



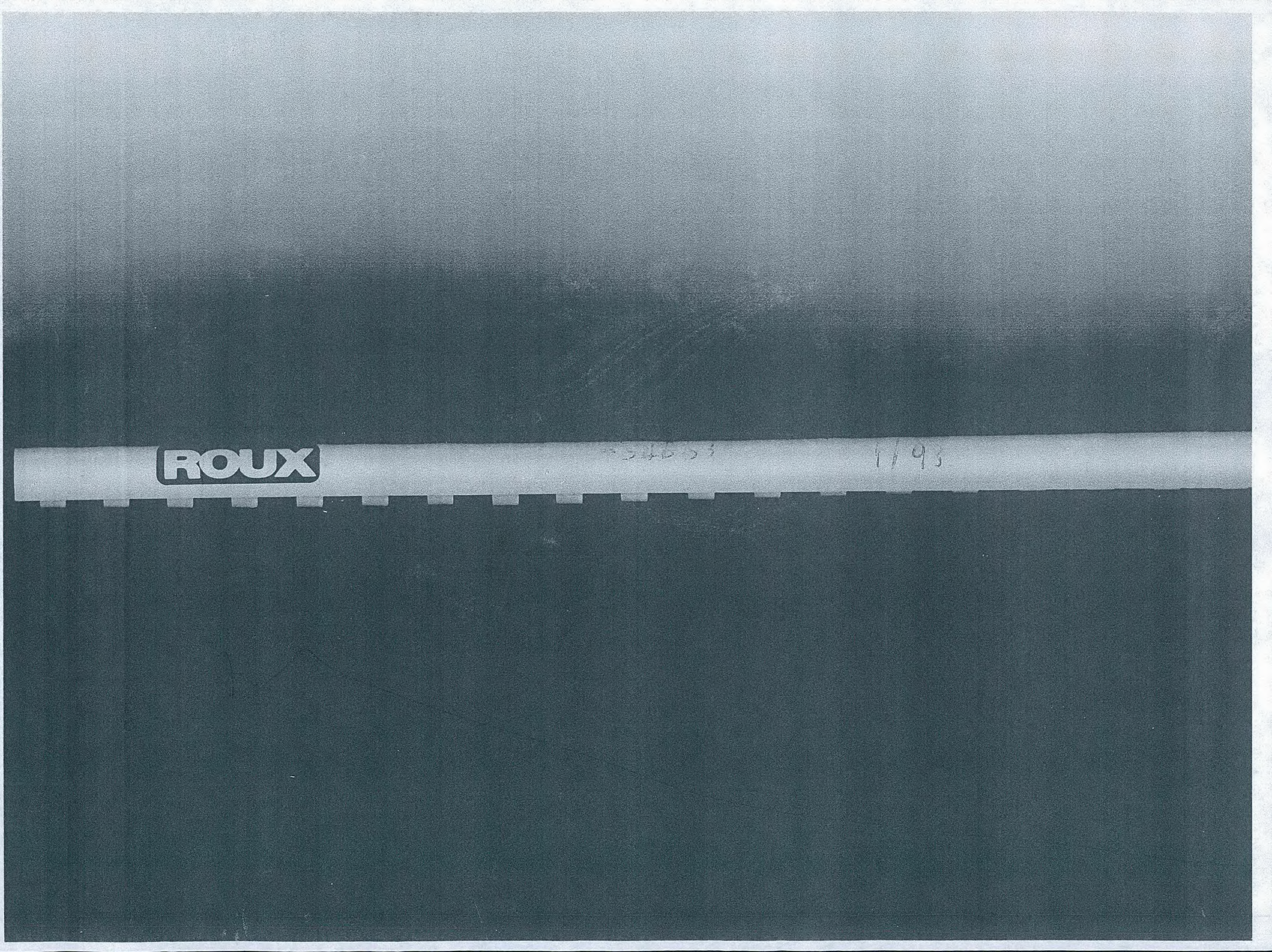
Write or Copy/Paste Document Title In This Space

Report.HW.734053.1998-01-09.Pre-Remedial_Design_Sampling

DO NOT PHOTOCOPY. PRINT FROM PDF VERSION ONLY.






ROUX

REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

1377 MOTOR PARKWAY
SUITE 403
ISLANDIA, NEW YORK 11788
TEL (516) 232-2600
FAX (516) 232-9898

January 9, 1998

Mr. Wayne Mizerak
Bureau of Western Remedial Action
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12203

Re: Syracuse China Site, Town of Salina
Onondaga County, Site Number 7-34-053
Response to DEC Comments for the Report on Pre-Remedial Design Sampling

Dear Mr. Mizerak:

Remedial Engineering, P.C. has prepared this correspondence on behalf of The Pfaltzgraff Co. (Pfaltzgraff) to respond to New York State Department of Environmental Conservation's (NYDEC's) December 1, 1997 letter providing comments on your review of the November 19, 1997 Report on Pre-Remedial Design Sampling (Report) for the above-referenced site. The intent of this correspondence is to include the information requested by the NYDEC in a series of attachments and thereby append the Report. The NYDEC comments and Pfaltgraff's responses are presented below.

Comment
The range of the historic piezometric water levels for MW-1 through MW-7 should be reported so a comparison can be made for determination of whether the most recent piezometric measurements are during a high or low season.

Response
A table has been prepared to provide historic ground-water elevation data and is included herein as Attachment A.

Comment
The historic sediment data should be included as a comparison with most current data.

Response
Table 1 of the Report has been modified to include the historic sediment data and is included herein as Attachment B.

Comment
On page 4, 2nd paragraph: For clarity, include the specific borings in the areas being referenced throughout this paragraph.

Response
The second paragraph of page 4 of the Report has been modified and is included herein as Attachment C.

Comment
2.2 Hydraulic Monitoring: There is no indication in the reading or in the boring logs that the new wells were surveyed. Include top of ground, top of casing, and top of PVC elevations in boring log. Include top of PVC elevations in Table 2. Also indicate what the depth measurements in Table 2 are referenced to. If the depth measurements are not referenced to top of PVC, provide appropriate reference elevation.

Response
The new wells were surveyed by a licensed surveyor. The boring logs have been modified to reflect the appropriate elevations and are included herein in Attachment D. Table 2 of the report has also been modified to indicate appropriate information and is also included in Attachment D.

Comment
It is suggested by the Report that the removal be based solely on visual observation. The Department suggests that some combination of visual observations and minimum depth be used. In the region of SB-07-E, there were none of the usual visual cues found in the other locations, however, high levels of lead were encountered.

Response
The proposed wetland material removal will be based on discrete depths, as determined from data presented in the Report. Removal may be supplemented with visual observation, where practicable. A separate submittal will be made to the NYDEC which will detail proposed removal actions.

Comment
Include in the report the laboratory data summary sheets for the ten confirmation samples.

Response
The laboratory report for the ten confirmation samples are included herein as Attachment E.

Comment
Identify background samples in Table 1 and in Figure 2.

Response
Table 1 has been modified to identify background samples (samples SB-01, SB-02, SB-03, SB-04, and SB-05) and is included herein as Attachment B. Figure 2 has also been modified to identify background samples and is included herein as Attachment F.

Comment
The conclusion concerning using the white clay as a visual aide for extent of removal is not correct. The clay layer was not always white. Include a column for the description of clay layer or soil in Table 1 for each sample.

Response
Table 1 has been modified to describe the soil for each sample and is included herein as Attachment B.

Comment
Sampling to the east was limited and did not go, in extent, to low lead levels. Do you intend to excavate to the berm on the eastern side.

Response
It is currently our intent to excavate to the berm on the eastern side. A separate submittal will be made to the NYDEC which will detail proposed removal actions.

We trust the above meets with your approval. Should you have any questions or would like to discuss the project, please contact Ms. Elaine Bobletz at (716) 263-1596 or Mr. P.J. Hansen, P.E. at (609) 423-8800.

Respectfully,

REMEDIAL ENGINEERING, P.C.

Peter J. Gerbasi, P.E.
Principal Engineer

ROUX ASSOCIATES, INC.

Patrick J. Hansen, P.E.
Project Manager

cc: Ms. Elaine Bobletz - Nixon Hargrave

Attachments

ATTACHMENT A

HISTORIC GROUND-WATER ELEVATION DATA

Attachment A. Historic Ground-Water Elevations. The Pfaltzgraff Company; Syracuse China Site.

Well Identification	Ground-Water Elevation (feet above mean sea level)					
	10/13/1989[1]	10/26/1989[1]	1/5/1995[2]	8/17/1995[2]	10/31/1997[3]	11/17/1997[3]
MW - 1	395.27	398.34	394.49	393.03	392.45	393.16
MW - 2	390.07	390.69	390.38	388.93	389.95	390.78
MW - 3	383.91	383.92	384.14	383.64	383.91	384.02
MW - 4	380.09	380.36	380.44	380.17	380.33	380.66
MW - 4I	NI	NI	380.07	381.78	382.46	382.56
MW - 5	386.74	387.25	386.25	385.10	384.41	385.02
MW - 6	NI	NI	410.03	410.85	410.05	408.67
MW - 7	NI	NI	387.16	389.14	389.78	390.60
MW-8	NI	NI	NI	NI	382.10	382.20
MW-9	NI	NI	NI	NI	---	393.84
MW-10	NI	NI	NI	NI	380.23	380.50

NI = Not installed.
-- = Not gauged.

[1]Depth to water data obtained from Table 2, Preliminary Hydrogeologic Site Assessment; O'Brien & Gere, April 1990.
[2]Depth to water data obtained from Appendix D, Remedial Investigation Report; Geraghty & Miller, December 1997.
[3]Depth to water data obtained from McLaren Hart field notes.

ATTACHMENT B

MODIFIED TABLE 1

Attachment B. Modified Table 1, Soil Sampling Analytical Results. The Pfaltzgraff Co.; Syracuse China Site.

Sample Identification	Sample Depth (inches below ground surface)	Sample Date	Lead Concentration (mg/kg)	Confirmatory Concentration (mg/kg)	Soil Sample Description
SS-5	0-12"	12/7/94	5,110	NA	--
SS-6	0-12"	12/7/94	51.9	NA	--
SS-7	0-12"	12/7/94	639	NA	--
SS-8	0-12"	12/7/94	1,560	NA	--
SS-9	0-12"	12/7/94	3,280	NA	--
SS-10	0-12"	12/7/94	668	NA	--
SS-11	0-12"	12/7/94	3,060	NA	--
SS-12	0-12"	12/7/94	3,740	NA	--
SED-1	0-12"	8/17/95	3,380	NA	--
SED-2	0-12"	8/17/95	4,840	NA	--
SED-2A	0-12"	8/17/95	2,020	NA	--
SED-3	0-12"	8/17/95	4,510	NA	--
SED-4	0-12"	8/17/95	3,720	NA	--
SED-4A	0-12"	8/17/95	617	NA	--
SED-5	0-12"	8/17/95	2,580	NA	--
SED-6	0-12"	8/17/95	4,000	NA	--
SED-6A	0-12"	8/17/95	6,010	NA	--
SB-01*	0"-6"	10/27/97	20	NA	Brown Peat, Moist
SB-02*	0"-6"	10/27/97	10	9.2	Brown Peat, Wet
SB-02*	6"-12"	10/27/97	0.5	NA	Brown Silty Sand, Moist
SB-02*	12"-18"	10/27/97	8	NA	Brown Silty Sand, Moist
SB-02*	18"-24"	10/27/97	2	NA	Brown Silty Sand, Moist
SB-03*	0"-6"	10/27/97	450	464	Brown Peat, Wet
SB-04*	0"-6"	10/27/97	557	617	Brown Peat, Wet
SB-04*	6"-12"	10/27/97	31	33.5	Brown Silty Sand, Moist
SB-05*	0"-6"	10/27/97	68	NA	Brown Peat, Wet
SB-05*	6"-12"	10/27/97	2	NA	Brown Silty Sand, Moist
SB-05*	12"-18"	10/27/97	8	NA	Brown Silty Sand, Moist
SB06	0"-6"	10/28/97	4,700	NA	Brown to Gray Clay
SB06	6"-12"	10/28/97	330	51.3	Black Peat
SB06	12"-18"	10/28/97	14	NA	Dark Gray Clay

* Denotes background sample.
NA = Not applicable.
-- = Description not available.

Attachment B. Modified Table 1, Soil Sampling Analytical Results. The Pfaltzgraff Co.; Syracuse China Site.

Sample Identification	Sample Depth (inches below ground surface)	Sample Date	Lead Concentration (mg/kg)	Confirmatory Concentration (mg/kg)	Soil Sample Description
SB06	18"-24"	10/28/97	17	NA	Light Gray Clay
SB06-70E	0"-6"	10/28/97	1,800	NA	Peat
SB06-70E	6"-12"	10/28/97	26	NA	Black Clay, Peat
SB06-70EDUP	0"-6"	10/28/97	2,700	NA	Black Clay, Peat
SB06-100W	0"-6"	10/28/97	3,800	NA	Peat
SB06-100W	6"-12"	10/28/97	1,700	NA	Peat
SB06-150W	0"-6"	10/28/97	9,400	NA	Tan Clay
SB06-150W	6"-12"	10/28/97	52	NA	rk Brown-Black Clay with P
SB06-150W	12"-18"	10/28/97	16	NA	Fine Brown Sand
SB06-150W	18"-24"	10/28/97	13	NA	Fine Brown Sand
SB07	0"-6"	10/28/97	1,200	4,900	Brown Clay
SB07	6"-12"	10/28/97	2,400	NA	Peat
SB07	12"-18"	10/28/97	17	NA	ottled Brown and Gray Cla
SB07-100W	0"-6"	10/28/97	8,200	NA	Peat
SB07-100W	6"-12"	10/28/97	12	NA	Dark Clay with Peat
SB08	0"-6"	10/28/97	2,000	NA	Clay, Plant Matter and Roots
SB08	6"-12"	10/28/97	34	NA	Peat
SB08	12"-18"	10/28/97	5	NA	Peat and Clay
SB08	18"-24"	10/28/97	16	NA	Mottled Gray Brown Clay
SB08-60W	0"-6"	10/28/97	6,100	NA	rown/Black Peat with Root
SB08-60W	6"-12"	10/28/97	7,500	NA	Tan Clay with Roots
SB08-60W	12"-18"	10/28/97	46	NA	Black Peat
SB09	0"-6"	10/28/97	4,200	NA	Peat
SB09	6"-12"	10/28/97	7,000	NA	Peat
SB10	0"-6"	10/28/97	4,800	NA	Dark Brown To Black Peat
SB10	6"-12"	10/28/97	9,000	NA	Dark Brown To Black Peat
SB11	0"-6"	10/29/97	16,000	13,600	Peat
SB11	6"-12"	10/29/97	30	NA	Peat
SB11	12"-18"	10/29/97	4	NA	Till
SB12	0"-6"	10/29/97	370	235	Peat
SB12	6"-12"	10/29/97	11	NA	Clay

* Denotes background sample.
NA = Not applicable.
-- = Description not available.

Sample Identification	Sample Depth (inches below ground surface)	Sample Date	Lead Concentration (mg/kg)	Confirmatory Concentration (mg/kg)	Soil Sample Description
SB12	12"-18"	10/29/97	11	NA	Sand and Silt
SB13	0"-6"	10/29/97	6,600	NA	Peat
SB13	6"-12"	10/29/97	260	NA	Dark Peat and Organics
SB13	12"-18"	10/29/97	31	NA	Dark Peat and Organics
SB13	18"-24"	10/29/97	15	NA	Gray Sand and Silt
SB14	0"-6"	10/29/97	4,500	NA	Brown/Black Peat
SB14	6"-12"	10/29/97	46	NA	Black Peat
SB14	12"-18"	10/29/97	16	NA	Black Peat
SB15	0"-6"	10/29/97	1,900	NA	White Clay and Peat
SB15	6"-12"	10/29/97	29	NA	Peat
SB15	12"-18"	10/29/97	25	NA	Fine Sand and Clay
SB16	0"-6"	10/29/97	24	10.4	Peat Moss
SB16	6"-12"	10/29/97	13	NA	Fine Sand and Clay
SB16	12"-18"	10/29/97	13	NA	Silt and Clay Iron Staining
SB17	0"-6"	10/29/97	2,100	1,090	Peat, Sand and Clay
SB17	6"-12"	10/29/97	5,100	NA	Peat, Sand and Clay
SB17	12"-18"	10/29/97	3,500	NA	Peat, Sand and Clay
SB17	18"-24"	10/29/97	790	NA	Dark Peat
SB18	0"-6"	10/29/97	6,900	NA	Peat and Clay
SB18	6"-12"	10/29/97	2,500	NA	Peat and Clay
SB18	12"-18"	10/29/97	4,000	NA	Peat, Sand and Clay
SB18	18"-24"	10/29/97	63	NA	Black Peat

* Denotes background sample.
NA = Not applicable.
-- = Description not available.

ATTACHMENT C

MODIFIED PARAGRAPH

Revised Paragraph
Page 4, Paragraph 2
Report on Pre-Remedial Design Sampling November 1997
Revised by McLaren Hart

After establishing that the highest lead concentrations correlated with the white clay layer, the areal extent of the clay layer was determined by digging holes at selected locations throughout the wetlands area with a shovel (SB-11, SB-11 and SB-12). The white clay layer was detected in the wetlands area bounded to the north by the preferential drainage pathway, to the south by the landfill, to the east by the preferential drainage pathway (except for a small area surrounding boring SB-13), and to the west by the access road to the landfill off of Factory Avenue. The white/gray clay layer was not found to be present west of the access road, or in the other two sample locations east of the drainage pathway (SB-14 and SB-06-70E). Once the areal extent of the clay layer was determined, several more samples were collected towards the perimeter of the wetlands (SB-15, SB-16, SB-17 and SB-18).

ATTACHMENT D

BORING LOGS
MODIFIED TABLE 2

McLaren Hart

TEST BORING/WELL INSTALL LOG

BORING/WELL LOCATION SKETCH MAP

N

BORING/WELL NO.: MW08				
PROJECT NO./NAME: 14-0802581-001-001/Syracuse China	LOCATION: Syracuse, NY			
DRILLING CONTRACTOR/DRILLER: Parrott-Wolff/				
MCLAREN/HART GEOLOGIST/OFFICE: Adrian Bilger/Albany, NY				
DRILLING EQUIPMENT/METHOD: /6" Hollow Stem Auger	SIZE/TYPE OF BIT:	SAMPLING METHOD: 2" Split Spoon	START/FINISH DATE: 10/31/97-10/31/97	
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA.: PVC/2"	SCREEN: TYPE Slot MAT. PVC LENGTH 10' DIA. 2" SLOT SIZE 10		
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE: 386.96	TOP OF WELL CASING: 389.00	TOP & BOTTOM SCREEN: PVC Casing/388.87	GW SURFACE / DATE
REMARKS:				

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE: DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
					Brown peat, some brown silt, little fine sand, damp. 0.3				
1					Landfilled waste - broken china, white glazing clay.				
2									
3									
4					4.5				
5					Brown silty fine sand.				
6					Grading from 6' to 7'6".	Water level at 6'.			
7					7.5				
8					Brown silty fine sand, some grey clay lenses, wet.				
9									
10									

Clay; Clay with Sand; Clay with Peat; Peat; Broken China

Sand; Sand with Silt; Sand with Clay; Silt with Sand; Silt with Clay

Silt with Gravel; Bentonite; Fine Sand; Fine Sand w/Slotted Screen; Fine Sand at Bottom

BORING/WELL NO.
MW08

McLaren Hart

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE (continued) DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
11					11.5				
12					Grey clay.				
13									
14									
15					15.2				
					End of Boring @ 15.25'				

McLaren Hart

BORING/WELL LOCATION SKETCH MAP

N

TEST BORING/WELL INSTALL LOG

BORING/WELL NO.	MW09
PROJECT NO./NAME	14-0802581-001-001/Syracuse China
LOCATION	Syracuse, NY
DRILLING CONTRACTOR/DRILLER	Parrott-Wolff/
MCLAREN/HART GEOLOGIST/OFFICE	Adrian Bilger/Albany, NY
DRILLING EQUIPMENT/METHOD	/6" Hollow Stem Auger
SIZE/TYPE OF BIT	
SAMPLING METHOD	2" Split Spoon
START/FINISH DATE	10/31/97-10/31/97
WELL INSTALLED?	YES ☒ NO ☐
CASING MAT./DIA.	PVC/2"
SCREEN:	TYPE Slot MAT. PVC LENGTH 10' DIA. 2" SLOT SIZE 10
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE 412.50; TOP OF WELL CASING 414.59; TOP & BOTTOM SCREEN PVC Casing/414.43; GW SURFACE; DATE
REMARKS:	

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE: DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
					Brown loamy soil, damp. 0.2				
1					China fill, silt, brick, damp. 1.1				
					Black sand, some silt, damp.				
2					Brown fine sand, little silt, damp. Iron stained ribbons. Little fine gravel.				
3									
4									
5									
6									
7									
8									
9									
10									

Clay; Clay with Sand; Clay with Peat; Peat; Broken China

Sand; Sand with Silt; Sand with Clay; Silt with Sand; Silt with Clay

Silt with Gravel; Bentonite; Fine Sand; Fine Sand w/Slotted Screen; Fine Sand at Bottom

BORING/WELL NO.
MW09

McLaren Hart

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE (continued) DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
					Fine sand, ribbons, moist.				
11									
12									
13									
14									
15									
16									
17									
18						Water level at 17.5'.			
19									
20									
21									
22									
23									
24									

10 15 20 25

BORING/WELL NO.
MW09

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE (continued) DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
					25.5				
					End of Boring @ 25.5'				

25

McLaren Hart

TEST BORING/WELL INSTALL LOG

BORING/WELL LOCATION SKETCH MAP

N

BORING/WELL NO.	MW10
PROJECT NO./NAME	14-0802581-001-001/Syracuse China
LOCATION	Syracuse, NY
DRILLING CONTRACTOR/DRILLER	Parrott-Wolff/
MCLAREN/HART GEOLOGIST/OFFICE	Adrian Bilger/Albany, NY
DRILLING EQUIPMENT/METHOD	/6" Hollow Stem Auger
SIZE/TYPE OF BIT	
SAMPLING METHOD	2" Split Spoon
START/FINISH DATE	10/31/97-10/31/97
WELL INSTALLED?	YES ☒ NO ☐
CASING MAT./DIA.	PVC/2"
SCREEN:	TYPE Slot MAT. PVC LENGTH 8' DIA. 2" SLOT SIZE 10
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE 383.24; TOP OF WELL CASING 385.88; TOP & BOTTOM SCREEN PVC Casing/385.69; GW SURFACE; DATE
REMARKS:	

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE: DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
					Brown peat, moist. 0.3				
1					Landfilled waste - broken china, white clay. 1.5				
2					Brown/black sandy clay and silt, damp. Refractory brick chunk.				
3									
4									
5					Brown sandy clay, wet.	Water level at 5'.			
6									
7									
8									
9									
					10.0				

0 5 10

Clay; Clay with Sand; Clay with Peat; Peat; Broken China
Sand; Sand with Silt; Sand with Clay; Silt with Sand; Silt with Clay
Silt with Gravel; Bentonite; Fine Sand; Fine Sand w/Slotted Screen; Fine Sand at Bottom

McLaren Hart

BORING/WELL NO.
MW10

Depth (ft)	Sample No.	Recovery (ft)	Penetration Resistance Blows/6"	RQD (%)	LOG OF TEST BORING/ROCK CORE (continued) DESCRIPTION	REMARKS	Core Time (min)	Well Const.	Graphic Litho Log
11					Reddish brown fine sand, some silt, little fine gravel, damp.				
12					12.5 End of Boring @ 12.5'				

10

Attachment D. Revised Table 2, Ground-Water Elevations for 10/31/97 and 11/17/97. The Pfaltzgraff Co.; Syracuse China Site.

Well Identification	Measuring Point[1] Elevation (feet above mean sea level)	Land Surface Elevation (feet above mean sea level)	Depth of Well (feet below ground surface)	10/31/97		11/17/97	
				Depth to Water (feet below measuring point[1])	Ground-Water Elevation (feet above mean sea level)	Depth to Water (feet below measuring point [1])	Ground-Water Elevation (feet above mean sea level)
MW - 1	413.78	411.53	24.48	21.33	392.45	20.62	393.16
MW - 2	394.84	392.08	13.10	4.89	389.95	4.06	390.78
MW - 3	387.83	384.80	12.13	3.92	383.91	3.81	384.02
MW - 4	385.59	382.54	13.33	5.26	380.33	4.93	380.66
MW - 4I	385.40	383.91	20.02	2.94	382.46	2.84	382.56
MW - 5	390.40	387.06	13.40	5.99	384.41	5.38	385.02
MW - 6	415.61[2]	413.19[2]	15.50	5.56	410.05	6.94	408.67
MW - 7	394.67	393.21	17.20	4.89	389.78	4.07	390.60
MW - 8	388.87	386.96	16.81	6.77	382.10	6.67	382.20
MW - 9	414.43	412.50	27.43	---	---	20.59	393.84
MW - 10	385.69	383.24	14.59	5.46	380.23	5.19	380.50

[1] Measuring point is top of PVC casing.
[2] Resurveyed November 1997 due to well re-implement.

- Depth to water data obtained from McLaren Hart field notes.
- PVC casing elevations and heights for MW-1 through 7 obtained from Geraghty & Miller Remedial Investigation Report, Appendix D, December 1995.
- Land surface and PVC casing elevations for MW-6, 8 and 9 obtained from E.W. Donegan correspondence dated 11/17/97.

ATTACHMENT E

LABORATORY REPORT

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES

SCILAB ALBANY, INC.
15 Century Hill Drive
P.O. Box 787
Latham, NY 12110
Tel: (518) 786-8100
Fax: (518) 786-7700

Laboratory Analysis and CLP Report

Prepared for: McLaren-Hart

Attn: Mr. Adrian Bilger

SDG: SB-02

SCILAB Project Number: 9913340

SCILAB Task Number: 971112D

November 20, 1997

Submitted by:
SCILAB Albany, Inc.

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES

SCILAB ALBANY, INC.
15 Century Hill Drive
P.O. Box 787
Latham, NY 12110
Tel: (518) 786-8100
Fax: (518) 786-7700

SDG NARRATIVE

SDG: SB-02

SCILAB Albany, Inc. performed analyses on the following samples:

LAB ID	CLIENT ID	DATE RECEIVED	VTSR	MATRIX
971112D-01	SB-11	11/12/97	9:00	SOIL
971112D-02	SB-07	11/12/97	9:00	SOIL
971112D-03	SB-06	11/12/97	9:00	SOIL
971112D-04	SB-17	11/12/97	9:00	SOIL
971112D-05	SB-04(6-12")	11/12/97	9:00	SOIL
971112D-06	SB-16	11/12/97	9:00	SOIL
971112D-07	SB-04(0-6")	11/12/97	9:00	SOIL
971112D-08	SB-12	11/12/97	9:00	SOIL
971112D-09	SB-02	11/12/97	9:00	SOIL
971112D-10	SB-03	11/12/97	9:00	SOIL

No problems were encountered during analyses with the following exceptions:

Metals - EPA Methods 200.7 - ICP Analysis

1. The predigestion spike recovery for Sodium, on sample 971112D01, was out of the acceptable range. However the concentration of the sample exceeded the concentration of the spike added by a factor of four. The spike added is considered insignificant and the recovery data unreliable. No further action is necessary.

2. The results for Lead ICP Serial Dilution was greater than 10%, this is outside of acceptable criteria. These results are flagged with an "E" as required by the protocol. The "E" represents possible matrix interference during analysis and denotes an estimated value. No further action is necessary.

"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 conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Signature: _____ Name: David J O'Hehir

Date: 11/24/97 Title: Quality Assurance Officer

American Environmental Network

AEN

200 Monroe Turnpike • Monroe, CT 06468 • 203-261-4458

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 | NO. P7097-2626A

EN JOB #: 7097-2626A

CLIENT: MCLAREN HART

PROJECT ID: M07570-SOIL PB

EN PROJECT MGR: ERIC N. JOHNSON

RUSH [ ] YES [X] NO | DUE DATE Standard TAT

TTLE ET #	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N
01	SB-11 (0-6")	10/28	SO	01	Y
02	SB-07 (0-6")	10/28	SO	02	N
03	SB-06 6-12")	10/28	SO	03	N
04	SB-17 (0-6")	10/29	SO	04	N
05	SB-04 (6-12")	10/27	SO	05	N
06	SB-16 (0-6")	10/29	SO	06	N
07	SB-04 (0-6")	10/27	SO	07	N
08	SB-12 (0-6")	10/28	SO	08	N
09	SB-02 (0-6")	10/27	SO	09	N
10	SB-03 (0-6")	10/27	SO	10	N

TESTS

NO	Lead 6010								
MET-MISC									
BOTTLE TYPE AND PRESERVATION									
GL250	GL125								
FIELD FILTERED - CIRCLE Y or N									
Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N
3	1								
1	1								
1	1								
1	1								
1	1								
1	1								
1	1								
1	1								
1	1								
1	1								

Passed Rad Screen 11-3-97

Rec'd @ Lab 11/12/97 0900

GENERAL REMARKS

P711121

SAMPLE REMARKS

Dup for QC

MATRIX CODES

A - AIR
AQ - AQUEOUS
CX - COMPLEX
DW - DRUM WASTE
NS - NS
S - SOIL
SL - SLUDGE
W - WIPE
O - OTHER
FB - FIELD BLANK
TB - TRIP BLANK

BOTTLES PREPARED BY: DATE / TIME 10/23/97 1600
SIGNATURE

SAMPLES COLLECTED BY: Adrian D. Biker DATE / TIME 10/30 4pm
SIGNATURE Adrian D. Biker

BOTTLES REC'D BY: Adrian Biker DATE / TIME 10/24 10a
SIGNATURE Adrian D. Biker

RECEIVED IN LAB BY: M. Colon DATE / TIME 11-3-97
SIGNATURE

REMARKS ON SAMPLE RECEIPT

[4] BOTTLES INTACT | [ ] CUSTODY SEALS
[ ] PRESERVED | [ ] SEALS INTACT
[4] CHILLED | [ ] SEE REMARKS

INTRA-LABORATORY CHAIN OF CUSTODY
RAW SAMPLE

Department: Metals — SCILAB Sample No.: 971112D

Client Name: MCLAREN HART — Sample Matrix: SOIL — Client ID: SB02

Date Sampled: 10/27,10/28,10/29/97 — No. of Containers: 1 — Condition of Sample: INTACT

Recieved By: _____ (Signature) 11/12/97 (Date) 9:00 (Time) — Secured Storage Location: WALK-IN

Removed from Secured Storage by	Remove Date	Remove Time	Type of Analysis or Prep	Sample Nos.	Return Date	Return Time	Comments
Jeff Wilte	11/12/97	1000	ICP DIGESTION	ALL	11/12/97	1200	
Theresa L. Kessler	11/13/97	1300	% Total Solids	971112D01-D10	11/13/97	1400	

Generated By: Jeff Wilte — ICP DIGESTATE — 11/12/97 (Date) 1200 (Time) — Secured Storage Location: METALS

Removed from Secured Storage by	Remove Date	Remove Time	Type of Analysis or Prep	Sample Nos.	Return Date	Return Time	Comments
Jerome Hunter	11/12/97	14:00	ICP	1112D01-10	11/12/97	15:00	
Jerome Hunter	11/13/97	12:00	ICP	1112D01	11/13/97	13:00	

ICP RE-DIGEST

Generated By: _____ (Signature) (Date) (Time) — Secured Storage Location: METALS

Removed from Secured Storage by	Remove Date	Remove Time	Type of Analysis or Prep	Sample Nos.	Return Date	Return Time	Comments

NYSDEC ASP SAMPLE LOG-IN SHEET

Lab Name: SCILAB Albany, Inc. Page 1 of 1

Received by (Print Name): David J. O'Hehir Log-in Date: 11/12/97

Received by (Signature):

Case Number:
SDG Number: SB02
SAS Number:

REMARKS:

1. Custody Seal(s) Present/Absent*
   Intact/Broken
2. Custody Seal Numbers:
3. Chain-of-Custody Records Present/Absent*
4. Contract Lab Sample Inform. Sheet (CLSIS) Present/Absent*
5. Airbill Airbill/Sticker Present/Absent*
6. Airbill No.: N/A
7. Sample Tags Present/Absent*
   Sample Tag Nos. Listed/Not listed on Chain-of-Custody
8. Sample Condition Intact/Broken */ Leaking
9. Does information on custody rec. CLSIS, & sample tags agree Yes/No *
10. Date received at Lab:
11. Time Recieved:

Sample Transfer

Fraction:
Area #:
By:
On:

	CORRESPONDING		
NYSDEC SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
SB-11		97112D 01	
SB-07		97112D 02	
SB-06		97112D 03	
SB-17		97112D 04	
SB-04 (6-12")		97112D 05	
SB-16		97112D 06	
SB-04 (0-6")		97112D 07	
SB-12		97112D 08	
SB-02		97112D 09	
SB-03		97112D 10	

* Contact BTSR and attach record of resolution

Reviewed by:
Date: 11/12/97

Logbook No.: 2
Logbook Page No.: 24

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.:SB-02_

SOW No.: ILM04.0

	EPA Sample No.	Lab Sample ID
	SB-02	1112D09
	SB-03	1112D10
	SB-06	1112D03
	SB-07	1112D02
	SB-11	1112D01
	SB-11	1112D01D
	SB-11	1112D01S
	SB-12	1112D08
	SB-16	1112D06
	SB-17	1112D04
EP 11/14/97	SB04.0-6	1112D07
EP 11/14/97	SB04.6-12	1112D05

Were ICP interelement corrections applied ? Yes/No YES

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

Comments:

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

Signature: _____ Name: DAVID J O'HEHIR

Date: 11/20/97 Title: QUALITY ASSURANCE OFFICER

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-02

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D09

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _81.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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_____	9.2	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-03

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D10

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _49.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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_____	464	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-06

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D03

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _52.2

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_____	51.3	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-07

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D02

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _20.4

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	4900		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D01

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _50.8

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_____	13600	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-12

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D08

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _60.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				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	235		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-16

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D06

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _61.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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_____	10.4	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-17

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D04

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _68.0

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_____	1090	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB04.0-6

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D07

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _37.2

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_____	617	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB04.6-12

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D05

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _62.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				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	33.5		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Initial Calibration Source: ERA_____

Continuing Calibration Source: ERA_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	1000.0	974.97	97.5	1000.0	968.60	96.9	985.56	98.6	P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Initial Calibration Source: ERA_____

Continuing Calibration Source: ERA_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				1000.0	968.97	96.9			P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Initial Calibration Source: ERA_____

Continuing Calibration Source: ERA_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	1000.0	985.95	98.6	1000.0	977.18	97.7	995.71	99.6	P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

U.S. EPA - CLP

3
BLANKS

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	2.7	U	2.7	U	2.7	U	2.7	U	2.70	U	P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Preparation Blank Matrix (soil/water): _____

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

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

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No: _____ SDG No.: SB-02_

ICP ID Number: OPTIMA 3000X ICS Source: SPEX_____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead		1000		911.1	91.1		836.4	83.6
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

0021

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No: _____ SDG No.: SB-02_

ICP ID Number: OPTIMA 3000X ICS Source: SPEX_____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead		1000		937.7	93.8		938.9	93.9
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

% Solids for Sample: _50.8

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		13240.2019		13639.2972		96.50	-413.6		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead		70924.50		69287.63		6.0	27281.2		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

% Solids for Sample: _50.8 % Solids for Duplicate: __50.8

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		13639.2972		12186.4517		11.3		P
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Solid LCS Source: ERA 234_____

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				143.0	124.6		49.8	135.0	87.1
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

U.S. EPA - CLP

8
STANDARD ADDITION RESULTS

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract:_____

Lab Code: 10358_ Case No.: _____ SAS No.:_____ SDG No.:SB-02_

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

FORM VIII - IN ILM04.0

U.S. EPA - CLP

9

ICP SERIAL DILUTION

EPA SAMPLE NO.

SB-03

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	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	2344.38		2618.84		11.7	E	P
Magnesium							NR
Manganese							NR
Mercury							NR
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

ICP ID Number: OPTIMA_3000X Date: 07/07/97

Flame AA ID Number : _____

Furnace AA ID Number : _____

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

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

ICP ID Number: OPTIMA 3000X Date: 07/21/97

Analyte	Wavelength (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	___
Aluminum	308.22	0.0000000	0.0006420	0.0010930	0.0000260	
Antimony	206.83	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.11	0.0000000	0.0000000	0.0000000	0.0000000	
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	
Calcium	315.89	0.0000240	0.0000000	0.0000070	0.0000290	
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	239.56	0.0001090	0.0002200	0.0000000	0.0000680	
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium	279.08	0.0000570	0.0006600	0.0001180	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	232.00	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium						
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium						
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

ICP ID Number: OPTIMA 3000X Date: 11/05/96

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	100.00	500000.0	P
Antimony	100.00	10000.0	P
Arsenic	100.00	10000.0	P
Barium	100.00	10000.0	P
Beryllium	100.00	2000.0	P
Cadmium	100.00	10000.0	P
Calcium	100.00	250000.0	P
Chromium	100.00	10000.0	P
Cobalt	100.00	10000.0	P
Copper	100.00	10000.0	P
Iron	100.00	50000.0	P
Lead	100.00	10000.0	P
Magnesium	100.00	500000.0	P
Manganese	100.00	70000.0	P
Mercury			NR
Nickel	100.00	10000.0	P
Potassium			NR
Selenium	100.00	10000.0	P
Silver	100.00	10000.0	P
Sodium			NR
Thallium	100.00	10000.0	P
Vanadium	100.00	10000.0	P
Zinc	100.00	10000.0	P

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.:_____ SAS No.: _____ SDG No.:SB-02_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
04.6-12	11/12/97	1.01	100
B04.0-6	11/12/97	1.00	100
LCSS	11/12/97	1.00	100
PBS	11/12/97		100
SB-02	11/12/97	1.02	100
SB-03	11/12/97	1.03	100
SB-06	11/12/97	1.00	100
SB-07	11/12/97	1.00	100
SB-11	11/12/97	1.00	100
SB-11	11/12/97	1.02	100
SB-11	11/12/97	1.03	100
SB-12	11/12/97	1.00	100
SB-16	11/12/97	1.00	100
SB-17	11/12/97	1.00	100

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.:SB-02_

Instrument ID Number: OPTIMA 3000X_ Method: P_

Start Date: 11/12/97 End Date: 11/12/97

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
blank	1.00	1316				X			X	X	X			X	X	X											
#1	1.00	1321				X			X		X				X												
#2	1.00	1324		X						X				X		X											
ICV	1.00	1329													X												
ICB	1.00	1335													X												
CRI	1.00	1341													X												
ICSA	1.00	1348													X												
ICSAB	1.00	1354													X												
CCV	1.00	1400													X												
CCB	1.00	1406													X												
PBS	1.00	1412													X												
LCSS	1.00	1418													X												
ZZZZZZ	1.00	1424																									
ZZZZZZ	1.00	1430																									
ZZZZZZ	1.00	1436																									
ZZZZZZ	1.00	1442																									
SB-07	1.00	1448													X												
SB-06	1.00	1454													X												
SB-17	1.00	1500													X												
04.6-12_	1.00	1506													X												
CCV	1.00	1512													X												
CCB	1.00	1518													X												
SB-16	1.00	1524													X												
SB04.0-6	1.00	1530													X												
SB-12	1.00	1536													X												
SB-02	1.00	1543													X												
SB-03	1.00	1549													X												
SB-03	1.00	1555													X												
CRI	1.00	1601													X												
ICSA	1.00	1608													X												
ICSAB	1.00	1615													X												
CCV	1.00	1621													X												

FORM XIV - IN ILM04.0

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.:SB-02_

Instrument ID Number: OPTIMA 3000X_ Method: P_

Start Date: 11/12/97 End Date: 11/12/97

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1626													X												
ZZZZZZ	1.00	1632																									

FORM XIV - IN ILM04.0

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.:SB-02_

Instrument ID Number: OPTIMA 3000X_ Method: P_

Start Date: 11/13/97 End Date: 11/13/97

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
blank	1.00	1121				X			X	X	X			X	X	X											
#1	1.00	1127				X			X		X				X												
#2	1.00	1129		X						X				X		X											
ICV	1.00	1135													X												
ICB	1.00	1140													X												
CRI	1.00	1146													X												
ICSA	1.00	1153													X												
ICSAB	1.00	1200													X												
CCV	1.00	1206													X												
CCB	1.00	1211													X												
SB-11	10.00	1217													X												
SB-11	10.00	1223													X												
SB-11	10.00	1228													X												
SB-11	10.00	1234													X												
CRI	1.00	1240													X												
ICSA	1.00	1247													X												
ICSAB	1.00	1254													X												
CCV	1.00	1259													X												
CCB	1.00	1305													X												
ZZZZZZ	1.00	1311																									

F-7,136
ICP Run #1
11/12/97
PE3000
OPTIMA

11/12/97 13:16
blank

Al308215	av	323.21	EM	%cv	0.57		
As188979	av	-0.23	EM	%cv	219.1		
Ca315887	av	-19.67	EM	%cv	212.9		
Cd226502	av	59.48	EM	%cv	4.07		
Cr267716	av	-31.21	EM	%cv	1.27		
Fe239562	av	403.96	EM	%cv	0.63		
Mg279079	av	572.48	EM	%cv	1.70		
Pb220353	av	71.51	EM	%cv	5.58		

11/12/97 13:21
#1 standard

As188979	av	3613.336	EM	%cv	0.50	conc	10.000
Cd226502	av	200939.7	EM	%cv	0.17	conc	10.000
Cr267716	av	389185.4	EM	%cv	0.33	conc	10.000
Pb220353	av	19036.96	EM	%cv	0.56	conc	10.000

11/12/97 13:24
#2 standard

Al308215	av	42919.33	EM	%cv	1.27	conc	10.000
Ca315887	av	146473.8	EM	%cv	1.17	conc	10.000
Fe239562	av	167303.5	EM	%cv	1.12	conc	10.000
Mg279079	av	80880.08	EM	%cv	1.10	conc	10.000

11/12/97 13:29
icv1

Al308215	av	5.1335	mg/l	%cv	1.53
As188979	av	1.0107	mg/l	%cv	0.34
Ca315887	av	5.6170	mg/l	%cv	1.39
Cd226502	av	0.2457	mg/l	%cv	0.18
Cr267716	av	0.9762	mg/l	%cv	0.92
Fe239562	av	0.9685	mg/l	%cv	0.80
Mg279079	av	0.9910	mg/l	%cv	0.06
Pb220353	av	0.9750	mg/l	%cv	0.14

11/12/97 13:35
icb

Al308215	av	0.0031	mg/l	%cv	69.81
As188979	av	-0.0017	mg/l	%cv	142.3
Ca315887	av	-0.0039	mg/l	%cv	23.96
Cd226502	av	0.0005	mg/l	%cv	25.31
Cr267716	av	-0.0001	mg/l	%cv	29.92
Fe239562	av	-0.0004	mg/l	%cv	3.84
Mg279079	av	-0.0004	mg/l	%cv	914.7
Pb220353	av	0.0008	mg/l	%cv	249.0

11/12/97 13:41
cri

Al308215	av	0.3783	mg/l	%cv	0.14
As188979	av	0.0145	mg/l	%cv	4.77
Ca315887	av	9.1704	mg/l	%cv	0.12
Cd226502	av	0.0094	mg/l	%cv	0.02
Cr267716	av	0.0185	mg/l	%cv	0.10
Fe239562	av	0.1581	mg/l	%cv	0.04
Mg279079	av	9.1376	mg/l	%cv	0.35
Pb220353	av	0.0061	mg/l	%cv	5.79

11/12/97 13:48
icsa

Al308215	av	524.4412	mg/l	%cv	0.16
As188979	av	-0.0570	mg/l	%cv	14.04

Fe239562	av	173.9148	mg/l	%cv	0.12
Mg279079	av	515.2502	mg/l	%cv	0.23
Pb220353	av	0.0514	mg/l	%cv	1.53

11/12/97 13:54
icsab

Al308215	av	496.4355	mg/l	%cv	0.46
As188979	av	0.8473	mg/l	%cv	0.77
Ca315887	av	444.4199	mg/l	%cv	0.28
Cd226502	av	0.8443	mg/l	%cv	0.08
Cr267716	av	0.4528	mg/l	%cv	0.35
Fe239562	av	159.2236	mg/l	%cv	0.43
Mg279079	av	491.8872	mg/l	%cv	0.39
Pb220353	av	0.9111	mg/l	%cv	0.16

11/12/97 14:00
ccv 1a

Al308215	av	5.1779	mg/l	%cv	0.22
As188979	av	1.0085	mg/l	%cv	0.79
Ca315887	av	4.9730	mg/l	%cv	0.25
Cd226502	av	0.2471	mg/l	%cv	0.36
Cr267716	av	0.9817	mg/l	%cv	0.30
Fe239562	av	0.9787	mg/l	%cv	0.58
Mg279079	av	0.9803	mg/l	%cv	1.82
Pb220353	av	0.9686	mg/l	%cv	0.80

11/12/97 14:06
ccb 1

Al308215	av	0.0020	mg/l	%cv	93.25
As188979	av	0.0025	mg/l	%cv	40.55
Ca315887	av	-0.0017	mg/l	%cv	54.27
Cd226502	av	0.0001	mg/l	%cv	34.23
Cr267716	av	-0.0008	mg/l	%cv	17.28
Fe239562	av	0.0038	mg/l	%cv	0.26
Mg279079	av	-0.0005	mg/l	%cv	679.8
Pb220353	av	-0.0002	mg/l	%cv	550.9

11/12/97 14:12
bbs 11/12/97

Al308215	av	0.3485	mg/l	%cv	0.29
As188979	av	-0.0059	mg/l	%cv	2.99
Ca315887	av	0.1558	mg/l	%cv	1.21
Cd226502	av	0.0003	mg/l	%cv	20.77
Cr267716	av	0.0008	mg/l	%cv	5.00
Fe239562	av	0.0183	mg/l	%cv	1.04
Mg279079	av	0.0470	mg/l	%cv	11.66
Pb220353	av	0.0027	mg/l	%cv	7.66

11/12/97 14:18 1.00
lcss 234

Al308215	av	28.0121	mg/l	%cv	2.20
As188979	av	0.6153	mg/l	%cv	1.39
Ca315887	av	16.9205	mg/l	%cv	2.29
Cd226502	av	0.5202	mg/l	%cv	2.54
Cr267716	av	0.7940	mg/l	%cv	2.01
Fe239562	av	62.4449	mg/l	%cv	2.21
Mg279079	av	8.3833	mg/l	%cv	1.83
Pb220353	av	1.2459	mg/l	%cv	0.55

11/12/97 14:24 1.00 50.8%
l112d01

Al308215	av	43.7202	mg/l	%cv	2.41
As188979	av	0.0109	mg/l	%cv	49.54
Ca315887	av	85.2290	mg/l	%cv	1.42

Fe239562	av	16.5921	mg/l	%cv	0.89
Mg279079	av	3.8426	mg/l	%cv	1.99
Pb220353	av	58.6456	mg/l	%cv	1.93

11/12/97 14:30 1.03
1112d01d

Al308215	av	48.0193	mg/l	%cv	2.63
As188979	av	0.0117	mg/l	%cv	42.51
Ca315887	av	77.2570	mg/l	%cv	0.99
Cd226502	av	0.0243	mg/l	%cv	1.94
Cr267716	av	0.0766	mg/l	%cv	1.40
Fe239562	av	14.5681	mg/l	%cv	1.04
Mg279079	av	3.5918	mg/l	%cv	1.58
Pb220353	av	55.2124	mg/l	%cv	1.11

11/12/97 14:36 1.02
1112d01s

Al308215	av	52.9239	mg/l	%cv	4.07
As188979	av	0.4212	mg/l	%cv	2.79
Ca315887	av	78.6325	mg/l	%cv	0.61
Cd226502	av	0.4352	mg/l	%cv	2.15
Cr267716	av	0.5180	mg/l	%cv	3.80
Fe239562	av	18.2722	mg/l	%cv	1.08
Mg279079	av	8.2003	mg/l	%cv	2.39
Pb220353	av	65.1471	mg/l	%cv	1.09

11/12/97 14:42
1112d01as

Al308215	av	44.1321	mg/l	%cv	0.94
As188979	av	0.4273	mg/l	%cv	1.32
Ca315887	av	90.4023	mg/l	%cv	0.68
Cd226502	av	0.4337	mg/l	%cv	1.21
Cr267716	av	0.5151	mg/l	%cv	0.61
Fe239562	av	16.9872	mg/l	%cv	0.92
Mg279079	av	8.1148	mg/l	%cv	0.54
Pb220353	av	58.6128	mg/l	%cv	1.09

11/12/97 14:48 1.00 20.4%
1112d02

Al308215	av	30.4087	mg/l	%cv	0.53
As188979	av	0.0202	mg/l	%cv	5.83
Ca315887	av	13.7713	mg/l	%cv	0.56
Cd226502	av	0.0044	mg/l	%cv	3.42
Cr267716	av	0.0734	mg/l	%cv	0.17
Fe239562	av	13.0616	mg/l	%cv	0.56
Mg279079	av	6.2518	mg/l	%cv	0.30
Pb220353	av	9.9990	mg/l	%cv	0.00

Pb ✱ 4900 2.4

11/12/97 14:54 1.00 52.2%
1112d03

Al308215	av	41.2425	mg/l	%cv	0.93
As188979	av	0.0452	mg/l	%cv	2.35
Ca315887	av	40.3421	mg/l	%cv	0.75
Cd226502	av	0.0009	mg/l	%cv	21.49
Cr267716	av	0.0622	mg/l	%cv	1.10
Fe239562	av	90.1015	mg/l	%cv	0.89
Mg279079	av	14.5645	mg/l	%cv	0.91
Pb220353	av	0.2676	mg/l	%cv	0.13

Pb 51.3 0.96

11/12/97 15:00 1.00 68%
1112d04

Al308215	av	45.8957	mg/l	%cv	0.47
As188979	av	0.0137	mg/l	%cv	9.82

Pb 1090

Cr267716	av	0.0546	mg/l		%cv	0.38
Fe239562	av	7.6960	mg/l		%cv	0.65
Mg279079	av	4.8578	mg/l		%cv	0.44
Pb220353	av	7.4033	mg/l		%cv	0.55

11/12/97 15:06 1.07 62.9%
1112d05

Al308215	av	59.4568	mg/l		%cv	0.81
As188979	av	0.4602	mg/l		%cv	0.94
Ca315887	av	48.7661	mg/l		%cv	0.94
Cd226502	av	0.0047	mg/l		%cv	0.40
Cr267716	av	0.0866	mg/l	Pb. 33.5	%cv	1.40
Fe239562	av	220.0195	mg/l		%cv	1.00
Mg279079	av	26.2170	mg/l	0.79	%cv	0.94
Pb220353	av	0.2126	mg/l		%cv	1.23

11/12/97 15:12
ccv 2a

Al308215	av	5.1935	mg/l		%cv	0.27
As188979	av	1.0224	mg/l	✓	%cv	0.16
Ca315887	av	4.9824	mg/l		%cv	0.56
Cd226502	av	0.2447	mg/l	✓	%cv	0.60
Cr267716	av	0.9891	mg/l	✓	%cv	0.06
Fe239562	av	0.9882	mg/l		%cv	1.25
Mg279079	av	0.9886	mg/l		%cv	0.78
Pb220353	av	0.9856	mg/l	✓	%cv	0.53

11/12/97 15:18
ccb 2

Al308215	av	0.0023	mg/l	✓	%cv	139.9
As188979	av	0.0012	mg/l	✓	%cv	693.4
Ca315887	av	-0.0011	mg/l		%cv	15.59
Cd226502	av	0.0000	mg/l	✓	%cv	635.6
Cr267716	av	-0.0009	mg/l	✓	%cv	15.26
Fe239562	av	0.0042	mg/l		%cv	6.13
Mg279079	av	-0.0049	mg/l		%cv	23.10
Pb220353	av	0.0010	mg/l	✓	%cv	57.25

11/12/97 15:24 1.00 61.9%
1112d06

Al308215	av	39.9950	mg/l		%cv	2.65
As188979	av	0.0280	mg/l		%cv	5.26
Ca315887	av	67.5369	mg/l		%cv	2.44
Cd226502	av	0.0009	mg/l		%cv	36.08
Cr267716	av	0.0646	mg/l	Pb, 10.4	%cv	1.18
Fe239562	av	69.0282	mg/l		%cv	2.46
Mg279079	av	12.6169	mg/l	0.81	%cv	0.78
Pb220353	av	0.0645	mg/l		%cv	2.30

11/12/97 15:30 1.00 37.2%
1112d07

Al308215	av	52.8497	mg/l		%cv	1.32
As188979	av	0.4067	mg/l		%cv	0.71
Ca315887	av	159.9511	mg/l		%cv	0.45
Cd226502	av	0.0113	mg/l	61%	%cv	1.87
Cr267716	av	0.1053	mg/l		%cv	1.15
Fe239562	av	154.6552	mg/l	at	%cv	0.54
Mg279079	av	67.0979	mg/l		%cv	0.54
Pb220353	av	2.2951	mg/l	1.3	%cv	0.09

11/12/97 15:36 1.00 60.1%
1112d08

Al308215	av	30.2259	mg/l		%cv	0.03
As188979	av	0.0323	mg/l		%cv	15.02

Cr267716	av	0.0332	mg/l		%cv	0.07
Fe239562	av	68.0691	mg/l	0,83	%cv	0.12
Mg279079	av	4.9612	mg/l		%cv	0.85
Pb220353	av	1.4102	mg/l		%cv	0.58

11/12/97 15:43 1,02 81.9%
1112d09

Al308215	av	35.4611	mg/l		%cv	1.06
As188979	av	-0.0030	mg/l		%cv	10.12
Ca315887	av	370.6310	mg/l	9,12 mg/ls	%cv	0.26
Cd226502	av	-0.0002	mg/l		%cv	16.29
Cr267716	av	0.0540	mg/l		%cv	0.41
Fe239562	av	83.6771	mg/l	0,60	%cv	0.68
Mg279079	av	125.7503	mg/l		%cv	0.45
Pb220353	av	0.0769	mg/l		%cv	1.18

11/12/97 15:49 1,03 49.1%
1112d10

Al308215	av	35.8733	mg/l		%cv	0.05
As188979	av	0.2922	mg/l		%cv	0.75
Ca315887	av	187.8320	mg/l		%cv	0.40
Cd226502	av	0.0091	mg/l	4,64 mg/ls	%cv	3.29
Cr267716	av	0.0994	mg/l		%cv	0.33
Fe239562	av	104.7449	mg/l		%cv	0.02
Mg279079	av	65.0016	mg/l	0,99	%cv	0.00
Pb220353	av	2.3444	mg/l		%cv	0.23

11/12/97 15:55
1112d10l 5x

Al308215	av	7.5074	mg/l		%cv	0.52
As188979	av	0.0588	mg/l		%cv	1.17
Ca315887	av	41.6474	mg/l		%cv	0.75
Cd226502	av	0.0018	mg/l		%cv	8.82
Cr267716	av	0.0222	mg/l		%cv	0.75
Fe239562	av	23.9545	mg/l		%cv	0.84
Mg279079	av	13.9129	mg/l		%cv	0.48
Pb220353	av	0.5238	mg/l		%cv	0.25

11/12/97 16:01
cri

Al308215	av	0.3717	mg/l		%cv	0.11
As188979	av	0.0147	mg/l		%cv	12.53
Ca315887	av	8.9357	mg/l		%cv	0.77
Cd226502	av	0.0088	mg/l		%cv	1.00
Cr267716	av	0.0177	mg/l		%cv	1.44
Fe239562	av	0.1585	mg/l		%cv	1.42
Mg279079	av	9.0581	mg/l		%cv	0.69
Pb220353	av	0.0083	mg/l		%cv	20.71

11/12/97 16:08
icsa

Al308215	av	515.1025	mg/l		%cv	1.75
As188979	av	-0.0553	mg/l		%cv	11.75
Ca315887	av	483.4499	mg/l		%cv	2.15
Cd226502	av	0.0015	mg/l		%cv	62.27
Cr267716	av	0.0045	mg/l		%cv	21.32
Fe239562	av	171.4783	mg/l		%cv	1.64
Mg279079	av	510.4522	mg/l		%cv	1.79
Pb220353	av	0.0523	mg/l		%cv	2.53

11/12/97 16:15
icsab

Al308215	av	443.6128	mg/l	✓	%cv	0.57
As188979	av	0.7698	mg/l		%cv	0.88

Cr267716	av	0.4060	mg/l	%cv	0.56
Fe239562	av	144.3869	mg/l	%cv	0.67
Mg279079	av	444.1775	mg/l	%cv	0.65
Pb220353	av	0.8364	mg/l	%cv	0.53

11/12/97 16:21
ccv 3a

Al308215	av	5.0204	mg/l	%cv	0.62
As188979	av	1.0048	mg/l	%cv	0.23
Ca315887	av	4.7934	mg/l	%cv	0.43
Cd226502	av	0.2368	mg/l	%cv	0.45
Cr267716	av	0.9620	mg/l	%cv	0.56
Fe239562	av	0.9558	mg/l	%cv	0.06
Mg279079	av	0.9704	mg/l	%cv	0.50
Pb220353	av	0.9690	mg/l	%cv	0.21

11/12/97 16:26
ccb 3

Al308215	av	0.0031	mg/l	%cv	175.4
As188979	av	-0.0001	mg/l	%cv	2924.
Ca315887	av	-0.0009	mg/l	%cv	60.88
Cd226502	av	0.0001	mg/l	%cv	29.10
Cr267716	av	-0.0011	mg/l	%cv	3.01
Fe239562	av	0.0049	mg/l	%cv	6.15
Mg279079	av	0.0066	mg/l	%cv	21.33
Pb220353	av	0.0023	mg/l	%cv	22.92

11/12/97 16:32
pbs 11/12/97

Al308215	av	0.0623	mg/l	%cv	8.34
As188979	av	-0.0016	mg/l	%cv	151.4
Ca315887	av	0.2323	mg/l	%cv	1.99
Cd226502	av	0.0001	mg/l	%cv	18.88
Cr267716	av	0.0008	mg/l	%cv	19.79
Fe239562	av	0.0093	mg/l	%cv	9.60
Mg279079	av	0.0596	mg/l	%cv	0.33
Pb220353	av	0.0045	mg/l	%cv	49.20

11/12/97 16:38 1,00
lcss 234

Al308215	av	36.1416	mg/l	%cv	1.26
As188979	av	0.6276	mg/l	%cv	0.98
Ca315887	av	17.1553	mg/l	%cv	0.93
Cd226502	av	0.4998	mg/l	%cv	0.76
Cr267716	av	0.8093	mg/l	%cv	1.21
Fe239562	av	75.6001	mg/l	%cv	1.21
Mg279079	av	9.3411	mg/l	%cv	1.12
Pb220353	av	1.2988	mg/l	%cv	0.23

11/12/97 16:44 1,00 87,3
1112a01

Al308215	av	76.0478	mg/l	%cv	0.05
As188979	av	0.1597	mg/l	%cv	1.59
Ca315887	av	9.4564	mg/l	%cv	0.25
Cd226502	av	0.0018	mg/l	%cv	28.82
Cr267716	av	0.0927	mg/l	%cv	0.83
Fe239562	av	203.7971	mg/l	%cv	0.02
Mg279079	av	31.4032	mg/l	%cv	0.59
Pb220353	av	0.5881	mg/l	%cv	0.17

As 18,3 1,1
Cd ND 0,57
Cr 10,6 1,1
PB 67,4 0,57

11/12/97 16:50
1112a01d

Al308215	av	81.1683	mg/l	%cv	1.57
As188979	av	0.1742	mg/l	%cv	0.33

11/13/97 11:21
blank

Al308215	av	234.52	EM	%cv	3.10		
As188979	av	-0.99	EM	%cv	127.6		
Ca315887	av	-120.53	EM	%cv	13.38		
Cd226502	av	68.54	EM	%cv	0.76		
Cr267716	av	-35.98	EM	%cv	14.80		
Fe239562	av	-14.02	EM	%cv	19.49		
Mg279079	av	592.17	EM	%cv	5.49		
Pb220353	av	75.23	EM	%cv	1.02		

F-7:137

IRP Run #2
11/13/97
FE OPTIMA
3000

11/13/97 11:27
#1 standard

As188979	av	3683.196	EM	%cv	0.46	conc	10.000
Cd226502	av	175830.7	EM	%cv	0.25	conc	10.000
Cr267716	av	382689.3	EM	%cv	0.27	conc	10.000
Pb220353	av	20188.18	EM	%cv	0.51	conc	10.000

11/13/97 11:29
#2 standard

Al308215	av	39456.34	EM	%cv	0.09	conc	10.000
Ca315887	av	124951.9	EM	%cv	0.00	conc	10.000
Fe239562	av	160978.7	EM	%cv	0.21	conc	10.000
Mg279079	av	85162.10	EM	%cv	0.20	conc	10.000

11/13/97 11:35
icv1

Al308215	av	5.1282	mg/l	%cv 1.32
As188979	av	1.0332	mg/l	%cv 0.82
Ca315887	av	4.9952	mg/l	%cv 1.23
Cd226502	av	0.2484	mg/l	%cv 0.26
Cr267716	av	0.9934	mg/l	%cv 0.96
Fe239562	av	0.9812	mg/l	%cv 1.12
Mg279079	av	0.9553	mg/l	%cv 0.71
Pb220353	av	0.9860	mg/l	%cv 0.13

11/13/97 11:40
icb

Al308215	av	-0.0043	mg/l	%cv 35.92
As188979	av	-0.0008	mg/l	%cv 472.6
Ca315887	av	-0.0085	mg/l	%cv 10.13
Cd226502	av	0.0003	mg/l	%cv 4.86
Cr267716	av	-0.0009	mg/l	%cv 16.92
Fe239562	av	-0.0012	mg/l	%cv 44.22
Mg279079	av	-0.0020	mg/l	%cv 136.3
Pb220353	av	-0.0016	mg/l	%cv 20.36

11/13/97 11:46
cri

Al308215	av	0.3872	mg/l	%cv 0.35
As188979	av	0.0204	mg/l	%cv 1.22
Ca315887	av	9.6663	mg/l	%cv 0.17
Cd226502	av	0.0101	mg/l	%cv 0.47
Cr267716	av	0.0193	mg/l	%cv 0.16
Fe239562	av	0.2025	mg/l	%cv 0.04
Mg279079	av	9.5738	mg/l	%cv 0.04
Pb220353	av	0.0067	mg/l	%cv 11.10

11/13/97 11:53
icsa

Al308215	av	503.6852	mg/l	%cv 1.56
As188979	av	-0.1007	mg/l	%cv 2.85

Fe239562	av	167.1886	mg/l	%cv	1.26
Mg279079	av	494.1395	mg/l	%cv	1.42
Pb220353	av	0.0492	mg/l	%cv	2.18

11/13/97 12:00
icsab

Al308215	av	498.0973	mg/l	%cv	0.29
As188979	av	0.8035	mg/l	%cv	0.42
Ca315887	av	509.3412	mg/l	%cv	0.08
Cd226502	av	0.8415	mg/l	%cv	0.59
Cr267716	av	0.4532	mg/l	%cv	0.56
Fe239562	av	165.2577	mg/l	%cv	0.28
Mg279079	av	491.4272	mg/l	%cv	0.29
Pb220353	av	0.9377	mg/l	%cv	0.44

11/13/97 12:06
ccv 1a

Al308215	av	5.0415	mg/l	%cv	0.54
As188979	av	1.0209	mg/l	%cv	0.73
Ca315887	av	4.8932	mg/l	%cv	0.32
Cd226502	av	0.2484	mg/l	%cv	0.26
Cr267716	av	0.9793	mg/l	%cv	0.20
Fe239562	av	0.9695	mg/l	%cv	0.60
Mg279079	av	0.9440	mg/l	%cv	0.25
Pb220353	av	0.9772	mg/l	%cv	0.13

11/13/97 12:11
ccb 1

Al308215	av	0.0042	mg/l	%cv	40.02
As188979	av	0.0016	mg/l	%cv	162.5
Ca315887	av	-0.0036	mg/l	%cv	2.15
Cd226502	av	0.0000	mg/l	%cv	2187.
Cr267716	av	-0.0013	mg/l	%cv	10.74
Fe239562	av	0.0195	mg/l	%cv	0.35
Mg279079	av	0.0038	mg/l	%cv	17.00
Pb220353	av	-0.0012	mg/l	%cv	61.13

11/13/97 12:17
1112d01 10x 1,005 50,8%

Al308215	av	4.7743	mg/l	%cv	0.57
As188979	av	0.0020	mg/l	%cv	465.7
Ca315887	av	9.9122	mg/l	%cv	0.46
Cd226502	av	0.0031	mg/l	%cv	2.16
Cr267716	av	0.0082	mg/l	%cv	0.56
Fe239562	av	1.9186	mg/l	%cv	0.66
Mg279079	av	0.4314	mg/l	%cv	0.11
Pb220353	av	6.9288	mg/l	%cv	0.33

13600
9,893 lbs

11/13/97 12:23
1112d01d 10x

Al308215	av	4.4135	mg/l	%cv	0.03
As188979	av	0.0050	mg/l	%cv	13.22
Ca315887	av	8.8406	mg/l	%cv	0.35
Cd226502	av	0.0030	mg/l	%cv	6.20
Cr267716	av	0.0074	mg/l	%cv	0.28
Fe239562	av	1.6484	mg/l	%cv	0.25
Mg279079	av	0.3927	mg/l	%cv	0.18
Pb220353	av	6.3764	mg/l	%cv	0.02

11/13/97 12:28
1112d01s 10x

Al308215	av	4.5196	mg/l	%cv	0.04
As188979	av	0.0477	mg/l	%cv	6.34
Ca315887	av	8.1467	mg/l	%cv	0.16

Cd226502	av	0.0473	mg/l		%cv	0.27
Cr267716	av	0.0523	mg/l		%cv	0.18
Fe239562	av	1.8764	mg/l		%cv	0.28
Mg279079	av	0.8299	mg/l		%cv	1.00
Pb220353	av	6.8605	mg/l		%cv	0.45

11/13/97 12:34
1112d01as 10x

Al308215	av	5.1529	mg/l		%cv	0.42
As188979	av	0.5040	mg/l		%cv	2.17
Ca315887	av	14.4710	mg/l		%cv	0.35
Cd226502	av	0.5034	mg/l		%cv	0.45
Cr267716	av	0.5215	mg/l		%cv	0.22
Fe239562	av	2.3293	mg/l		%cv	0.36
Mg279079	av	5.3102	mg/l		%cv	0.04
Pb220353	av	7.0925	mg/l		%cv	0.27

11/13/97 12:40
cri

Al308215	av	0.3951	mg/l		%cv	1.72
As188979	av	0.0247	mg/l		%cv	33.13
Ca315887	av	9.9121	mg/l		%cv	0.46
Cd226502	av	0.0101	mg/l		%cv	0.06
Cr267716	av	0.0195	mg/l		%cv	0.37
Fe239562	av	0.2000	mg/l		%cv	0.78
Mg279079	av	9.6576	mg/l		%cv	0.03
Pb220353	av	0.0063	mg/l		%cv	12.06

11/13/97 12:47
icsa

Al308215	av	502.1942	mg/l		%cv	0.03
As188979	av	-0.0874	mg/l		%cv	0.58
Ca315887	av	459.1724	mg/l		%cv	0.50
Cd226502	av	0.0038	mg/l		%cv	5.66
Cr267716	av	0.0044	mg/l		%cv	30.23
Fe239562	av	166.7188	mg/l		%cv	0.04
Mg279079	av	488.2027	mg/l		%cv	0.04
Pb220353	av	0.0482	mg/l		%cv	2.11

11/13/97 12:54
icsab

Al308215	av	503.9464	mg/l		%cv	0.50
As188979	av	0.8024	mg/l		%cv	0.31
Ca315887	av	507.9037	mg/l		%cv	0.79
Cd226502	av	0.8502	mg/l		%cv	0.25
Cr267716	av	0.4542	mg/l		%cv	0.11
Fe239562	av	166.3238	mg/l		%cv	0.42
Mg279079	av	490.4844	mg/l		%cv	0.49
Pb220353	av	0.9389	mg/l		%cv	0.30

11/13/97 12:59
ccv 2a

Al308215	av	5.2057	mg/l		%cv	0.14
As188979	av	1.0319	mg/l		%cv	0.44
Ca315887	av	5.0460	mg/l		%cv	0.35
Cd226502	av	0.2549	mg/l		%cv	0.56
Cr267716	av	1.0013	mg/l		%cv	0.31
Fe239562	av	0.9956	mg/l		%cv	0.26
Mg279079	av	0.9648	mg/l		%cv	0.62
Pb220353	av	0.9957	mg/l		%cv	0.33

11/13/97 13:05
ccb 2

Al308215	av	0.0017	mg/l		%cv	324.1

Cr267716	av	-0.0014	mg/l	%cv	0.79
Fe239562	av	0.0197	mg/l	%cv	1.20
Mg279079	av	0.0064	mg/l	%cv	82.83
Pb220353	av	-0.0020	mg/l	%cv	4.20

11/13/97 13:11
pbs 11/12/97

Al308215	av	0.0130	mg/l	%cv	15.94
As188979	av	0.0039	mg/l	%cv	106.0
Ca315887	av	-0.0035	mg/l	%cv	17.55
Cd226502	av	0.0004	mg/l	%cv	28.24
Cr267716	av	0.0004	mg/l	%cv	382.0
Fe239562	av	0.0022	mg/l	%cv	148.5
Mg279079	av	0.0059	mg/l	%cv	60.68
Pb220353	av	0.0051	mg/l	%cv	38.61

11/13/97 13:17 1,00
css 234

Al308215	av	33.0041	mg/l	%cv	0.86
As188979	av	0.7167	mg/l	%cv	4.36
Ca315887	av	20.4269	mg/l	%cv	0.41
Cd226502	av	0.6364	mg/l	%cv	1.20
Cr267716	av	0.9574	mg/l	%cv	0.88
Fe239562	av	76.0631	mg/l	%cv	0.39
Mg279079	av	9.7752	mg/l	%cv	0.72
Pb220353	av	1.4695	mg/l	%cv	5.35

11/13/97 13:23 1,00 82,0
1112a09

Al308215	av	41.8863	mg/l	%cv	0.44
As188979	av	0.1860	mg/l	%cv	0.47
Ca315887	av	11.9083	mg/l	%cv	0.42
Cd226502	av	0.0035	mg/l	%cv	15.70
Cr267716	av	0.0804	mg/l	%cv	0.04
Fe239562	av	160.3981	mg/l	%cv	0.51
Mg279079	av	15.3898	mg/l	%cv	0.61
Pb220353	av	0.4018	mg/l	%cv	1.02

As 22.7 1,2
Cd WD 0,61
Cr 9,8 1,2
Pb 49,0 0,61

11/13/97 13:29 1,00
1112a09d

Al308215	av	44.8851	mg/l	%cv	0.21
As188979	av	0.1980	mg/l	%cv	3.02
Ca315887	av	9.2283	mg/l	%cv	0.34
Cd226502	av	0.0036	mg/l	%cv	12.32
Cr267716	av	0.0737	mg/l	%cv	0.82
Fe239562	av	166.9079	mg/l	%cv	0.27
Mg279079	av	22.3365	mg/l	%cv	0.05
Pb220353	av	0.3584	mg/l	%cv	0.41

11/13/97 13:35 1,00
1112a09s

Al308215	av	43.1506	mg/l	%cv	0.40
As188979	av	0.6418	mg/l	%cv	0.42
Ca315887	av	16.1101	mg/l	%cv	0.95
Cd226502	av	0.4658	mg/l	%cv	0.71
Cr267716	av	0.5614	mg/l	%cv	0.54
Fe239562	av	160.7830	mg/l	%cv	0.86
Mg279079	av	20.1199	mg/l	%cv	0.26
Pb220353	av	0.8691	mg/l	%cv	0.37

11/13/97 13:41 1,00
1112a09as

Al308215	av	43.1108	mg/l	%cv	0.26
As188979	av	0.6624	mg/l	%cv	0.13

Blank | 5gms | 5gms
LCSS *
1111 Y01
1111 Y01D
1111 Y01S *

* 1ml Comb *

MP4A JR 11/12/97

Blank	Weight (g)	Final Vol.
	—	100
LCSS 234	1.00	
1112A01	1.00	
1112A01D	1.00	
1112A01S*	1.00	
1112A02	1.00	
1112A03	1.00	
1112A04	1.00	
1112A05	1.00	
1112A06	1.00	
1112A07	1.00	
1112A08	1.00	

* 2ml 5 Comb *

MP4A 11/12/97 PSD/TAM

Blank	Weight (g)	Final Vol.
	—	100
LCSS 234	1.100	
1112D01	1.00	
D01DP	1.03	
D01SPK*	1.02	
D02	1.00	
D03	1.00	
D04	1.00	
D05	1.01	
D06	1.00	
D07	1.00	
D08	1.00	

	wt	Final Vol
D09	1.02	100
D10	1.03	100

Sci Lab of Albany, Inc.

Percent Total Solids (% TS)

DATE	TIME	INITIALS	SAMPLE I.D.	BOAT #	BOAT WEIGHT (grams)	WET WEIGHT (grams)	DRY WT. + BOAT WT. (grams)	% TS
11/13/97	8:30	MJW	971112W01	1	1.28	6.09	7.09	95.4
			W01 Dup	2	1.28	7.49	8.44	95.6
			W02	3	1.29	7.93	8.75	94.2
			1112X01	4	1.29	7.64	8.48	94.1
			1112AC01	5	1.28	6.38	7.05	90.4
11/13/97	10:10	MJW	971113V01	A	1.27	6.65	7.44	92.9
			V01 Dup	B	1.29	6.21	7.07	93.1
			1113E01	~~A~~ D	1.28	7.82	8.33	90.2
			1113V02	~~D~~ C	1.28	5.84	6.69	92.6
11/13/97	1:45	TH	971112D01	E	1.28	5.32	3.99	50.8%
			D02	F	1.28	5.20	2.34	20.4%
			D03	G	1.29	4.79	3.79	52.2
			D03 Dup	H	1.29	5.06	4.05	54.5
			D04	I	1.29	6.02	5.39	~~68%~~ 68.
			D05	J	1.29	4.80	4.31	62.9%
			D06	K	1.29	5.20	4.51	61.9
			D07	L	1.28	7.28	3.99	37.2
			D08	M	1.28	5.77	4.75	60.1
			D09	N	1.29	5.10	5.47	81.9
			D10	Ø	1.29	5.25	3.87	49.1
11/13/97	4:45	TH	971031D01	1	1.29	6.03	6.64	8.87
			D01 Dup	2	1.29	5.30	5.89	86.8
			F03	3	1.29	7.30	7.39	82.9
			F04	4	1.29	8.56	8.46	83.8
			F05	5	1.29	5.88	6.19	83.3
			F06	6	1.29	8.21	8.70	90.2
			F07	7	1.29	5.22	5.73	85.0
			971112A01	8	1.28	5.67	6.23	87.3
			A02	9	1.29	5.36	5.47	80.0
			A03	10	1.29	6.73	6.96	84.2
			A04	11	1.29	5.01	4.93	72.7
			A05	12	1.28	5.19	5.86	88.2
			A05 Dup	13	1.28	5.70	6.19	86.1

% TS = (DRY WT. + BOAT WT. - BOAT WT.) / WET WT. x 100

47

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES

SCILAB ALBANY, INC.
15 Century Hill Drive
P.O. Box 787
Latham, NY 12110
Tel: (518) 786-8100
Fax: (518) 786-7700

SAMPLE DELIVERY GROUP: SB-02
SAMPLE DATA SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*VOA GC Method	*Pest PCBs Method	*Metals	*Other MISC.
SB-11	971112D01					X	
SB-07	971112D02					X	
SB-06	971112D03					X	
SB-17	971112D04					X	
SB-04(6-12")	971112D05					X	
SB-16	971112D06					X	
SB-04(0-6")	971112D07					X	
SB-12	971112D08					X	
SB-02	971112D09					X	
SB-03	971112D010					X	

00001

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Analyzed
971112D01-10	SOIL	ICP	11/12/97	11/13/97,11/12/97

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES

SCILAB ALBANY, INC.
15 Century Hill Drive
P.O. Box 787
Latham, NY 12110
Tel: (518) 786-8100
Fax: (518) 786-7700

SDG NARRATIVE

SDG: SB-02

SCILAB Albany, Inc. performed analyses on the following samples:

LAB ID	CLIENT ID	DATE RECEIVED	VTSR	MATRIX
971112D-01	SB-11	11/12/97	9:00	SOIL
971112D-02	SB-07	11/12/97	9:00	SOIL
971112D-03	SB-06	11/12/97	9:00	SOIL
971112D-04	SB-17	11/12/97	9:00	SOIL
971112D-05	SB-04(6-12")	11/12/97	9:00	SOIL
971112D-06	SB-16	11/12/97	9:00	SOIL
971112D-07	SB-04(0-6")	11/12/97	9:00	SOIL
971112D-08	SB-12	11/12/97	9:00	SOIL
971112D-09	SB-02	11/12/97	9:00	SOIL
971112D-10	SB-03	11/12/97	9:00	SOIL

No problems were encountered during analyses with the following exceptions:

Metals - EPA Methods 200.7 - ICP Analysis

1. The predigestion spike recovery for Sodium, on sample 971112D01, was out of the acceptable range. However the concentration of the sample exceeded the concentration of the spike added by a factor of four. The spike added is considered insignificant and the recovery data unreliable. No further action is necessary.

2. The results for Lead ICP Serial Dilution was greater than 10%, this is outside of acceptable criteria. These results are flagged with an "E" as required by the protocol. The "E" represents possible matrix interference during analysis and denotes an estimated value. No further action is necessary.

"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 conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Signature: _____ Name: David J O'Hehir

Date: 11/24/97 Title: Quality Assurance Officer

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-02

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D09

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _81.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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____	9.2	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-03

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D10

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _49.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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_____	464	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-06

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D03

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _52.2

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_____	51.3	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-07

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D02

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _20.4

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____	4900	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D01

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _50.8

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_____	13600	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-12

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D08

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _60.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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_____	235	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-16

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D06

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _61.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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_____	10.4	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB-17

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D04

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _68.0

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_____	1090	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SB04.0-6

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D07

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _37.2

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_____	617	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SE04.6-12

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Matrix (soil/water): SOIL_ Lab Sample ID: 1112D05

Level (low/med): LOW__ Date Received: 11/12/97

% Solids: _62.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		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____	33.5	_	E	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
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: BROWN____ Clarity Before: TURBID Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

Solids for Sample: _50.8 % Solids for Duplicate: __50.8

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		13639.2972		12186.4517		11.3		P
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

% Solids for Sample: _50.8

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		13240.2019		13639.2972		96.50	-413.6		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
SB-11

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead		70924.50		69287.63		6.0	27281.2		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

3
BLANKS

Lab Name: SCI_LAB_GROUP_OF_ALBANY__ Contract: _____

Lab Code: 10358_ Case No.: _____ SAS No.: _____ SDG No.: SB-02_

Preparation Blank Matrix (soil/water): _____

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

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

ATTACHMENT F

MODIFIED FIGURE 2

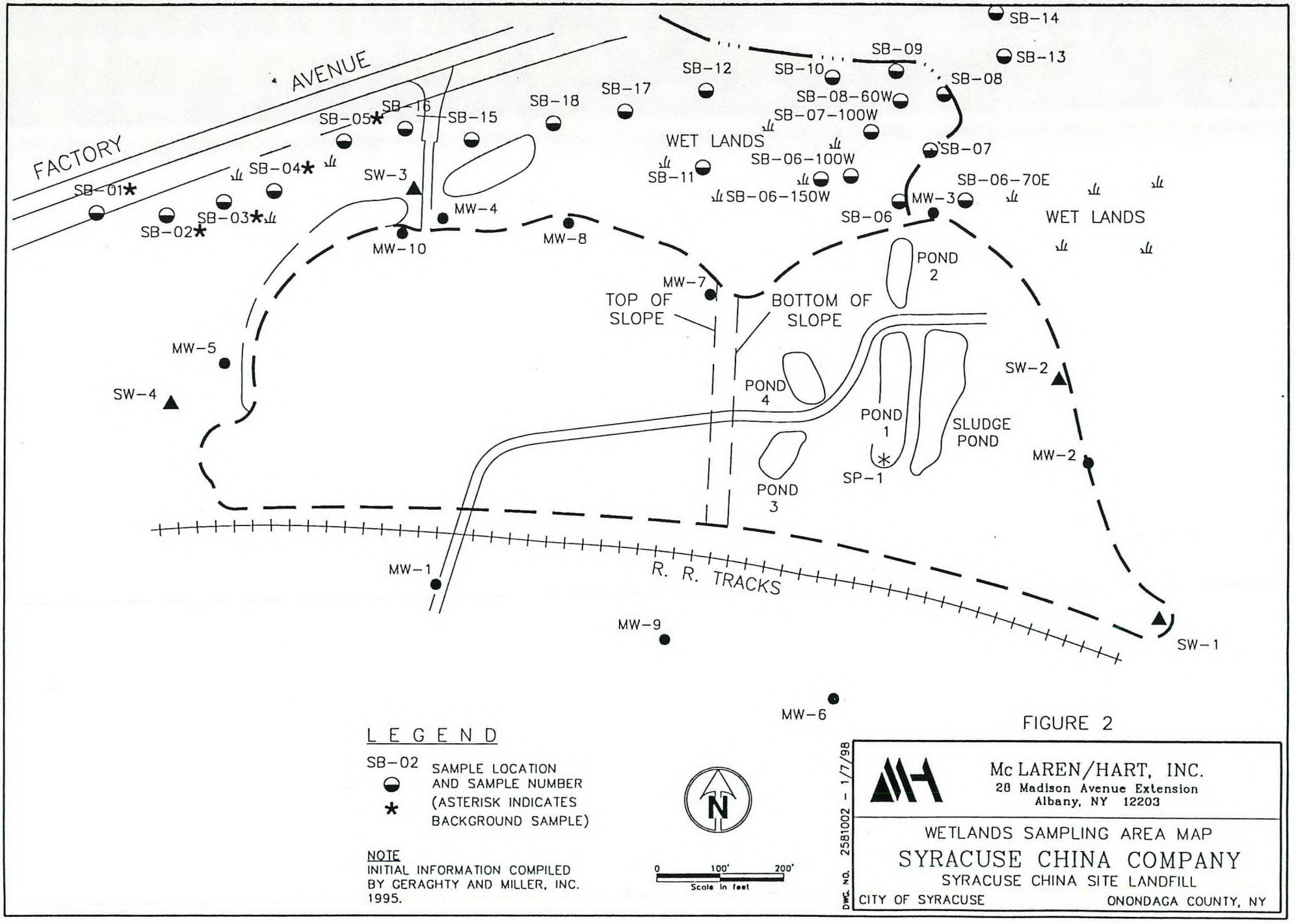

AVENUE
FACTORY
SB-01
SB-02
SB-03
SB-04
SB-05
SB-16
SB-15
SB-18
SB-17
SB-12
SB-10
SB-09
SB-14
SB-13
SB-08
SB-08-60W
SB-07-100W
SB-07
WET LANDS
SB-11
SB-06-100W
SB-06-150W
SB-06-70E
SB-06
MW-3
WET LANDS
SW-3
MW-4
MW-10
MW-8
MW-7
TOP OF SLOPE
BOTTOM OF SLOPE
POND 2
MW-5
SW-4
POND 4
POND 1
SLUDGE POND
SW-2
MW-2
SP-1
POND 3
MW-1
R. R. TRACKS
MW-9
SW-1
MW-6
LEGEND
SB-02
SAMPLE LOCATION AND SAMPLE NUMBER
(ASTERISK INDICATES BACKGROUND SAMPLE)
NOTE
INITIAL INFORMATION COMPILED BY GERAGHTY AND MILLER, INC. 1995.
N
0
100'
200'
Scale in feet
DWG. NO. 2581002 - 1/7/98
McLAREN/HART, INC.
28 Madison Avenue Extension
Albany, NY 12203
WETLANDS SAMPLING AREA MAP
SYRACUSE CHINA COMPANY
SYRACUSE CHINA SITE LANDFILL
CITY OF SYRACUSE
ONONDAGA COUNTY, NY

FIGURE 2