarity Before: C_____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92104

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19185

Level (low/med): LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL Clarity Before: C Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

48

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

A92105

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212_____

Matrix (soil/water): WATER Lab Sample ID: 19186

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L_

[illegible]

Color Before: CL_____ Clarity Before: C_____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92106

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19187

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL Clarity Before: C Texture: _____

Color After: Clarity After: Artifacts:

Comments :

REGULATED TCLP METALS RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

Matrix (soil/water): WATER

Concentration Units (mg/L) : MG/L

Regulatory
Level[illegible]

REGULATED TCLP METALS RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT____
Contract: C003181____
Matrix (soil/water): WATER____
Concentration Units (mg/L): MG/L____

Regulatory
Level[illegible]

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212_____

Initial Calibration Source: EPA-LV/P-E_____

Continuing Calibration Source: VHG/NBS_____

Concentration Units: ug/L

[illegible]

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

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_ Case No.:SH994__ SAS No.: _____ SDG No.: 1212__

Initial Calibration Source: EPA-LV/P-E__

Continuing Calibration Source: VHJ/NBS_____

Concentration Units: ug/L

[illegible]

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

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

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

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____
Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212_____
Initial Calibration Source: EPA-LV/P-E_____
Continuing Calibration Source: VHG/NBS_____

Concentration Units: ug/L

[illegible]

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

2B
CRDL STANDARD FOR AA AND ICP

Concentration Units: ug/L

[illegible]

3
BLANKS

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

[illegible]

3
BLANKS

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

[illegible]

3
BLANKS

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

[illegible]

4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE_ Case No.:SH994__ SAS No: _____ SDG No.: 1212__

ICP ID Number: JY_____ ICS Source: VHG_____

Concentration Units: ug/L

[illegible]

SPIKE SAMPLE RECOVERY

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

A92101S

Lab Code: EANDE_ Case No.: SH994_ SAS No.: _ SDG No.: 1212

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (mg/L) : MG/L

[illegible]

Comments :

SPIKE SAMPLE RECOVERY

Lab Name: ECOLOGY_AND_ENVIRONMENT_

Contract: C003181

A92105S

Lab Code: EAND E_ Case No.: SH994 SAS No.: SDG No.: 1212

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (mg/L) : MG/L_

[illegible]

Comments:

6
DUPLICATES

A92105D

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

[illegible]

LABORATORY CONTROL SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____

Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212_____

Solid LCS Source: _____

Aqueous LCS Source: VHG/P-E_____

[illegible]

9
ICP SERIAL DILUTION

A92106L

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

[illegible]

ILM03.0

10

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

ICP ID Number: JY_____ Date: 11/14/94

Flame AA ID Number :

Furnace AA ID Number : _____

Comments:

REGULATED TCLP METALS

10

Instrument Detection Limits (Quarterly)

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

ICP ID Number: _____ Date: 10/18/94

Flame AA ID Number : 2380

Furnace AA ID Number : _____

[illegible]

Comments :

FORM X - IN

ILM03.0

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

[illegible]

12
ICP LINEAR RANGES (QUARTERLY)

ICP ID Number: JY_____ Date: 11/14/94

[illegible]

13
PREPARATION LOG

Method: P_

[illegible]

13
PREPARATION LOG

Method: CV

[illegible]

14
ANALYSIS RUN LOG

End Date: 12/20/94

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REGULATED TCLP METALS

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: SH994__

SAS No.: _____ SDG No.:1212__

Instrument ID Number: 2380_____

Method: CV

Start Date: 12/20/94

End Date: 12/20/94

EPA Sample No.	D/F	Time	% R	Analytes																									
				A S	B A	C D	C R	P B	H G	S E	A G																		
S0	1.00	1945		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S0.2	1.00	1947		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S0.4	1.00	1949		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S0.8	1.00	1951		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S2	1.00	1953		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S4	1.00	1955		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S8	1.00	1957		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICV	1.00	2000		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICB	1.00	2002		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	2004		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	2006		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PBW	1.00	2007		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2009		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2011		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2015		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2023		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2025		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	2028		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	2030		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2035		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2037		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2039		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	2047		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

REGULATED TCLP METALS

14
ANALYSIS RUN LOG

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

Lab Code: EANDE_ Case No.: SH994__

SAS No.: _____ SDG No.:1212__

Instrument ID Number: 2380_____

Method: CV

Start Date: 12/20/94

End Date: 12/20/94

EPA Sample No.	D/F	Time	% R	Analytes																			
				A S	B A	C D	C R	P B	H G	S E	A G												
ZZZZZZ	1.00	2049		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2052		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2054		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2055		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2057		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2107		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2116		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2118		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2119		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2121		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2127		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2131		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2133		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2135		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	2140		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2142		-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2143		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2145		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2147		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2149		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

ILM03.0

14
ANALYSIS RUN LOG

End Date: 12/20/94

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9402.827-TCLP

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# 401822) and VHG Silver 1,000 ppm stock (LOT# 402631B) and VHG Antimony 1,000 ppm stock (LOT# 402631A) on 12/20/94.

ICP calibration standard (STD2) for the elements iron, arsenic and selenium were prepared from VHG multielement stock (LOT# 401822) and VHG arsenic 1,000 ppm stock (LOT# 402489A) on 12/20/94.

ICP calibration standard (STD3) for the elements Calcium, Magnesium, Sodium and Potassium 100 ppm stock (LOT# 400805A) on 12/20/94.

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 _____.

354

Raw Data

12/20/94

go

9402.827 - TCLP

Run # 1

PBW 392 - LCS(12/19)JM

Measures :STDLOW

Elements of SIMULTANEOUS

\$As	138.979	0.37800	0.00000	0.38700-0.00900
		0.38000	0.00000	0.38300-0.00300
		0.37000	0.00000	0.38900-0.01900
\$Se	196.026	0.78400	0.00000	0.76300 0.02100
		0.78600	0.00000	0.78400 0.00200
		0.75500	0.00000	0.74000 0.01500
\$Cr	205.559	0.51600	0.00000	0.51300 0.00300
		0.52200	0.00000	0.52600-0.00400
		0.49900	0.00000	0.49900 0.00000
\$Pb	220.353	1.5480	1.5610	0.00000-0.01300
		1.5890	1.5430	0.00000 0.04600
		1.5900	1.5650	0.00000 0.02500
\$Cd	226.502	1.3910	0.00000	1.4280-0.03700
		1.4090	0.00000	1.4170-0.00800
		1.3730	0.00000	1.4510-0.07800
\$Ba	233.527	1.0360	0.00000	1.1210-0.08500
		1.0260	0.00000	1.1040-0.07800
		1.0070	0.00000	1.1060-0.09900
\$Fe	259.940	0.42300	0.40200	0.00000 0.02100
		0.42400	0.40400	0.00000 0.02000
		0.42200	0.40400	0.00000 0.01800
\$Ag	328.068	8.8010	9.1110	0.00000-0.31000
		8.8160	9.0530	0.00000-0.23700
		8.7400	9.0400	0.00000-0.30000
\$Al	396.152	2.5410	2.5550	0.00000-0.01400
		2.5270	2.5250	0.00000 0.00200
		2.5210	2.5260	0.00000-0.00500

----- 7:25:43 12/20/94 -----

Results for STDLOW # Measures :3 (R)

EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma
As\$-0.01033/	78%	Se\$ 0.01267/	77%	Cr\$-0.00033/+o***%	Pb\$ 0.01933/	160%	
Cd\$-0.04100/	86%	Ba\$-0.08733/	12%	Fe\$ 0.01967/	7.8%	Ag\$-0.28233/	14%
Al\$-0.00567/	140%						

Measures :STDHIGH

Elements of SIMULTANEOUS

\$As	188.979	0.67200	0.00000	0.41400	0.25800
		0.70300	0.00000	0.39900	0.30400
		0.67800	0.00000	0.39700	0.28100
\$Se	196.026	1.3020	0.00000	0.78400	0.51800
		1.2940	0.00000	0.77000	0.52400
		1.2970	0.00000	0.80700	0.49000
\$Cr	205.559	6.5920	0.00000	0.59300	5.9990
		6.5320	0.00000	0.59300	5.9390
		6.5150	0.00000	0.58100	5.9340
\$Pb	220.353	6.6520	1.6550	0.00000	4.9970
		6.5340	1.7340	0.00000	4.8000
		6.5190	1.6630	0.00000	4.8560
\$Cd	226.502	23.846	0.00000	1.5040	22.342
		23.964	0.00000	1.5210	22.443
		23.937	0.00000	1.5170	22.420
\$Ba	233.527	32.738	0.00000	1.2350	31.503
		33.007	0.00000	1.2380	31.769
		32.937	0.00000	1.2240	31.713
\$Ag	328.068	67.816	9.8720	0.00000	57.944
		67.895	9.8270	0.00000	58.068
		67.798	9.8070	0.00000	57.991
\$Al	396.152	6.8960	2.5500	0.00000	4.3460
		6.8870	2.5310	0.00000	4.3560
		6.9020	2.5200	0.00000	4.3820

----- 7:31:38 12/20/94 -----

Results for STDHIGH # Measures :3 (R)

EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma	EL	SIGNAL/sigma
As\$	0.28100/ 8.2%	Se\$	0.51067/ 3.5%	Cr\$	5.9573/ 0.61%	Pb\$	4.8843/ 2.1%
Cd\$	22.402/ 0.24%	Ba\$	31.662/ 0.44%	Ag\$	58.001/ 0.11%	Al\$	4.3613/ 0.43%

Measures :STD2

Elements of SIMULTANEOUS

\$As	188.979	3.3920	0.00000	0.43400	2.9580
		3.3900	0.00000	0.44800	2.9420
		3.3400	0.00000	0.45100	2.8890
\$Se	196.026	5.8720	0.00000	0.90700	4.9650
		5.9180	0.00000	0.91600	5.0020
		5.8800	0.00000	0.92900	4.9510

\$Fe 259.940 8.5760 0.45000 0.00000 8.1260
 8.5920 0.45000 0.00000 8.1420
 8.5790 0.45000 0.00000 8.1290

----- 7:37:34 12/20/94 -----

Results for STD2 # Measures :3 (R)

EL SIGNAL/sigma EL SIGNAL/sigma EL SIGNAL/sigma

As\$ 2.9297/ 1.2% Se\$ 4.9727/ 0.53% Fe\$ 8.1323/ 0.10%

Intensities for Recalibration:

El	Wave	LOW	HI
As\$	188.979	STDLOW: -0.0103	STDHIGH: 0.2810
Se\$	196.026	STDLOW: 0.0127	STDHIGH: 0.5107
Cr\$	205.559	STDLOW: -0.0003	STDHIGH: 5.9573
Zn\$	213.856	STDLOW: -0.0153	STDHIGH: 19.3917
Sb\$	217.581	STDLOW: -0.0083	STDHIGH: 1.9457
Pb\$	220.353	STDLOW: 0.0193	STDHIGH: 4.8843
Cd\$	226.502	STDLOW: -0.0410	STDHIGH: 22.4017
Co\$	228.616	STDLOW: -0.0190	STDHIGH: 30.2397
Ni\$	231.604	STDLOW: 0.1223	STDHIGH: 7.5727
Ba\$	233.527	STDLOW: -0.0873	STDHIGH: 31.6617
Mn\$	257.610	STDLOW: 0.7700	STDHIGH: 38.3280
Fe\$	259.940	STDLOW: 0.0197	STD2: 8.1323
Mg\$	279.079	STDLOW: 0.0037	STD3: 34.4810
V \$	292.402	STDLOW: -0.0307	STDHIGH: 8.6207
Be\$	313.042	STDLOW: 3.1843	STDHIGH: 359.0150
Ca\$	317.933	STDLOW: -0.0350	STD3: 58.0240
Cu\$	324.754	STDLOW: 0.2557	STDHIGH: 41.1983
Ag\$	328.068	STDLOW: -0.2823	STDHIGH: 58.0010
Al\$	396.152	STDLOW: -0.0057	STDHIGH: 4.3613
Na\$	589.592	STDLOW: 29.5160	STD3: 396.9743
K \$	766.490	STDLOW: 0.2260	STD3: 29.7640

Measurements for ICV1 -

1

 Elements of SIMULTANEOUS

\$Cr	205.559	3.5510	0.00000	0.60200	2.9490	495.05	ppb
		3.6380	0.00000	0.62200	3.0160	506.29	ppb
		3.5210	0.00000	0.59700	2.9240	490.85	ppb
\$Pb	220.353	13.758	1.7160	0.00000	12.042	4942.5	ppb
		13.649	1.7570	0.00000	11.892	4880.8	ppb
		13.877	1.7280	0.00000	12.149	4986.5	ppb
\$Cd	226.502	12.724	0.00000	1.5540	11.170	499.54	ppb
		12.720	0.00000	1.5180	11.202	500.97	ppb
		12.732	0.00000	1.5320	11.200	500.88	ppb
\$Ba	233.527	62.763	0.00000	1.2290	61.534	1940.9	ppb
		62.890	0.00000	1.2240	61.666	1945.0	ppb
		62.737	0.00000	1.2380	61.499	1939.8	ppb

\$Fe	259.940	2.0300	0.40800	0.00000	1.6220	1975.1	ppb
		2.0240	0.40700	0.00000	1.6170	1968.9	ppb
		2.0200	0.40800	0.00000	1.6120	1962.8	ppb
\$Ag	328.068	37.597	9.5000	0.00000	28.097	486.92	ppb
		37.585	9.4520	0.00000	28.133	487.54	ppb
		37.491	9.4940	0.00000	27.997	485.20	ppb
\$Al	396.152	13.565	4.0910	0.00000	9.4740	2170.8	ppb
		13.582	4.0920	0.00000	9.4900	2174.4	ppb
		13.548	4.1000	0.00000	9.4480	2164.8	ppb

----- 7:47:47 12/20/94 ----- Method: ILMO201

Sample ICV1 - - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for
r Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$Cr	497.4/	1.6%	\$Pb	4935/	1.1%	\$Cd	500.1/	0.16%	\$Ba	1942/	0.14%
\$Fe	1969/	0.31%	\$Ag	486.9/	0.25%	\$Al	2170/	0.22%			

Measurements for ICV2- - 1

Elements of SIMULTANEOUS

\$As	188.979	1.8300	0.00000	0.37800	1.4520	4976.4	ppb
		1.7760	0.00000	0.38300	1.3930	4775.8	ppb
		1.7590	0.00000	0.37100	1.3880	4758.8	ppb
\$Se	196.026	3.1380	0.00000	0.78800	2.3500	4711.2	ppb
		3.0660	0.00000	0.78300	2.2830	4576.1	ppb
		3.1430	0.00000	0.79700	2.3460	4703.1	ppb

----- 7:53:12 12/20/94 ----- Method: ILMO201

Sample ICV2- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for
Simul.

EL	CONC/	sigma	EL	CONC/	sigma
\$As	4837/	2.5%	\$Se	4663/	1.6%

Measurements for ICB1- - 1

Elements of SIMULTANEOUS

\$As	188.979	0.37700	0.00000	0.39500-0.01800	-21.580	ppb
		0.37200	0.00000	0.38300-0.01100	2.2196	ppb
		0.38300	0.00000	0.38000	0.00300	49.820

\$Se	196.026	0.77300	0.00000	0.75900	0.01400	0.69486	ppb
		0.77400	0.00000	0.77700	-0.00300	-33.585	ppb
		0.77400	0.00000	0.77400	0.00000	-27.536	ppb
\$Cr	205.559	0.50300	0.00000	0.50200	0.00100	0.22380	ppb
		0.49600	0.00000	0.50300	-0.00700	-1.1190	ppb
		0.52800	0.00000	0.50300	0.02500	4.2522	ppb
\$Pb	220.353	1.5600	1.5870	0.00000	-0.02700	-19.048	ppb
		1.5370	1.5790	0.00000	-0.04200	-25.214	ppb
		1.5760	1.5530	0.00000	0.02300	1.5074	ppb
\$Cd	226.502	1.4130	0.00000	1.4160	-0.00300	1.6932	ppb
		1.3880	0.00000	1.4140	-0.02600	0.66837	ppb
		1.4020	0.00000	1.4340	-0.03200	0.40102	ppb
\$Ba	233.527	1.0160	0.00000	1.1350	-0.11900	-0.99741	ppb
		1.0360	0.00000	1.1260	-0.09000	-0.08399	ppb
		1.0260	0.00000	1.1260	-0.10000	-0.39896	ppb
\$Fe	259.940	0.41800	0.40100	0.00000	0.01700	-3.2870	ppb
		0.41700	0.40100	0.00000	0.01600	-4.5197	ppb
		0.41800	0.40000	0.00000	0.01800	-2.0544	ppb
\$Ag	328.068	8.7920	9.0760	0.00000	-0.28400	-0.02860	ppb
		8.7890	9.0160	0.00000	-0.22700	0.94939	ppb
		8.7940	9.0410	0.00000	-0.24700	0.60623	ppb
\$Al	396.152	2.5440	2.5390	0.00000	0.00500	2.4426	ppb
		2.5310	2.5010	0.00000	0.03000	8.1673	ppb
		2.5410	2.5140	0.00000	0.02700	7.4803	ppb

7:57:23 12/20/94 ----- Method: ILMO201

Sample ICB1- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	10.15/	360%	\$Se	-20.14/	91%	\$Cr	1.119/	250%	\$Pb	-14.26/	98%
\$Cd	0.9214/	74%	\$Ba	-0.4935/	94%	\$Fe	-3.287/	37%	\$Ag	0.5084/	98%
\$Al	6.030/	52%									

Measurements for CCV1- - 1

Elements of SIMULTANEOUS

\$As	188.979	0.79600	0.00000	0.48000	0.31600	1114.0	ppb
		0.78600	0.00000	0.49000	0.29600	1046.0	ppb
		0.78100	0.00000	0.49200	0.28900	1022.2	ppb
\$Se	196.026	1.3250	0.00000	0.84800	0.47700	934.33	ppb
		1.3200	0.00000	0.89600	0.42400	827.45	ppb
		1.3650	0.00000	0.83500	0.53000	1041.2	ppb

\$Cr	205.559	3.4240	0.00000	0.58300	2.8410	476.92	ppb
		3.4720	0.00000	0.59800	2.8740	482.46	ppb
		3.4650	0.00000	0.58300	2.8820	483.80	ppb
\$Pb	220.353	4.0380	1.7550	0.00000	2.2830	930.59	ppb
		4.0350	1.7980	0.00000	2.2370	911.68	ppb
		3.9960	1.7310	0.00000	2.2650	923.19	ppb
\$Cd	226.502	12.131	0.00000	1.5430	10.588	473.61	ppb
		12.178	0.00000	1.5390	10.639	475.88	ppb
		12.258	0.00000	1.5190	10.739	480.34	ppb
\$Ba	233.527	15.987	0.00000	1.2000	14.787	468.50	ppb
		16.031	0.00000	1.2000	14.831	469.88	ppb
		16.159	0.00000	1.2200	14.939	473.29	ppb
\$Fe	259.940	0.81000	0.40400	0.00000	0.40600	476.21	ppb
		0.81100	0.40500	0.00000	0.40600	476.21	ppb
		0.81200	0.40400	0.00000	0.40800	478.68	ppb
\$Ag	328.068	35.846	9.4610	0.00000	26.385	457.55	ppb
		35.776	9.4750	0.00000	26.301	456.11	ppb
		35.854	9.4010	0.00000	26.453	458.71	ppb
\$Al	396.152	6.3060	4.0770	0.00000	2.2290	511.72	ppb
		6.3210	4.0560	0.00000	2.2650	519.96	ppb
		6.2990	4.0480	0.00000	2.2510	516.75	ppb

8:03:24 12/20/94 ----- Method: ILMO201

Sample CCV1- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1061/	4.5%	\$Se	934.3/	11%	\$Cr	481.1/	0.76%	\$Pb	921.5/	1.0%
\$Cd	476.5/	0.72%	\$Ba	470.6/	0.52%	\$Fe	477.0/	0.30%	\$Ag	457.6/	0.29%
\$Al	516.1/	0.81%									

Measurements for CCB1- -

1

Elements of SIMULTANEOUS

\$As	188.979	0.37200	0.00000	0.39800-0.02600	-48.780	ppb
		0.37200	0.00000	0.40800-0.03600	-82.780	ppb
		0.37200	0.00000	0.39500-0.02300	-38.580	ppb
\$Se	196.026	0.75600	0.00000	0.79200-0.03600	-100.13	ppb
		0.78600	0.00000	0.80200-0.01600	-59.800	ppb
		0.80500	0.00000	0.81300-0.00800	-43.668	ppb
\$Cr	205.559	0.52100	0.00000	0.52100 0.00000	0.05595	ppb
		0.49200	0.00000	0.50200-0.01000	-1.6226	ppb
		0.54200	0.00000	0.50100 0.04100	6.9378	ppb

\$Pb	220.353	1.6040	1.5530	0.00000	0.05100	13.018	ppb
		1.5060	1.5460	0.00000	-0.04000	-24.392	ppb
		1.5920	1.4930	0.00000	0.09900	32.751	ppb
\$Cd	226.502	1.3910	0.00000	1.4640	-0.07300	-1.4259	ppb
		1.4070	0.00000	1.4200	-0.01300	1.2476	ppb
		1.3880	0.00000	1.4290	-0.04100	0.00000	ppb
\$Ba	233.527	1.0110	0.00000	1.1450	-0.13400	-1.4699	ppb
		1.0260	0.00000	1.1100	-0.08400	0.10499	ppb
		1.0270	0.00000	1.1220	-0.09500	-0.24148	ppb
\$Fe	259.940	0.42100	0.40000	0.00000	0.02100	1.6435	ppb
		0.42200	0.40200	0.00000	0.02000	0.41088	ppb
		0.42100	0.40200	0.00000	0.01900	-0.82176	ppb
\$Ag	328.068	8.7930	9.0500	0.00000	-0.25700	0.43466	ppb
		8.7910	9.0550	0.00000	-0.26400	0.31456	ppb
		8.7690	9.0060	0.00000	-0.23700	0.77781	ppb
\$Al	396.152	2.5390	2.5450	0.00000	-0.00600	-0.07633	ppb
		2.5440	2.5110	0.00000	0.03300	8.8543	ppb
		2.5430	2.5080	0.00000	0.03500	9.3123	ppb

----- 8:09:27 12/20/94 ----- Method: ILM0201

Sample CCB1- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-56.71/	41%	\$Se	-67.87/	43%	\$Cr	1.790/	250%	\$Pb	7.122/	410%
\$Cd	-0.0595/+0***%		\$Ba	-0.5354/	160%	\$Fe	0.4109/	300%	\$Ag	0.5091/	47%
\$Al	6.030/	88%									

Measurements for ICSAI- - 1

Elements of SIMULTANEOUS

\$As	188.979	1.2060	0.00000	1.2250	-0.01900	-24.980	ppb
		1.2120	0.00000	1.2340	-0.02200	-35.180	ppb
		1.2020	0.00000	1.2440	-0.04200	-103.18	ppb
\$Se	196.026	2.0850	0.00000	2.1060	-0.02100	-69.882	ppb
		2.1080	0.00000	2.1010	0.00700	-13.421	ppb
		2.1220	0.00000	2.0870	0.03500	43.041	ppb
\$Cr	205.559	2.3990	0.00000	2.3640	0.03500	5.9307	ppb
		2.3510	0.00000	2.3590	-0.00800	-1.2869	ppb
		2.3890	0.00000	2.3410	0.04800	8.1128	ppb
\$Pb	220.353	3.6850	2.9550	0.00000	0.73000	292.15	ppb
		3.7190	2.9470	0.00000	0.77200	309.42	ppb
		3.7340	2.8750	0.00000	0.85900	345.19	ppb

\$Cd	226.502	3.3020	0.00000	2.4720	0.83000	38.810	ppb
		3.2950	0.00000	2.5180	0.77700	36.448	ppb
		3.3590	0.00000	2.4960	0.86300	40.280	ppb
\$Ba	233.527	1.6630	0.00000	1.5750	0.08800	5.5225	ppb
		1.6450	0.00000	1.5490	0.09600	5.7745	ppb
		1.6340	0.00000	1.5360	0.09800	5.8374	ppb
\$Fe	259.940	129.35	0.54000	0.00000	128.81	158750	ppb
		128.75	0.54300	0.00000	128.20	158010	ppb
		129.03	0.54100	0.00000	128.49	158360	ppb
\$Ag	328.068	8.8820	10.505	0.00000	-1.6230	-23.003	ppb
		8.9170	10.504	0.00000	-1.5870	-22.385	ppb
		8.8820	10.494	0.00000	-1.6120	-22.814	ppb
\$Al	396.152	1983.5	17.130	0.00000	1966.3	450270	ppb
		1987.9	17.191	0.00000	1970.7	451280	ppb
		1984.2	17.179	0.00000	1967.1	450440	ppb

----- 8:21:06 12/20/94 ----- Method: ILMO201

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-54.45/	78%	\$Se	-13.42/	420%	\$Cr	4.252/	120%	\$Pb	45.19/	60%
\$Cd	11.59/	16%	\$Ba	5.711/	2.9%	\$Fe	158400/	0.24%	\$Ag	8.941/	2.7%
\$Al	450700/	0.12%									

Measurements for ICSABI- -

1

Elements of SIMULTANEOUS

\$As	188.979	1.1950	0.00000	1.2220-0.02700	-52.180	ppb
		1.2200	0.00000	1.2070 0.01300	83.820	ppb
		1.2130	0.00000	1.2240-0.01100	2.2196	ppb
\$Se	196.026	2.0470	0.00000	2.1040-0.05700	-142.48	ppb
		2.0780	0.00000	2.0680 0.01000	-7.3711	ppb
		2.0770	0.00000	2.0910-0.01400	-55.767	ppb
\$Cr	205.559	4.8980	0.00000	2.3690 2.5290	424.55	ppb
		4.8180	0.00000	2.3270 2.4910	418.17	ppb
		4.8550	0.00000	2.3480 2.5070	420.86	ppb
\$Pb	220.353	5.6710	2.9970	0.00000 2.6740	1091.3	ppb
		5.6820	2.9760	0.00000 2.7060	1104.5	ppb
		5.6700	2.9770	0.00000 2.6930	1099.1	ppb
\$Cd	226.502	21.433	0.00000	2.4820 18.951	846.25	ppb
		21.369	0.00000	2.4970 18.872	842.73	ppb
		21.398	0.00000	2.4700 18.928	845.22	ppb

\$Ba	233.527	14.813	0.00000	1.5620	13.251	420.12	ppb
		14.732	0.00000	1.5680	13.164	417.38	ppb
		14.868	0.00000	1.6050	13.263	420.50	ppb
\$Fe	259.940	126.96	0.54100	0.00000	126.42	155800	ppb
		127.00	0.54100	0.00000	126.46	155850	ppb
		126.93	0.54100	0.00000	126.39	155770	ppb
\$Ag	328.068	57.177	10.808	0.00000	46.369	800.42	ppb
		57.066	10.853	0.00000	46.213	797.75	ppb
		57.150	10.857	0.00000	46.293	799.12	ppb
\$Al	396.152	1961.0	17.149	0.00000	1943.9	445130	ppb
		1960.3	17.123	0.00000	1943.1	444960	ppb
		1956.5	17.159	0.00000	1939.3	444080	ppb

8:27:07 12/20/94 ----- Method: ILMO201

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	11.29/	610%	\$Se	-68.54/	100%	\$Cr	421.2/	0.76%	\$Pb	831.5/	0.81%
\$Cd	818.2/	0.22%	\$Ba	419.3/	0.41%	\$Fe	155800/	0.03%	\$Ag	830.3/	0.16%
\$Al	444700/	0.13%									

Measurements for CR11- - 1

Elements of SIMULTANEOUS

\$As	188.979	1.8300	0.00000	0.40800	1.4220	4874.4	ppb
		1.8250	0.00000	0.39100	1.4340	4915.2	ppb
		1.8220	0.00000	0.40000	1.4220	4874.4	ppb
\$Se	196.026	3.3050	0.00000	0.78900	2.5160	5045.9	ppb
		3.2410	0.00000	0.80800	2.4330	4878.6	ppb
		3.2060	0.00000	0.80000	2.4060	4824.1	ppb
\$Cr	205.559	0.65000	0.00000	0.53200	0.11800	19.862	ppb
		0.66800	0.00000	0.54200	0.12600	21.205	ppb
		0.65700	0.00000	0.51300	0.14400	24.226	ppb
\$Pb	220.353	2.5530	1.6540	0.00000	0.89900	361.63	ppb
		2.5520	1.6200	0.00000	0.93200	375.20	ppb
		2.5270	1.6220	0.00000	0.90500	364.10	ppb
\$Cd	226.502	1.6140	0.00000	1.4240	0.19000	10.293	ppb
		1.6450	0.00000	1.4610	0.18400	10.026	ppb
		1.6560	0.00000	1.4680	0.18800	10.204	ppb
\$Ba	233.527	13.240	0.00000	1.1600	12.080	383.24	ppb
		13.290	0.00000	1.1580	12.132	384.87	ppb
		13.321	0.00000	1.1440	12.177	386.29	ppb

\$Fe	259.940	0.58700	0.40400	0.00000	0.18300	201.33	ppb
		0.58700	0.40300	0.00000	0.18400	202.56	ppb
		0.58700	0.40300	0.00000	0.18400	202.56	ppb
\$Ag	328.068	10.128	9.2160	0.00000	0.91200	20.492	ppb
		10.132	9.2180	0.00000	0.91400	20.526	ppb
		10.149	9.1750	0.00000	0.97400	21.556	ppb
\$Al	396.152	4.6340	2.8990	0.00000	1.7350	398.60	ppb
		4.6220	2.8720	0.00000	1.7500	402.03	ppb
		4.6270	2.8660	0.00000	1.7610	404.55	ppb

----- 8:33:10 12/20/94 ----- Method: ILM0201

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	4888/	0.48%	\$Se	4916/	2.3%	\$Cr	21.76/	10%	\$Pb	366.7/	2.0%
\$Cd	10.14/	1.3%	\$Ba	384.8/	0.40%	\$Fe	202.2/	0.35%	\$Ag	20.90/	2.9%
\$Al	401.7/	0.74%									

Measurements for PBW392- -

1

Elements of SIMULTANEOUS

\$As	188.979	0.37000	0.00000	0.38700-0.01700	-18.180	ppb
		0.37300	0.00000	0.38000-0.00700	15.820	ppb
		0.37700	0.00000	0.38700-0.01000	5.6196	ppb
\$Se	196.026	0.79700	0.00000	0.78600 0.01100	-5.3546	ppb
		0.79100	0.00000	0.77500 0.01600	4.7278	ppb
		0.76700	0.00000	0.78000-0.01300	-53.750	ppb
\$Cr	205.559	0.52400	0.00000	0.50400 0.02000	3.4130	ppb
		0.48400	0.00000	0.49300-0.00900	-1.4547	ppb
		0.50300	0.00000	0.50200 0.00100	0.22380	ppb
\$Pb	220.353	1.5860	1.6040	0.00000-0.01800	-15.348	ppb
		1.5260	1.6010	0.00000-0.07500	-38.780	ppb
		1.5920	1.5920	0.00000 0.00000	-7.9479	ppb
\$Cd	226.502	1.3720	0.00000	1.4620-0.09000	-2.1833	ppb
		1.4160	0.00000	1.3850 0.03100	3.2082	ppb
		1.3610	0.00000	1.4120-0.05100-0.44558	ppb	
\$Ba	233.527	1.0180	0.00000	1.1010-0.08300	0.13649	ppb
		1.0160	0.00000	1.1200-0.10400-0.52495	ppb	
		1.0250	0.00000	1.0920-0.06700	0.64044	ppb
\$Fe	259.940	0.42600	0.40200	0.00000 0.02400	5.3414	ppb
		0.42600	0.40100	0.00000 0.02500	6.5741	ppb
		0.42700	0.40100	0.00000 0.02600	7.8067	ppb

\$Ag	328.068	8.7840	9.1220	0.00000	-0.33800	-0.95510	ppb
		8.7660	9.0400	0.00000	-0.27400	0.14298	ppb
		8.7890	9.0560	0.00000	-0.26700	0.26308	ppb
\$Al	396.152	2.5550	2.5480	0.00000	0.00700	2.9005	ppb
		2.5490	2.5400	0.00000	0.00900	3.3585	ppb
		2.5520	2.5270	0.00000	0.02500	7.0224	ppb

3:39:11 12/20/94 ----- Method: ILM0201

Sample PBW392-
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	1.086/+o***	\$Se	-18.13/	170%	\$Cr	0.7274/	340%	\$Pb	-20.69/	78%	
	<0.005		<0.02						<0.01		
\$Cd	0.1920/+o***	\$Ba	0.0840/	700%	\$Fe	6.574/	19%	\$Ag	-0.1817/	370%	
\$Al	4.427/	51%									

Measurements for LCS(12/19)-

1

Elements of SIMULTANEOUS

\$As	188.979	0.73700	0.00000	0.47100	0.26600	944.02	ppb
		0.72300	0.00000	0.50700	0.21600	774.02	ppb
		0.72900	0.00000	0.52500	0.20400	733.22	ppb
\$Se	196.026	1.3900	0.00000	0.92000	0.47000	920.21	ppb
		1.3460	0.00000	0.86500	0.48100	942.39	ppb
		1.3670	0.00000	0.86900	0.49800	976.67	ppb
\$Cr	205.559	6.6770	0.00000	0.61800	6.0590	1017.1	ppb
		6.6460	0.00000	0.61800	6.0280	1011.9	ppb
		6.5710	0.00000	0.59300	5.9780	1003.5	ppb
\$Pb	220.353	3.9200	1.8670	0.00000	2.0530	336.04	ppb
		3.8900	1.7750	0.00000	2.1150	861.53	ppb
		3.9930	1.7640	0.00000	2.2290	908.39	ppb
\$Cd	226.502	23.223	0.00000	1.4990	21.724	969.80	ppb
		23.307	0.00000	1.4940	21.813	973.77	ppb
		23.116	0.00000	1.4900	21.626	965.44	ppb
\$Ba	233.527	32.103	0.00000	1.2560	30.847	974.34	ppb
		32.064	0.00000	1.2460	30.818	973.43	ppb
		32.075	0.00000	1.2580	30.817	973.40	ppb
\$Fe	259.940	1.2390	0.40800	0.00000	0.83100	1000.1	ppb
		1.2340	0.40900	0.00000	0.82500	992.69	ppb
		1.2320	0.40800	0.00000	0.82400	991.45	ppb
\$Ag	328.068	60.219	10.287	0.00000	49.932	861.56	ppb
		60.282	10.229	0.00000	50.053	863.63	ppb
		60.055	10.284	0.00000	49.771	858.79	ppb

\$A1 396.152 7.3510 2.8990 0.00000 4.4520 1020.8 ppb
 7.3600 2.8680 0.00000 4.4920 1029.9 ppb
 7.3430 2.8570 0.00000 4.4860 1028.5 ppb

----- 8:54:29 12/20/94 ----- Method: ILMO201

Sample LCS(12/19)- - 1 #MEAS.= 3 for Seq., #MEAS.=
 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	817.1/	14%	\$Se	946.4/	3.0%	\$Cr	1011/	0.68%	\$Pb	868.0/	4.2%
\$Cd	969.5/	0.43%	\$Ba	973.7/	0.06%	\$Fe	994.7/	0.47%	\$Ag	861.5/	0.28%
\$Al	1026/	0.48%									

Measurements for 19182- - 1

 Elements of SIMULTANEOUS

\$As	188.979	0.69600	0.00000	0.73900-0.04300	-106.58	ppb
		0.70800	0.00000	0.75800-0.05000	-130.38	ppb
		0.69400	0.00000	0.74200-0.04800	-123.58	ppb
\$Se	196.026	1.0760	0.00000	1.0740 0.00200	-23.503	ppb
		0.99700	0.00000	1.0720-0.07500	-178.77	ppb
		1.0590	0.00000	1.0620-0.00300	-33.585	ppb
\$Cr	205.559	0.73800	0.00000	0.65100 0.08700	14.659	ppb
		0.73700	0.00000	0.65500 0.08200	13.820	ppb
		0.73500	0.00000	0.68100 0.05400	9.1199	ppb
\$Pb	220.353	2.0410	1.8300	0.00000 0.21100	78.794	ppb
		1.9690	1.8260	0.00000 0.14300	50.839	ppb
		2.0060	1.7790	0.00000 0.22700	85.372	ppb
\$Cd	226.502	1.7160	0.00000	1.5590 0.15700	8.8225	ppb
		1.6650	0.00000	1.5660 0.09900	6.2381	ppb
		1.7300	0.00000	1.5280 0.20200	10.828	ppb
\$Ba	233.527	30.666	0.00000	1.2230 29.443	930.12	ppb
		30.471	0.00000	1.1850 29.286	925.17	ppb
		30.632	0.00000	1.2140 29.418	929.33	ppb
\$Fe	259.940	0.45300	0.41600	0.00000 0.03700	21.366	ppb
		0.45300	0.41600	0.00000 0.03700	21.366	ppb
		0.45100	0.41700	0.00000 0.03400	17.668	ppb
\$Ag	328.068	8.6850	8.9150	0.00000-0.23000	0.89791	ppb
		8.7040	8.9880	0.00000-0.28400	-0.02860	ppb
		8.6680	8.9500	0.00000-0.28200	0.00572	ppb
\$Al	396.152	12.462	11.188	0.00000 1.2740	293.03	ppb
		12.463	11.294	0.00000 1.1690	268.99	ppb
		12.440	11.266	0.00000 1.1740	270.13	ppb

(9402.827)

----- 9:00:29 12/20/94 ----- Method: ILM0201

Sample 19182- *mg/L* 1 #MEAS.= 3 for Seq., #MEAS.= 3 fo
r Simul. *A92101*

08/12/2019

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-120.2/	10%	\$Se	-78.62/	110%	\$Cr	12.53/	24%	\$Pb	71.50/	26%
\$Cd	8.626/	27%	\$Ba	928.2/	0.29%	\$Fe	20.13/	11%	\$Ag	0.2957/	180%
\$Al	277.4/	4.9%									

Measurements for 19182D- - 1

Elements of SIMULTANEOUS

\$As	188.979	0.68500	0.00000	0.69800-0.01300	-4.5804	ppb
		0.72400	0.00000	0.74900-0.02500	-45.380	ppb
		0.71700	0.00000	0.73600-0.01900	-24.980	ppb
\$Se	196.026	1.0370	0.00000	1.0470-0.01000	-47.701	ppb
		1.0270	0.00000	1.0950-0.06800	-164.66	ppb
		1.0330	0.00000	1.1070-0.07400	-176.76	ppb
\$Cr	205.559	0.75700	0.00000	0.69600 0.06100	10.295	ppb
		0.74400	0.00000	0.70700 0.03700	6.2664	ppb
		0.76700	0.00000	0.69900 0.06800	11.470	ppb
\$Pb	220.353	1.9920	1.8280	0.00000 0.16400	59.472	ppb
		1.9810	1.8540	0.00000 0.12700	44.262	ppb
		2.0370	1.8770	0.00000 0.16000	57.828	ppb
\$Cd	226.502	1.7150	0.00000	1.5870 0.12800	7.5303	ppb
		1.7210	0.00000	1.5760 0.14500	8.2878	ppb
		1.7270	0.00000	1.5770 0.15000	8.5106	ppb
\$Ba	233.527	31.474	0.00000	1.2000 30.274	956.29	ppb
		31.738	0.00000	1.2190 30.569	965.58	ppb
		31.877	0.00000	1.2340 30.643	967.91	ppb
\$Fe	259.940	0.45300	0.41800	0.00000 0.03500	18.900	ppb
		0.45300	0.41700	0.00000 0.03600	20.133	ppb
		0.45400	0.41700	0.00000 0.03700	21.366	ppb
\$Ag	328.068	8.7810	8.9520	0.00000-0.17100	1.9102	ppb
		8.7330	9.0070	0.00000-0.27400	0.14298	ppb
		8.7410	8.9720	0.00000-0.23100	0.88075	ppb
\$Al	396.152	12.705	11.430	0.00000 1.2750	293.26	ppb
		12.695	11.443	0.00000 1.2520	287.99	ppb
		12.691	11.462	0.00000 1.2290	282.73	ppb

----- 9:06:30 12/20/94 ----- Method: ILM0201

Sample 19182D- *A92101 (DUP)* 1 #MEAS.= 3 for Seq., #MEAS.= 3 f

or Simul.

mg/L

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.10			<0.01			0.054	
\$As	-24.98/	82%	\$Se	-129.7/	55%	\$Cr	9.344/	29%	\$Pb	53.68/	16%
	0.008			0.96						<0.01	
\$Cd	8.106/	6.3%	\$Ba	963.3/	0.64%	\$Fe	20.13/	6.1%	\$Ag	0.9820/	90%
\$Al	288.0/	1.8%									

Measurements for 19182S-

1

Elements of SIMULTANEOUS

\$As	188.979	2.1110	0.00000	0.74100	1.3700	4697.6	ppb
		2.1280	0.00000	0.75500	1.3730	4707.8	ppb
		2.1140	0.00000	0.74700	1.3670	4687.4	ppb
\$Se	196.026	3.4560	0.00000	1.0700	2.3860	4783.8	ppb
		3.4880	0.00000	1.0450	2.4430	4898.7	ppb
		3.4790	0.00000	1.0690	2.4100	4832.2	ppb
\$Cr	205.559	25.356	0.00000	0.75900	24.597	4128.7	ppb
		25.223	0.00000	0.73200	24.491	4110.9	ppb
		25.336	0.00000	0.75900	24.577	4125.3	ppb
\$Pb	220.353	11.920	1.8790	0.00000	10.041	4119.9	ppb
		11.808	1.9220	0.00000	9.8860	4056.2	ppb
		11.914	1.9450	0.00000	9.9690	4090.3	ppb
\$Cd	226.502	19.696	0.00000	1.6090	18.087	807.75	ppb
		19.764	0.00000	1.5820	18.182	811.98	ppb
		19.639	0.00000	1.6110	18.028	805.12	ppb
\$Ba	233.527	1279.0	0.00000	2.0490	1277.0	40223	ppb
		1279.7	0.00000	2.0390	1277.6	40244	ppb
		1273.4	0.00000	2.0130	1271.4	40049	ppb
\$Fe	259.940	0.45700	0.41800	0.00000	0.03900	23.831	ppb
		0.45600	0.41800	0.00000	0.03800	22.598	ppb
		0.45800	0.41800	0.00000	0.04000	25.064	ppb
\$Ag	328.068	56.323	9.0690	0.00000	47.254	815.61	ppb
		56.321	9.0040	0.00000	47.317	816.69	ppb
		56.081	9.0850	0.00000	46.996	811.18	ppb
\$Al	396.152	12.662	11.385	0.00000	1.2770	293.72	ppb
		12.640	11.447	0.00000	1.1930	274.48	ppb
		12.601	11.414	0.00000	1.1870	273.11	ppb

----- 9:12:31 12/20/94 ----- Method: ILM0201

Sample 19182S-
or Simul.

A92101 (spike)

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
----	-------	-------	----	-------	-------	----	-------	-------	----	-------	-------

\$As	94%	4698/	0.22%	\$Se	97%	4838/	1.2%	\$Cr	82%	4122/	0.23%	\$Pb	82%	4089/	0.78%
\$Cd	81%	808.3/	0.43%	\$Ba	78%	40170/	0.27%	\$Fe		23.83/	5.2%	\$Ag	81%	814.5/	0.36%
\$Al		250.4/	4.1%												

Measurements for 19183- - 1

Elements of SIMULTANEOUS

\$As	188.979	0.56700	0.00000	0.55600	0.01100	77.020	ppb
		0.56200	0.00000	0.56700-0.00500		22.620	ppb
		0.55100	0.00000	0.56500-0.01400		-7.9804	ppb
\$Se	196.026	0.90400	0.00000	0.89700	0.00700	-13.421	ppb
		0.92200	0.00000	0.93800-0.01600		-59.800	ppb
		0.94100	0.00000	0.94600-0.00500		-37.618	ppb
\$Cr	205.559	0.62400	0.00000	0.59800	0.02600	4.4201	ppb
		0.62400	0.00000	0.62800-0.00400		-0.61545	ppb
		0.64900	0.00000	0.59600	0.05300	8.9520	ppb
\$Pb	220.353	2.2220	1.7610	0.00000	0.46100	181.57	ppb
		2.1690	1.7060	0.00000	0.46300	182.39	ppb
		2.1440	1.7410	0.00000	0.40300	157.73	ppb
\$Cd	226.502	1.5860	0.00000	1.4670	0.11900	7.1293	ppb
		1.5590	0.00000	1.4990	0.06000	4.5004	ppb
		1.5670	0.00000	1.5010	0.06600	4.7677	ppb
\$Ba	233.527	18.478	0.00000	1.1780	17.300	547.65	ppb
		18.484	0.00000	1.1720	17.312	548.03	ppb
		18.591	0.00000	1.1620	17.429	551.71	ppb
\$Fe	259.940	0.48900	0.41100	0.00000	0.07800	71.904	ppb
		0.49000	0.41100	0.00000	0.07900	73.137	ppb
		0.49000	0.41100	0.00000	0.07900	73.137	ppb
\$Ag	328.068	8.7650	8.9530	0.00000-0.18800		1.6185	ppb
		8.8520	9.0750	0.00000-0.22300		1.0180	ppb
		8.8050	9.0370	0.00000-0.23200		0.86360	ppb
\$Al	396.152	7.5820	6.2910	0.00000	1.2910	296.92	ppb
		7.5810	6.3100	0.00000	1.2710	292.34	ppb
		7.5880	6.3040	0.00000	1.2840	295.32	ppb

----- 9:18:32 12/20/94 ----- Method: ILMO201

Sample 19183-
r Simul.

mg/L
A92102

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.10			<0.1			<0.01			0.17	
\$As	30.55/	140%	\$Se	-36.95/	63%	\$Cr	4.252/	110%	\$Pb	173.7/	8.1%
\$Cd	5.453/	27%	\$Ba	549.1/	0.41%	\$Fe	72.73/	0.98%	\$Ag	<0.01	34%

\$Al 294.9/ 0.79%

Measurements for 19184-

1

Elements of SIMULTANEOUS

\$As	188.979	0.55500	0.00000	0.57500-0.02000	-28.380	ppb
		0.54700	0.00000	0.55800-0.01100	2.2196	ppb
		0.54400	0.00000	0.56900-0.02500	-45.380	ppb
\$Se	196.026	0.92500	0.00000	0.91600 0.00900	-9.3876	ppb
		0.94400	0.00000	0.92200 0.02200	16.827	ppb
		0.92800	0.00000	0.93800-0.01000	-47.701	ppb
\$Cr	205.559	0.63100	0.00000	0.61400 0.01700	2.9094	ppb
		0.62300	0.00000	0.61100 0.01200	2.0702	ppb
		0.63300	0.00000	0.59800 0.03500	5.9307	ppb
\$Pb	220.353	1.7290	1.7360	0.00000-0.00700	-10.826	ppb
		1.7580	1.7130	0.00000 0.04500	10.552	ppb
		1.7710	1.7250	0.00000 0.04600	10.963	ppb
\$Cd	226.502	1.5130	0.00000	1.4970 0.01600	2.5398	ppb
		1.5190	0.00000	1.5350-0.01600	1.1139	ppb
		1.5320	0.00000	1.5410-0.00900	1.4259	ppb
\$Ba	233.527	18.470	0.00000	1.1690 17.301	547.63	ppb
		18.479	0.00000	1.1640 17.315	548.12	ppb
		18.260	0.00000	1.1750 17.085	540.38	ppb
\$Fe	259.940	0.51500	0.41100	0.00000 0.10400	103.95	ppb
		0.51400	0.41100	0.00000 0.10300	102.72	ppb
		0.51300	0.41200	0.00000 0.10100	100.25	ppb
\$Ag	328.068	8.8050	9.0970	0.00000-0.29200-0.16586	ppb	
		8.7870	9.0510	0.00000-0.26400 0.31456	ppb	
		8.8450	9.0230	0.00000-0.17800 1.7901	ppb	
\$Al	396.152	7.4470	6.3100	0.00000 1.1370	261.66	ppb
		7.5120	6.3490	0.00000 1.1630	267.61	ppb
		7.4510	6.3370	0.00000 1.1140	256.39	ppb

----- 9:24:33 12/20/94 ----- Method: ILMO201

Sample 19184-
r Simul.

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

mg/L
0 A92103

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-23.85/ 20.585	100%	\$Se	-13.42/ 0.55	240%	\$Cr	3.637/	56%	\$Pb	3.406/ 20.01	370%
\$Cd	1.676/	45%	\$Ba	545.6/	0.74%	\$Fe	102.3/	1.8%	\$Ag	0.6667/	150%
\$Al	261.9/	2.1%									

Measurements for CCV2-

1

Elements of SIMULTANEOUS

\$As	188.979	0.77300	0.00000	0.46700	0.30600	1080.0	ppb
		0.75900	0.00000	0.48000	0.27900	988.22	ppb
		0.74800	0.00000	0.46300	0.28500	1008.6	ppb
\$Se	196.026	1.3360	0.00000	0.83200	0.50400	988.77	ppb
		1.3560	0.00000	0.84900	0.50700	994.82	ppb
		1.3240	0.00000	0.87000	0.45400	887.95	ppb
\$Cr	205.559	3.3360	0.00000	0.62000	2.7160	455.94	ppb
		3.3830	0.00000	0.60700	2.7760	466.01	ppb
		3.3780	0.00000	0.58500	2.7930	468.86	ppb
\$Pb	220.353	4.0450	1.7550	0.00000	2.2900	933.47	ppb
		4.0850	1.7440	0.00000	2.3410	954.44	ppb
		4.0670	1.6780	0.00000	2.3890	974.17	ppb
\$Cd	226.502	11.760	0.00000	1.5130	10.247	458.41	ppb
		11.766	0.00000	1.4990	10.267	459.30	ppb
		11.779	0.00000	1.5090	10.270	459.44	ppb
\$Ba	233.527	15.611	0.00000	1.2090	14.402	456.37	ppb
		15.566	0.00000	1.2220	14.344	454.54	ppb
		15.469	0.00000	1.1910	14.278	452.47	ppb
\$Fe	259.940	0.80400	0.41100	0.00000	0.39300	460.19	ppb
		0.80600	0.41100	0.00000	0.39500	462.65	ppb
		0.80200	0.41000	0.00000	0.39200	458.95	ppb
\$Ag	328.068	38.969	9.5110	0.00000	29.458	510.27	ppb
		38.984	9.5290	0.00000	29.455	510.22	ppb
		38.815	9.4550	0.00000	29.360	508.59	ppb
\$Al	396.152	6.2710	4.0280	0.00000	2.2430	514.92	ppb
		6.2650	4.0590	0.00000	2.2060	506.45	ppb
		6.2500	4.0360	0.00000	2.2140	508.28	ppb

9:41:59 12/20/94 ----- Method: ILMO201

Sample CCB2- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1026/	4.7%	\$Se	957.2/	6.3%	\$Cr	463.6/	1.5%	\$Pb	953.7/	2.1%
\$Cd	459.0/	0.12%	\$Ba	454.5/	0.43%	\$Fe	460.6/	0.41%	\$Ag	509.8/	0.19%
\$Al	509.9/	0.87%									

Measurements for CCB2- -

1

Elements of SIMULTANEOUS

\$As	188.979	0.37300	0.00000	0.39100-0.01800	-2.1580	ppb
		0.38000	0.00000	0.38100-0.00100	3.6220	ppb
		0.37100	0.00000	0.39700-0.02600	-4.8780	ppb
\$Se	196.026	0.77600	0.00000	0.76500 0.01100-0.53546	ppb	
		0.75500	0.00000	0.75700-0.00200	-3.1569	ppb
		0.75400	0.00000	0.76400-0.01000	-4.7701	ppb
\$Cr	205.559	0.52600	0.00000	0.49900 0.02700 0.45879	ppb	
		0.52400	0.00000	0.49300 0.03100 0.52593	ppb	
		0.50700	0.00000	0.50900-0.00200-0.02798	ppb	
\$Pb	220.353	1.5520	1.5490	0.00000 0.00300-0.67146	ppb	
		1.6080	1.5850	0.00000 0.02300 0.15074	ppb	
		1.5670	1.5810	0.00000-0.01400	-1.3703	ppb
\$Cd	226.502	1.3840	0.00000	1.4280-0.04400-0.01337	ppb	
		1.4010	0.00000	1.4070-0.00600 0.15595	ppb	
		1.3740	0.00000	1.4140-0.04000 0.00446	ppb	
\$Ba	233.527	1.0290	0.00000	1.1280-0.09900-0.03675	ppb	
		1.0340	0.00000	1.1180-0.08400 0.01050	ppb	
		1.0260	0.00000	1.1160-0.09000-0.00840	ppb	
\$Fe	259.940	0.42000	0.40600	0.00000 0.01400-0.69850	ppb	
		0.42200	0.40800	0.00000 0.01400-0.69850	ppb	
		0.42100	0.40500	0.00000 0.01600-0.45197	ppb	
\$Ag	328.068	8.7750	9.0710	0.00000-0.29600-0.02345	ppb	
		8.8040	9.0870	0.00000-0.28300-0.00114	ppb	
		8.7370	9.0460	0.00000-0.30900-0.04575	ppb	
\$Al	396.152	2.5450	2.5700	0.00000-0.02500-0.44271	ppb	
		2.5500	2.5550	0.00000-0.00500 0.01527	ppb	
		2.5430	2.5210	0.00000 0.02200 0.63354	ppb	

9:48:01 12/20/94 ----- Method: ILM0201

Sample CCB2- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-1.138/	380%	\$Se	-2.821/	76%	\$Cr	0.3189/	95%	\$Pb	-0.6304/	120%
\$Cd	0.0491/	190%	\$Ba	-0.0115/	210%	\$Fe	-0.6163/	23%	\$Ag	-0.0236/	95%
\$Al	0.0687/	790%									

Measurements for 19185-

1

Elements of SIMULTANEOUS

\$As	188.979	0.68300	0.00000	0.69200-0.00900	9.0196	ppb
		0.66300	0.00000	0.69400-0.03100	-65.780	ppb
		0.66000	0.00000	0.67800-0.01800	-21.580	ppb

\$Se	196.026	1.0290	0.00000	1.0680-0.03900	-106.18	ppb
		1.0260	0.00000	1.0190 0.00700	-13.421	ppb
		1.0030	0.00000	1.0340-0.03100	-90.047	ppb
\$Cr	205.559	0.70500	0.00000	0.66200 0.04300	7.2735	ppb
		0.69600	0.00000	0.67600 0.02000	3.4130	ppb
		0.69700	0.00000	0.67600 0.02100	3.5808	ppb
\$Pb	220.353	2.0280	1.8540	0.00000 0.17400	63.583	ppb
		2.0440	1.8220	0.00000 0.22200	83.316	ppb
		2.0390	1.7960	0.00000 0.24300	91.949	ppb
\$Cd	226.502	1.7870	0.00000	1.5030 0.28400	14.481	ppb
		1.7840	0.00000	1.5300 0.25400	13.145	ppb
		1.7770	0.00000	1.5350 0.24200	12.610	ppb
\$Ba	233.527	31.854	0.00000	1.1820 30.672	968.83	ppb
		31.809	0.00000	1.2140 30.595	966.40	ppb
		31.912	0.00000	1.1600 30.752	971.35	ppb
\$Fe	259.940	0.50200	0.41700	0.00000 0.08500	80.532	ppb
		0.50300	0.41600	0.00000 0.08700	82.998	ppb
		0.50200	0.41600	0.00000 0.08600	81.765	ppb
\$Ag	328.068	8.7600	9.0150	0.00000-0.25500	0.46897	ppb
		8.7870	8.9570	0.00000-0.17000	1.9274	ppb
		8.7580	9.0070	0.00000-0.24900	0.57192	ppb
\$Al	396.152	11.013	9.6270	0.00000 1.3860	318.68	ppb
		11.006	9.7000	0.00000 1.3060	300.36	ppb
		10.987	9.6930	0.00000 1.2940	297.61	ppb

----- 9:54:48 12/20/94 ----- Method: ILMO201

Sample 19185-
r Simul.

mg/L

A92104

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
	<0.1			<0.1			<0.01			0.079	
\$As	-26.11/	140%	\$Se	-69.88/	71%	\$Cr	4.756/	46%	\$Pb	79.43/	18%
	0.013			0.97						<0.01	
\$Cd	13.40/	7.2%	\$Ba	968.9/	0.26%	\$Fe	81.77/	1.5%	\$Ag	1.006/	81%
\$Al	305.5/	3.7%									

Measurements for 19186-

1

Elements of SIMULTANEOUS

\$As	188.979	0.87800	0.00000	0.88700-0.00900	9.0196	ppb
		0.88200	0.00000	0.89000-0.00800	12.420	ppb
		0.87500	0.00000	0.90300-0.02800	-55.580	ppb
\$Se	196.026	1.1780	0.00000	1.1790-0.00100	-29.552	ppb
		1.1980	0.00000	1.1760 0.02200	16.827	ppb
		1.2030	0.00000	1.1950 0.00800	-11.404	ppb

\$Cr	205.559	1.1770	0.00000	0.81400	0.36300	60.986 ppb
		1.1660	0.00000	0.81900	0.34700	58.300 ppb
		1.1750	0.00000	0.82300	0.35200	59.139 ppb
\$Pb	220.353	2.5920	2.1590	0.00000	0.43300	170.06 ppb
		2.5710	2.1790	0.00000	0.39200	153.20 ppb
		2.5600	2.1490	0.00000	0.41100	161.01 ppb
\$Cd	226.502	2.0420	0.00000	1.7520	0.29000	14.749 ppb
		2.0300	0.00000	1.7360	0.29400	14.927 ppb
		2.0170	0.00000	1.7460	0.27100	13.902 ppb
\$Ba	233.527	31.913	0.00000	1.3000	30.613	966.97 ppb
		31.928	0.00000	1.2570	30.671	968.80 ppb
		31.972	0.00000	1.2930	30.679	969.05 ppb
\$Fe	259.940	0.47400	0.43300	0.00000	0.04100	26.296 ppb
		0.47300	0.43300	0.00000	0.04000	25.064 ppb
		0.47400	0.43400	0.00000	0.04000	25.064 ppb
\$Ag	328.068	8.9700	9.1440	0.00000	-0.17400	1.8587 ppb
		8.9280	9.1560	0.00000	-0.22800	0.93223 ppb
		8.9110	9.1290	0.00000	-0.21800	1.1038 ppb
\$Al	396.152	32.601	16.010	0.00000	16.591	3800.5 ppb
		32.579	16.120	0.00000	16.459	3770.2 ppb
		32.588	16.118	0.00000	16.470	3772.8 ppb

----- 10:00:49 12/20/94 ----- Method: ILMO201

Sample 19186-
r Simul.

mg/L
5

A92105

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	<0.1	340%	\$Se	<0.1	290%	\$Cr	0.059	2.3%	\$Pb	0.16	5.3%
	-11.38/			-8.043/			59.48/			159.2/	
	0.015			0.97						<0.01	
\$Cd	14.52/	3.8%	\$Ba	968.3/	0.12%	\$Fe	25.47/	2.8%	\$Ag	1.303/	38%
\$Al	3781/	0.44%									

Measurements for 19187-

1

Elements of SIMULTANEOUS

\$As	188.979	0.90400	0.00000	0.89900	0.00500	56.620 ppb
		0.91500	0.00000	0.92100	-0.00600	19.220 ppb
		0.86800	0.00000	0.91100	-0.04300	-106.58 ppb
\$Se	196.026	1.1550	0.00000	1.1870	-0.03200	-92.063 ppb
		1.1910	0.00000	1.1840	0.00700	-13.421 ppb
		1.1750	0.00000	1.1620	0.01300	-1.3216 ppb
\$Cr	205.559	1.2690	0.00000	0.83100	0.43800	73.575 ppb
		1.2390	0.00000	0.78800	0.45100	75.757 ppb
		1.2640	0.00000	0.78700	0.47700	80.121 ppb

\$Pb	220.353	2.4010	2.1510	0.00000	0.25000	94.827	ppb
		2.3800	2.1660	0.00000	0.21400	80.027	ppb
		2.4080	2.1830	0.00000	0.22500	84.549	ppb
\$Cd	226.502	2.0400	0.00000	1.6840	0.35600	17.690	ppb
		2.0490	0.00000	1.6950	0.35400	17.600	ppb
		2.0340	0.00000	1.7550	0.27900	14.259	ppb
\$Ba	233.527	29.743	0.00000	1.2750	28.468	899.41	ppb
		29.816	0.00000	1.3450	28.471	899.50	ppb
		29.907	0.00000	1.2880	28.619	904.16	ppb
\$Fe	259.940	0.47500	0.42800	0.00000	0.04700	33.692	ppb
		0.47400	0.42700	0.00000	0.04700	33.692	ppb
		0.47400	0.42800	0.00000	0.04600	32.460	ppb
\$Ag	328.068	9.0120	9.2190	0.00000-0.20700		1.2925	ppb
		9.0040	9.2290	0.00000-0.22500		0.98370	ppb
		8.8970	9.2380	0.00000-0.34100		-1.0066	ppb
\$Al	396.152	25.768	17.464	0.00000	8.3040	1902.8	ppb
		25.758	17.620	0.00000	8.1380	1864.8	ppb
		25.775	17.652	0.00000	8.1230	1861.4	ppb

----- 10:06:52 12/20/94 ----- Method: ILM0201

Sample 19187-
r Simul.

mg/L

A92106

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	<0.1	830%	\$Se	<0.1	140%	\$Cr	0.076	4.4%	\$Pb	0.085	8.9%
	-10.25/			-35.60/			76.48/			85.34/	
	0.017			0.90						<0.01	
\$Cd	16.51/	12%	\$Ba	901.0/	0.30%	\$Fe	33.28/	2.1%	\$Ag	0.4299/	290%
\$Al	1876/	1.2%									

Measurements for 19187L-

1

Elements of SIMULTANEOUS

\$As	188.979	0.59100	0.00000	0.61200-0.02100	-31.780	ppb
		0.59900	0.00000	0.59700 0.00200	46.420	ppb
		0.60500	0.00000	0.62700-0.02200	-35.180	ppb
\$Se	196.026	0.95700	0.00000	0.99400-0.03700	-102.15	ppb
		0.93500	0.00000	0.98600-0.05100	-130.38	ppb
		0.96200	0.00000	0.99800-0.03600	-100.13	ppb
\$Cr	205.559	0.75900	0.00000	0.64000 0.11900	20.030	ppb
		0.75100	0.00000	0.63500 0.11600	19.527	ppb
		0.77000	0.00000	0.65400 0.11600	19.527	ppb
\$Pb	220.353	1.8090	1.7840	0.00000 0.02500	2.3296	ppb
		1.7730	1.7110	0.00000 0.06200	17.540	ppb
		1.8750	1.7650	0.00000 0.11000	37.273	ppb

\$Cd	226.502	1.5870	0.00000	1.4980	0.08900	5.7925	ppb
		1.5760	0.00000	1.4960	0.08000	5.3915	ppb
		1.5520	0.00000	1.5140	0.03800	3.5201	ppb
\$Ba	233.527	7.3780	0.00000	1.1660	6.2120	198.41	ppb
		7.4790	0.00000	1.1840	6.2950	201.02	ppb
		7.5220	0.00000	1.1840	6.3380	202.38	ppb
\$Fe	259.940	0.43400	0.41300	0.00000	0.02100	1.6435	ppb
		0.43400	0.41200	0.00000	0.02200	2.8762	ppb
		0.43400	0.41200	0.00000	0.02200	2.8762	ppb
\$Ag	328.068	8.8430	9.1770	0.00000	-0.33400	-0.88647	ppb
		8.8570	9.0990	0.00000	-0.24200	0.69202	ppb
		8.8430	9.0910	0.00000	-0.24800	0.58908	ppb
\$Al	396.152	10.154	8.1830	0.00000	1.9710	452.64	ppb
		10.153	8.2890	0.00000	1.8640	428.14	ppb
		10.136	8.2910	0.00000	1.8450	423.78	ppb

----- 10:12:53 12/20/94 ----- Method: ILMO201

Sample 19187L-
or Simul.

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

A92106 (Serial Dilution)

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-6.847/	670%	\$Se	-110.9/	15%	\$Cr	19.69/	1.5%	\$Pb	18.79/	93%
\$Cd	4.901/	25%	\$Ba	200.6/	1.0%	\$Fe	2.465/	29%	\$Ag	0.1320/	670%
\$Al	434.9/	3.6%									

Measurements for ICSAF-

1

Elements of SIMULTANEOUS

\$As	188.979	1.2010	0.00000	1.2300	-0.02900	-58.980	ppb
		1.2370	0.00000	1.2220	0.01500	90.620	ppb
		1.2010	0.00000	1.2300	-0.02900	-58.980	ppb
\$Se	196.026	2.1030	0.00000	2.0470	0.05600	85.387	ppb
		2.0870	0.00000	2.0870	0.00000	-27.536	ppb
		2.1290	0.00000	2.0480	0.08100	135.80	ppb
\$Cr	205.559	2.3820	0.00000	2.3910	-0.00900	-1.4547	ppb
		2.4410	0.00000	2.3410	0.10000	16.841	ppb
		2.3970	0.00000	2.3680	0.02900	4.9236	ppb
\$Pb	220.353	3.7400	2.9400	0.00000	0.80000	320.93	ppb
		3.6710	2.9630	0.00000	0.70800	283.11	ppb
		3.7280	2.9230	0.00000	0.80500	322.99	ppb
\$Cd	226.502	3.3380	0.00000	2.4090	0.92900	43.221	ppb
		3.3290	0.00000	2.3730	0.95600	44.424	ppb
		3.3550	0.00000	2.4270	0.92800	43.177	ppb

\$Ba	233.527	1.6770	0.00000	1.5640	0.11300	6.3099	ppb
		1.6790	0.00000	1.5500	0.12900	6.8139	ppb
		1.6510	0.00000	1.5480	0.10300	5.9949	ppb
\$Fe	259.940	129.30	0.54900	0.00000	128.75	158680	ppb
		129.31	0.54800	0.00000	128.77	158700	ppb
		129.17	0.54800	0.00000	128.62	158520	ppb
\$Ag	328.068	8.9030	10.419	0.00000	-1.5160	-21.167	ppb
		8.9080	10.434	0.00000	-1.5260	-21.338	ppb
		8.9090	10.425	0.00000	-1.5160	-21.167	ppb
\$Al	396.152	2013.7	16.617	0.00000	1997.1	457320	ppb
		2009.4	17.073	0.00000	1992.3	456230	ppb
		2012.4	17.116	0.00000	1995.3	456900	ppb

----- 10:19:46 12/20/94 ----- Method: ILM0201

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	-9.114/	950%	\$Se	64.55/	130%	\$Cr	6.770/	140%	\$Pb	34.92/	63%
\$Cd	16.64/	4.2%	\$Ba	6.373/	6.5%	\$Fe	158600/	0.06%	\$Ag	10.50/	0.85%
\$Al	456800/	0.12%									

Measurements for ICSABF- -

1

Elements of SIMULTANEOUS

\$As	188.979	1.2120	0.00000	1.2180	-0.00600	19.220	ppb
		1.2040	0.00000	1.2050	-0.00100	36.220	ppb
		1.2100	0.00000	1.2270	-0.01700	-18.180	ppb
\$Se	196.026	2.0940	0.00000	2.0890	0.00500	-17.454	ppb
		2.0580	0.00000	2.1260	-0.06800	-164.66	ppb
		2.0110	0.00000	2.1340	-0.12300	-275.56	ppb
\$Cr	205.559	4.7600	0.00000	2.3690	2.3910	401.39	ppb
		4.8270	0.00000	2.3530	2.4740	415.32	ppb
		4.7580	0.00000	2.3970	2.3610	396.35	ppb
\$Pb	220.353	5.6870	2.9650	0.00000	2.7220	1111.1	ppb
		5.8890	2.9310	0.00000	2.9580	1208.1	ppb
		5.6850	2.9560	0.00000	2.7290	1113.9	ppb
\$Cd	226.502	21.748	0.00000	2.4470	19.301	861.84	ppb
		21.782	0.00000	2.4380	19.344	863.76	ppb
		21.340	0.00000	2.4330	18.907	844.28	ppb
\$Ba	233.527	14.616	0.00000	1.5670	13.049	413.76	ppb
		14.656	0.00000	1.5660	13.090	415.05	ppb
		14.347	0.00000	1.5900	12.757	404.56	ppb

\$Fe	259.940	126.55	0.54500	0.00000	126.00	155290	ppb
		127.28	0.54500	0.00000	126.74	156200	ppb
		124.38	0.54400	0.00000	123.84	152630	ppb
\$Ag	328.068	58.441	10.747	0.00000	47.694	823.16	ppb
		58.712	10.687	0.00000	48.025	828.84	ppb
		57.938	10.711	0.00000	47.227	815.14	ppb
\$Al	396.152	1953.8	16.671	0.00000	1937.1	443580	ppb
		1978.8	16.895	0.00000	1962.0	449270	ppb
		1945.7	16.872	0.00000	1928.8	441690	ppb

----- 10:25:48 12/20/94 ----- Method: ILMO201

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	12.42/	220%	\$Se	-152.6/	85%	\$Cr	404.4/	2.4%	\$Pb	877.5/	6.0%
\$Cd	830.3/	1.2%	\$Ba	411.1/	1.4%	\$Fe	154700/	1.2%	\$Ag	853.3/	0.85%
\$Al	444800/	0.89%									

Measurements for CRIF- - 1

Elements of SIMULTANEOUS

\$As	188.979	1.7980	0.00000	0.42500	1.3730	4707.8	ppb
		1.8280	0.00000	0.43300	1.3950	4782.6	ppb
		1.8240	0.00000	0.41000	1.4140	4847.2	ppb
\$Se	196.026	3.1890	0.00000	0.79200	2.3970	4806.0	ppb
		3.2420	0.00000	0.81400	2.4280	4868.5	ppb
		3.1690	0.00000	0.79100	2.3780	4767.7	ppb
\$Cr	205.559	0.66000	0.00000	0.54700	0.11300	19.023	ppb
		0.67500	0.00000	0.52900	0.14600	24.562	ppb
		0.67000	0.00000	0.51500	0.15500	26.073	ppb
\$Pb	220.353	2.6150	1.6740	0.00000	0.94100	378.90	ppb
		2.5910	1.6080	0.00000	0.98300	396.16	ppb
		2.5510	1.6060	0.00000	0.94500	380.54	ppb
\$Cd	226.502	1.6540	0.00000	1.4580	0.19600	10.560	ppb
		1.5860	0.00000	1.4710	0.11500	6.9510	ppb
		1.6300	0.00000	1.4450	0.18500	10.070	ppb
\$Ba	233.527	13.094	0.00000	1.1500	11.944	378.95	ppb
		13.021	0.00000	1.1610	11.860	376.31	ppb
		13.029	0.00000	1.1440	11.885	377.09	ppb
\$Fe	259.940	0.59900	0.40900	0.00000	0.19000	209.96	ppb
		0.59800	0.40800	0.00000	0.19000	209.96	ppb
		0.59600	0.40900	0.00000	0.18700	206.26	ppb

\$Ag	328.068	10.190	9.2960	0.00000	0.89400	20.183	ppb
		10.177	9.2260	0.00000	0.95100	21.161	ppb
		10.218	9.2440	0.00000	0.97400	21.556	ppb
\$Al	396.152	4.7090	2.9210	0.00000	1.7870	410.50	ppb
		4.7090	2.9190	0.00000	1.7900	411.19	ppb
		4.7050	2.8910	0.00000	1.8140	416.69	ppb

----- 10:31:49 12/20/94 ----- Method: ILMO201

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

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	4779/	1.5%	\$Se	4814/	1.1%	\$Cr	23.22/	16%	\$Pb	385.0/	2.5%
\$Cd	9.158/	21%	\$Ba	377.5/	0.36%	\$Fe	208.7/	1.0%	\$Ag	21.01/	3.4%
\$Al	412.8/	0.82%									

Measurements for CCV3-

1

Elements of SIMULTANEOUS

\$As	188.979	0.77800	0.00000	0.49500	0.28300	1001.8	ppb
		0.78000	0.00000	0.50600	0.27400	971.22	ppb
		0.81000	0.00000	0.49500	0.31500	1110.6	ppb
\$Se	196.026	1.3640	0.00000	0.86900	0.49500	970.62	ppb
		1.3830	0.00000	0.87700	0.50600	992.81	ppb
		1.4720	0.00000	0.86800	0.60400	1190.4	ppb
\$Cr	205.559	3.4370	0.00000	0.63200	2.8050	470.88	ppb
		3.4240	0.00000	0.62900	2.7950	469.20	ppb
		3.4290	0.00000	0.62200	2.8070	471.21	ppb
\$Pb	220.353	4.2040	1.6670	0.00000	2.5370	1035.0	ppb
		4.1720	1.7710	0.00000	2.4010	979.10	ppb
		4.1950	1.7460	0.00000	2.4490	998.84	ppb
\$Cd	226.502	12.158	0.00000	1.5140	10.644	476.10	ppb
		12.252	0.00000	1.5340	10.718	479.40	ppb
		12.431	0.00000	1.4840	10.947	489.60	ppb
\$Ba	233.527	15.767	0.00000	1.2100	14.557	461.25	ppb
		15.823	0.00000	1.1830	14.640	463.87	ppb
		15.761	0.00000	1.1740	14.587	462.20	ppb
\$Fe	259.940	0.81400	0.41100	0.00000	0.40300	472.51	ppb
		0.81600	0.40900	0.00000	0.40700	477.44	ppb
		0.81500	0.41000	0.00000	0.40500	474.98	ppb
\$Ag	328.068	39.514	9.5490	0.00000	29.965	518.97	ppb
		39.659	9.4720	0.00000	30.187	522.78	ppb
		39.434	9.4820	0.00000	29.952	518.75	ppb

\$Al 396.152 6.2770 4.0370 0.00000 2.2400 514.24 ppb
 6.2710 4.0230 0.00000 2.2480 516.07 ppb
 6.2740 4.0220 0.00000 2.2520 516.98 ppb

----- 10:48:56 12/20/94 ----- Method: ILMO201

Sample CCV3- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for
 Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	1028/	7.1%	\$Se	1051/	12%	\$Cr	470.4/	0.23%	\$Pb	1004/	2.8%
\$Cd	481.6/	1.5%	\$Ba	462.4/	0.29%	\$Fe	475.0/	0.52%	\$Ag	520.3/	0.44%
\$Al	515.8/	0.27%									

Measurements for CCB3- - 1

 Elements of SIMULTANEOUS

\$As	188.979	0.37700	0.00000	0.39100-0.01400-0.79804	ppb
		0.37800	0.00000	0.39200-0.01400-0.79804	ppb
		0.38200	0.00000	0.38300-0.00100 3.6220	ppb
\$Se	196.026	0.75400	0.00000	0.78300-0.02900 -8.6014	ppb
		0.75000	0.00000	0.77300-0.02300 -7.3915	ppb
		0.77000	0.00000	0.78200-0.01200 -5.1734	ppb
\$Cr	205.559	0.53400	0.00000	0.50900 0.02500 0.42522	ppb
		0.55500	0.00000	0.54700 0.00800 0.13988	ppb
		0.51900	0.00000	0.52000-0.00100-0.01119	ppb
\$Pb	220.353	1.4740	1.5240	0.00000-0.05000 -2.8503	ppb
		1.5410	1.4780	0.00000 0.06300 1.7951	ppb
		1.4850	1.5110	0.00000-0.02600 -1.8636	ppb
\$Cd	226.502	1.3860	0.00000	1.3930-0.00700 0.15150	ppb
		1.3650	0.00000	1.4120-0.04700-0.02673	ppb
		1.3680	0.00000	1.3830-0.01500 0.11585	ppb
\$Ba	233.527	1.0240	0.00000	1.1130-0.08900-0.00525	ppb
		1.0130	0.00000	1.1130-0.10000-0.03990	ppb
		0.99300	0.00000	1.1080-0.11500-0.08714	ppb
\$Fe	259.940	0.42300	0.40800	0.00000 0.01500-0.57523	ppb
		0.42400	0.40800	0.00000 0.01600-0.45197	ppb
		0.42300	0.40800	0.00000 0.01500-0.57523	ppb
\$Ag	328.068	8.7120	8.9660	0.00000-0.25400 0.04861	ppb
		8.6860	8.9650	0.00000-0.27900 0.00572	ppb
		8.5660	8.9570	0.00000-0.39100-0.18645	ppb
\$Al	396.152	2.5040	2.5060	0.00000-0.00200 0.08396	ppb
		2.5090	2.4880	0.00000 0.02100 0.61064	ppb
		2.4990	2.4920	0.00000 0.00700 0.29005	ppb

Sample CCB3- - 1 #MEAS.= 3 for Seq., #MEAS.= 3 for
Simul.

EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma	EL	CONC/	sigma
\$As	0.6753/	380%	\$Se	-7.055/	25%	\$Cr	0.1846/	120%	\$Pb	-0.9731/	250%
\$Cd	0.0803/	120%	\$Ba	-0.0441/	93%	\$Fe	-0.5341/	13%	\$Ag	-0.0441/	280%
\$Al	0.3282/	81%									

TITLE _____

From Page No. _____

Test Performed: WHEVIA/SHSVIB/WHEVIB/WHEVAP/WHEGSA/STCHG

Method No. _____

Date: 12/20/94

Work Performed: NS

Std. rack in: 3:30pm Out 4:30pm 95°C
Rack 1 in: 3:35pm Out 4:35pm 96°C
Rack 2 in: 4:30pm Out 5:30pm 96°C

Job No.	ID No.	Box	Read	Conc.	DF	Amnt.	Unit	Final Conc.	
	Blank		3						r=0.9972
	0.2 µg/L		5						y=13.74 x + 4.34
	0.4		9						x=-0.32
	0.8		15						
	2.0		34						
	4.0		65						
	8.0		111						
Time: 20:00	ICV		75	5.14		100ml	µg/L	5.14	TV=5 103% n
20:02	ICB		2	<0.20				<0.20	
20:04	CCV		17	0.92				0.92	
20:06	CCB		2	<0.20				<0.20	
	PBW		3	<0.20				<0.20	
Rack 1	PBS	6	3	<0.20				<0.20	NS 81% rec
	LCSS	9	75	5.14		0.05g	mg/kg	10.28	
9402836	19226.10	56	3	<0.20		100ml	µg/L	<0.20	
	19228.01	23	3	<0.20				<0.20	
9402837	19229.10	16	3	<0.20				<0.20	
	19230.10	25	3	<0.20				<0.20	
	19231.10	398	2	<0.20				<0.20	purge
	19234.01	403	3	<0.20				<0.20	purge
12/20/94	19235.01	10	3	<0.20				<0.20	purge
Time 20:28	CCV	13	17	0.92		100ml	µg/L	0.92	
20:30	CCB	11	3	<0.20				<0.20	
9402843	19263.10	121	4	<0.20		100ml	µg/L	<0.20	purge
Rack 2	19264.10	17	4	<0.20				<0.20	purge
	19265.10	397	3	<0.20				<0.20	
	19266.10	2	4	<0.20				<0.20	purge
	19267.10	1	4	<0.20				<0.20	purge
	19268.10	58	5	<0.20				<0.20	purge

Witnessed & Understood by me.
recycled paper

lm

Date

12/21/94

Invented by

Recorded by

NS

Date

12/20/94

Form Page No. 15
Test Performed: WHS VIA / SHS VIA
Method Number: _____
Date: 12/20/94
Work Performed By: MS

HEV16 / WHS MAP / WEH6SN / STCH6
Rack 3 in 4:35pm Out 5:35pm 95°C
Rack 4 in 5:30pm Out 6:30pm 96°C
Final

Job No.	ID No.	B	Recd	Conc.	DF	Amt.	Unit	Conc.	
9402.843	19273.01	28	5	<0.20		100ml	ug/L	<0.20	purge
	19274.01	19	5	<0.20		↓	↓	<0.20	purge
	19275.01	9	5	<0.20		↓	↓	<0.20	purge
	19276.01	11	3	<0.20		↓	↓	<0.20	purge
Time 20:52	CCV	17	16	0.85		100ml	ug/L	0.85	
20:54	CCB	11	1	<0.20		↓	↓	<0.20	
9402.843	19277.01	16	3	<0.20		100ml	ug/L	<0.20	purge
9402.849	19309.10	40	3	<0.20		↓	↓	<0.20	purge
	19310.10	4	4	<0.20		↓	↓	<0.20	purge
	19311.10	271	4	<0.20		↓	↓	<0.20	
	19312.10	204	5	<0.20		↓	↓	<0.20	
	19312.10 MS	53	17	0.92		↓	↓	0.92	92 % rec
	19312.10 MSD	87	16	0.85		↓	↓	0.85	85 % rec
	19317.01	4	5	<0.20		↓	↓	<0.20	
	19318.01	400	5	<0.20		↓	↓	<0.20	
	19319.01	18	5	<0.20		↓	↓	<0.20	
Time 21:16	CCV	215	18	0.99		100ml	ug/L	0.99	
21:18	CCB	91	4	<0.20		↓	↓	<0.20	
9402.849	19320.01	5	5	<0.20		100ml	ug/L	<0.20	
Rack 4	19320.01 MS	13	16	0.85		↓	↓	0.85	85 % rec
	19320.01 MSD	16	17	0.92		↓	↓	0.92	92 % rec
9402.839	19244.05	137	21	1.21		↓	↓	1.21	purge
	19245.05	12		0.56		↓	↓	0.56	purge
	19246.05	11		0.48		↓	↓	0.48	purge
	19247.05	9		0.34		↓	↓	0.34	purge
	19247.05 SP	9		0.34		↓	↓	0.34	purge
	19247.05 SPK	19		1.07		↓	↓	1.07	73 % rec
	19248.05	7		<0.20		↓	↓	<0.20	purge

To Page No. / S3

Witnessed & Understood by me,

MS

Date

12/21/94

Invented by

Recorded by

MS

Date

12/20/94

Project No. _____
 Book No. **994** TITLE _____

Page No. **53**
 Test Performed: **WHGVIA/SHGVIB/WHGVIB/WHGVPP/WEHGA/STCHG**

Method Number: _____
 Date: **12/22/94**
 Work Performed By: **MS**
 Rack 7 in 6:35 pm Out 7:35 pm **95°C**
 Rack 8 in 7:30 pm Out 8:00 pm **95°C**
 Final

Job No.	ID No.	B	Read	Conc.	DF	Ampl.	Unit	Conc.	
ack 6		8							
02.827	19185.010500	93	536	<0.20	100 x	1ml/100ml	mg/L	<0.002	A92104
ack 7	19186.010500	5	S	<0.20				<0.02	A92105
92105 (Dup)	19186.01 DUP	15	5	<0.20				<0.02	RPD N/C
92105 (SPK)	19186.01 SPK	62	19	1.07				7.47	107% rec
	19187.010500	401	5	<0.20				<0.02	A92106
02.829	19191.010500	68	6	<0.20				<0.02	
	19192.010500	139	S	<0.20				<0.02	
	19193.010500	195	4	<0.20				<0.02	
2:22:48	CCV	20	20	1.14		100 ml	ug/L	1.14	
2:25:50	CCB	92	5	<0.20				<0.20	
2:827	19182.01	62	OR	1.74		0.20g	mg/kg	-	
-	19183.01	11	OR	120				-	
ack 8	19183.01 DUP	83	OR					-	RPD=
	19183.01 SPK	26	OR					-	2. rec
	19184.01	393	85	5.87				2.94	
	19185.01	64	268	OR				-	
	19186.01	370	140	OR				-	
	19187.01	3	231	OR				-	
2:28:08	CCV	117	17	0.92		100ml	ug/L	0.92	
2:30:10	CCB	77	3	<0.20				<0.20	
1827	19182.01	83	13	0.63	10 x	Taken from adis. of 0.2g	mg/kg	3.15	
	19183.01	83	12	0.56	10 x			2.79	
	19183.01 DUP	83	14	0.70				3.51	RPD=23
	19183.01 SPK	26	11	0.48				2.42	4x rule
	19185.01	78	25	1.50				7.52	
	19186.01	78	14	0.70				3.51	
	19187.01	115	23	1.36				6.79	
3:26	CCV	5	17	0.92		100ml	ug/L	0.92	
13:28	CCB	60	2	<0.20				<0.20	

CCV

19276.01

19275.01

19274.01

19273.01

19268.16

19267.10

19266.19

19265.10

19264.70

19263.78

CCB

CCV

19235.01

19234.01

19231.810

19230.10

19229.10

19228.801

19226.10

PBS

PBS

CCB

CCV

ICB

ICV

A2

8.0

4.0

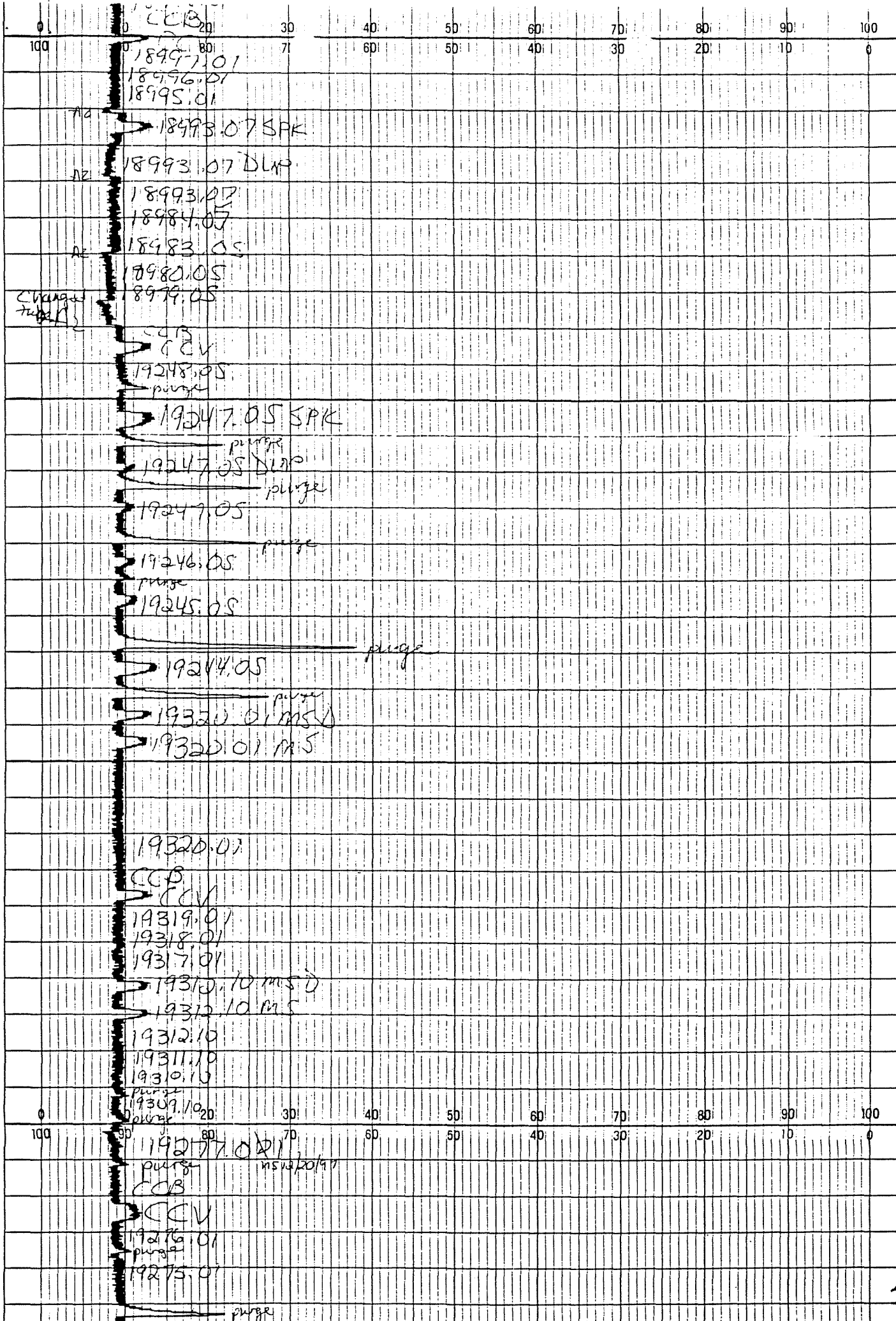
0.8

0.4

0.2

0.1

Chart speed 10mm/min
Range 5mV
12/20/94



PERKIN-ELMER CHART NO 056-7300

CCB
CCV

19187.01 10X

19186.01 30 10X 40

19185.01 70 10X 60

19183.01 80 10X

19183.01 DUP 10X

19183.01 10X

19183.01 10X

19183.01 10X

CCB

CCV

19187.01 GR
19186.01 GR

19184.01

19183.01 GR

19182.01 GR

CCB

CCV

19193.01 0500

19193.01 0500

19193.01 0500

19187.01 0500 A92106

19186.01 0500 SPE A92105 (SP:K)

19186.01 0500 DUP A92105 (DUP)

19186.01 0500 A92105

19185.01 0500 A92104

CCB

CCV

19189.01 0500 A92103

19183.01 0500 A92102

19183.01 0500 A92101

17852.01 SPE

17852.01

19212.03

18999.01 SPE

18999.01 DUP

18999.01

18999.01

CCB

CCV

18997.01

18996.01

18995.01

18993.01 SPE

18992.01 DUP

96

Work Performed by: JM

A92101
A92101 (DJP)
A92101 (Sp:Ke)
A92102
A92103
A92104
A92105
A92106

Approved by: _____ Date: _____

METALS DIGEST 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)

Project No. _____

Book No. _____

TITLE _____

Form Page No. _____

Test Performed: 0% Solids

Method Number: _____

Date: 12/19/94Work Performed By: JM

IN: 1:58pm Temp 105°F

Out: 2:59pm Temp 103°F

Job No.	ID No.	#	Dish wt. (g)	in. # L wt. (g) (Tared)	Final wt (g)	0% Solids
7402.827	19182.01	1	0.96	5.34	4.68	70.0%
	19183.01	2	0.96	5.37	4.80	71.5%
	19184.01	3	0.96	7.42	6.53	75.0%
	19185.01	4	0.96	6.37	5.22	67.0%
	19186.01	5	0.96	5.92	5.12	70.2%
	19187.01	6	0.97	5.75	5.47	78.2%
1402.790	18925.01	7	0.96	6.75	5.88	73.0%
	18926.01	8	0.98	6.81	7.04	89.0%
	18927.01	9	0.96	7.24	7.34	90.0%
	18927.01 dup	10	0.97	7.26	7.20	86.0% RPD = 4.5
	18928.01	11	0.97	7.60	6.51	73.0%
	18929.01	12	0.97	6.72	4.29	49.4%
	18930.01	13	0.97	7.22	6.68	79.0%
1402.789	18922.01	14	0.96	6.02	4.81	64.0%
	18923.01	15	0.96	7.07	7.33	90.0%
	18924.01	16	0.97	6.79	5.93	73.0%
402.797	18921.01 19017.01	17	0.96	7.03	6.76	82.5%
	19018.01	18	0.96	7.44	6.72	77.4%
	19019.01	19	0.96	6.54	5.98	77.0%
	19020.01	20	0.96	7.50	6.70	76.5%
	19020.01 dup	21	0.97	7.45	6.68	77.0% RPD = 0.6
402.777	18835.01	22	0.97	7.24	5.11	57.1%
402.775	18835.01					
402.795	19010.01	23	0.96	6.45	6.09	79.5%
	19011.01	24	0.97	7.27	7.01	83.0%
	19012.01	25	0.97	6.93	6.67	82.2%
	19012.01 dup	26	0.97	7.25	7.10	84.5% RPD = 2.5
7402.818	19148.01	27	0.96	6.43	4.97	62.3

To Page No. _____

Witnessed & Understood by me, _____

Date _____

Invented by _____

Date _____

Recorded by JM

12/19/94

117

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

[illegible]

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Analyzed
19182	Sed	Hg	12/15/94	12/20/94
19183				
19184	↓	↓	↓	↓
19185	↓	↓	↓	↓
19186	↓	↓	↓	↓
19187	↓	↓	↓	↓
19182	↓	TCLP: As, Ba, Cr,		12/20/94
19183	↓	Cd, Co, Pb, Se, Ag, Hg	↓	
19184	↓		↓	↓
19185	↓		↓	↓
19186	↓	↓	↓	↓
19187	↓	↓	↓	↓



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

December 22, 1994

LAB NAME: Ecology and Environment, Inc.

CASE NUMBER: SH994

SDG NUMBER: 1212

CONTRACT NUMBER: C003181

SAMPLES IN SDG: A92101 A92102 A92103 A92104 A92105 A92106

SDG NARRATIVE:

Enclosed are the analytical results for soil samples received at the Analytical Services Center on December 15, 1994. The samples were analyzed for the following parameter according to NYSDEC Analytical Services Protocol, September 1989, Revision 12/91:

Mercury	CLP-M
TCLP Metals	Method 3111

The "B" flag on TCLP extract analyses means that the reported sample result is above the IDL but below the regulatory limit.

All reported TCLP barium sample results have been flagged "E" based on the serial dilution. A chemical/physical interference is suspected.

Due to the level of mercury detected in several of the samples, secondary dilutions were required.

The duplicate analysis of sample A92102 exceeded the RPD criteria for mercury. The reported sample results have been flagged "*".

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 signature.

Gary Hahn - Manager
Analytical Services Center
December 22, 1994

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92101

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

Matrix (soil/water): SOIL__ Lab Sample ID: 19182

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: __70.0

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	4.5		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: __

Color After: __ Clarity After: __ Artifacts: __

Comments:

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92102

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): SOIL Lab Sample ID: 19183

Level (low/med): LOW Date Received: 12/15/94

% Solids: 71.5

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	3.9		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

12/91

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92103

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): SOIL Lab Sample ID: 19184

Level (low/med): LOW Date Received: 12/15/94

% Solids: 75.0

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	3.9		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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:

Color After: Clarity After: Artifacts:

Comments:

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92104

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): SOIL Lab Sample ID: 19185

Level (low/med): LOW Date Received: 12/15/94

% Solids: 67.0

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		-		NR
7440-39-3	Barium		-		NR
7440-41-7	Beryllium		-		NR
7440-43-9	Cadmium		-		NR
7440-70-2	Calcium		-		NR
7440-47-3	Chromium		-		NR
7440-48-4	Cobalt		-		NR
7440-50-8	Copper		-		NR
7439-89-6	Iron		-		NR
7439-92-1	Lead		-		NR
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury	11.2	-	*	CV
7440-02-0	Nickel		-		NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		-		NR
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:

Color After: Clarity After: Artifacts:

Comments:

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NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92105

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

Matrix (soil/water): SOIL__ Lab Sample ID: 19186

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: __70.2

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	5.0		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: __

Color After: __ Clarity After: __ Artifacts: __

Comments:

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NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

A92106

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

Matrix (soil/water): SOIL__

Lab Sample ID: 19187

Level (low/med): LOW__

Date Received: 12/15/94

% Solids: __78.2

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				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	8.7		*	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
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: __

Color After: __ Clarity After: __ Artifacts: __

Comments:

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REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92101

Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212_____

Matrix (soil/water): WATER

Lab Sample ID: 19182

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL Clarity Before: C Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

45

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92102

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19183

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL Clarity Before: C Texture: _____

Color After: Clarity After: Artifacts:

Comments:

46

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92103

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19184

Level (low/med): LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L) : MG/L

[illegible]

Color Before: CL _____ Clarity Before: C _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

47

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

A92104

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

Lab Code: EANDE_____ Case No.: SH994_____ SAS No.: _____ SDG No.: 1212

Matrix (soil/water): WATER Lab Sample ID: 19185

Level (low/med): LOW Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL_____ Clarity Before: C_____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92105

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19186

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL_____ Clarity Before: C_____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments :

49

REGULATED TCLP METALS

SAMPLE NO.

SAMPLE RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92106

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

Matrix (soil/water): WATER

Lab Sample ID: 19187

Level (low/med) : LOW

Date Received: 12/15/94

% Solids: 0.0

Concentration Units (mg/L): MG/L

[illegible]

Color Before: CL _____ Clarity Before: C _____ Texture: _____

Color After: Clarity After: Artifacts: _____

Comments :

REGULATED TCLP METALS RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

Matrix (soil/water): WATER

Concentration Units (mg/L) : MG/L

Regulatory
Level[illegible]

REGULATED TCLP METALS RESULTS

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

Matrix (soil/water): WATER

Concentration Units (mg/L) : MG/L

Regulatory
Level[illegible]

NYSDEC ASP

3
BLANKS

Lab Name: ECOLOGY_AND_ENVIRONMENT_____ Contract: C003181_____
 Lab Code: EANDE_____ Case No.: SH994 SAS No.: _____ SDG No.: 1212_____
 Preparation Blank Matrix (soil/water): SOIL_____
 Preparation Blank Concentration Units (ug/L or mg/kg): 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	0.2	U	0.100	U	CV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

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3
BLANKS

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

[illegible]

58

NYSDEC ASP

5A
SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

A92102S

Lab Name: ECOLOGY_AND_ENVIRONMENT

Contract: C003181

Lab Code: EANDE

Case No.: SH994

SAS No.:

SDG No.: 1212

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 71.5

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		3.3567	3.9161	0.699	-80.0		CV
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR
Cyanide							NR

Comments:

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SPIKE SAMPLE RECOVERY

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

A92101S

Lab Code: EANDE_ Case No.: SH994_ SAS No.: _ SDG No.: 1212_

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (mg/L) : MG/L

Comments :

NYSDEC ASP

6
DUPLICATES

NYSDEC SAMPLE NO.

A92102D

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: SH994 SAS No.: __ SDG No.: 1212__

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

% Solids for Sample: _71.5 % Solids for Duplicate: _71.5

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		3.9161	4.8951	22.2	*	CV
Nickel						NR
Potassium						NR
Selenium						NR
Silver						NR
Sodium						NR
Thallium						NR
Vanadium						NR
Zinc						NR
Cyanide						NR

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SAMPLE NO.

Lab Name: ECOLOGY AND ENVIRONMENT Contract: C003181

A92101D

Lab Code: EANDE Case No.: SH994 SAS No.: SDG No.: 1212

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

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

Concentration Units (mg/L) : MG/L

[illegible]

6
DUPLICATES

A92105D

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

[illegible]

NYSDEC ASP

7

LABORATORY CONTROL SAMPLE

Lab Name: ECOLOGY_AND_ENVIRONMENT____ Contract: C003181____
 Lab Code: EANDE_ Case No.: SH994 SAS No.: _____ SDG No.: 1212____
 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	10.3		8.5	17.0	81.1
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

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LABORATORY CONTROL SAMPLE

Contract: C003181

Solid LCS Source:

Aqueous LCS Source: VHG/P-E

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