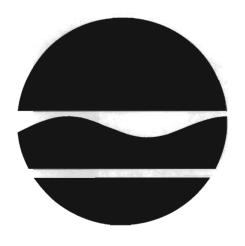
901022

# SAMPLING REPORT October 2005

AlTech Specialty Steel Site Site No. 907022 Dunkirk (c), Chautauqua County



November 2005

New York State Department of Environmental Conservation

GEORGE E. PATAKI, Governor DENISE M. SHEEHAN, Acting Commissioner

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#### 1.0 INTRODUCTION

This document details a sediment sampling effort conducted on October 5, 2005. Sediment samples were collected from Crooked Brook and the shores of Lake Erie. Crooked Brook accepts flow from a tributary which flows westerly through the southeast corner of the AlTech Specialty Steel Site, Site #907022 before emptying into Lake Erie. The samples were collected to supplement results of three, previous, sediment sampling of Crooked Brook and the tributary by the New York State Department of Environmental Conservation (NYSDEC).

#### 1.1 PROJECT BACKGROUND

The AlTech Specialty Steel (AlTech) site is a 90 acre active industrial site which manufactures stainless steel rod, bar, and wire from 4.5" billets. The facility is located adjacent to a residential are which includes a recreational park. Running through the property is a tributary to a surface water stream named Crooked Brook. Area groundwater is not used for drinking. AlTech filed for bankruptcy in 1999 and emerged reorganized as Empire Specialty Steel. However, further financial problems have plagued the company which went bankrupt again in 2001. Since that time the facility has been obtained and the current owner of the property is operating as Dunkirk Specialty Steel.

In 1992 AlTech submitted a RCRA Facility Assessment (RFA) in accordance with the Resource Recovery and Conservation Act (RCRA), Corrective Action Program. This assessment identified 24 Solid Waste Management Units (SWMU's) and 11 Areas of Concern (AOC). Over the period 1995-1997 the company conducted RCRA Facilities Investigation (RFI) which has documented hazardous waste disposal in areas of the plant. Empire Specialty Steel had committed an environmental remediation trust fund and signed a RCRA order on consent in 1999 to remediate the Dunkirk property as well as a facility located in Watervliet. Additional investigation work is necessary and funding remains in place to complete a final RFI which is expected in 2004.

Initial RFI work had documented the disposal of hazardous waste at levels that are impacting the environment, i.e. groundwater and surface water/sediments. Monitoring of the groundwater indicated standards for metals and chlorinated solvents had been exceeded. Hazardous wastes, such as, chromium, lead, chlorinated solvents and polychlorinated biphenyls (PCBs) are present on the site. Limited RFI data suggests the contaminated groundwater is migrating off-site. Significant levels of metals in surface soils may be contributing to metals being found in surface waters leading from the site (i.e. chromium detected at 630 ug/l in stream vs. 50 ug/l guidance value). Soil surrounding transformers have been found to have PCB contamination (87 mg/kg) while sediments in the on-site, man-made, Willowbrook pond contain PCBs as high as 2,100 mg/kg. These wastes are located in areas that may migrate to a nearby surface water stream or through groundwater to off-site locations.

Because residential areas surround the site and the proximity of the surface water stream, which has been impacted by site runoff, and the ability of the waste material to migrate from the site it was necessary to list this site on the Registry of Inactive Hazardous Waste Disposal Sites (Registry).

#### 2.0 WORK PERFORMED

Nine sediment/soil samples were collected by the NYSDEC on October 5, 2005. All samples were collected to further determine the extent of PCBs and chromium impact in Crooked Brook and if the impact had extended to the associated shores of Lake Erie.

The first sample, sample K, was collected, east of Route 5, approximately 120 feet upgradient of a previous sample, sample NF04I, (Jan 2005)0-6 inches in depth. This was a shallow sediment sample for PCBs and chromium.

Sample L was a shallow sediment sample, 0 - 6", collected in the same general vicinity of NF04I (Jan 2005) and analyzed for chromium only.

Sample number M was a shallow sediment sample collected approximately 200 feet south of the mouth of Crooked Brook into Lake Erie approximately 15 feet from the shore. The sample was analyzed for PCBs and chromium.

Sample N was collected approximately 375 feet down gradient of Crooked Brook 25 feet from the water's edge 6 to 12" deep. The sample was analyzed for chromium and PCBs.

Sample P was collected in the same hole as Sample N, however, Sample P was collected from 18" to 24" below ground surface and analyzed for PCBs only.

Sample Q, was collected approximately 150 feet down gradient of Crooked Brook from a depth of 6" to 12" and analyzed for PCBs only.

Sample R was collected directly west of the mouth of Crooked Brook 25 feet from the waters edge, from a depth of 6" to 12". The sample was analyzed for PCBs only.

Sample S was located 10 feet west of the water's edge on the southern side of Crooked Brook. Collected from 6" to 12" the sample was analyzed for PCBs only.

The last sample, Sample T was collected from within the center of Crooked Brook approximately 400' from the stream entrance into Lake Erie. This was a sediment sample collected from 6" to 12" deep.

### 3.0 SAMPLE RESULTS:

The family of chemicals known as PCBs are mixtures of up to 209 individual chlorinated compounds (known as congeners). Each congener is identified by a specific number. Eight of nine sediment and soil samples were analyzed for total PCBs.

Because Sample K and Sample T were collected from a stream channel, comparison of those results to the Technical Guidance for Screening Contaminated Sediments<sup>1</sup> is applicable. However, because none of the samples were analyzed for total organic carbon (toc), the PCB results could not be compared to the sediment screening criteria found in this guidance. For reference these samples were compared to recommended cleanup values presented in Technical, Administrative and Guidance Memorandum, HWR- 4046<sup>2</sup> (TAGM 4046).

Six of the eight samples, analyzed for PCBs, were collected from the beach where possible stream deposition could occur. These samples were determined to be soil samples and compared to guidance values presented in TAGM 4046 (Table 1).

To determine how a sample compares to soil cleanup guidance values, all congeners detected in a specific sample are added to determine the sample's total PCBs. Only one of the eight samples analyzed for PCBs, Sample K, noted the presence of the congener PCB-1248, at a concentration of (88 ug/kg). The remaining samples did not detect any PCBs. When compared to soil guidance values found in TAGM 4046 Sample K at (88 ug/kg) did not exceeded the 1 mg/kg (1000 ug/kg) surface soil concentration guidance value for PCBs (Table 1).

Five of the nine samples were analyzed for chromium. Sample K, sample L, and, sample T were sediment samples and compared to the Technical Guidance for Screening Contaminated Sediments<sup>3</sup> (Table 2.) All three samples contained chromium concentrations at 734 mg/kg, 582, mg/kg and 9.1 mg/kg respectively. When compared to the guidance, the concentrations in sample K and sample L exceeded both the lowest effect level and the severe effect level. Sample T did not exceed either the severe or the lowest effect level for chromium. The remaining two samples, sample M (1.3 mg/kg) and sample N (2.6 mg/kg), were soil (beach) samples and compared to the TAGM 4046 guidance. The values for sample M and sample N were below the TAGM 4046 recommended cleanup value of 10 mg/kg.

<sup>&</sup>lt;sup>1</sup> New York State Department of Environmental Conservation, "Technical Guidance for Screening Contaminated Sediments", Division of Fish, Wildlife and Marine Resources, January 1999, 39 pp.

<sup>&</sup>lt;sup>2</sup> New York State Department of Environmental Conservation, Technical Guidance and Administrative Memorandum, HWR 4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", Division of Environmental Remediation, January 24, 1994

<sup>&</sup>lt;sup>3</sup> New York State Department of Environmental Conservation, "Technical Guidance for Screening Contaminated Sediments", Division of Fish, Wildlife and Marine Resources, January 1999, 39 pp.

#### 4.0 CONCLUSIONS:

Only one sample of eight analyzed for PCBs contained PCBs. Sample K (88 ug/kg), when compared to TAGM 4046 values, is below the 1,000 ug/kg recommended soil cleanup value.

Five samples were analyzed for chromium. Two of the samples sample K and sample L were collected from Crooked Brook, east of Route 5. Sample K (734 mg/kg) and sample L (582) are impacted above both the lowest effect level and the severe effect level. Because the sediment criteria has been exceeded, more information is required to determine if remediation is necessary. Sample T, collected in Crooked Brook, west of Route 5 detected chromium at 9.1 mg/kg, this value does not exceed any effect level for sediments.

The lack of detections in the beach area and the general lack of sediments within 300 feet from the shore would indicate that this area in Lake Erie has not been significantly impacted by discharge from Crooked Brook. This indication is further supported by the decrease in concentration from samples collected east of Route 5 (samples K & L) to the concentration in sample T which is located to the west of Route 5.

The data collected during this sampling coupled with data from the three previous sampling indicates chromium, nickel and PCB impacts within the tributary to and within Crooked Brook from the AlTech Specialty Steel Site, extending west, from the site, to Route 5. The beach and shallow sediments in the outfall of Crooked Brook do not appear to be impacted. The data will need to be incorporated into the Recta Facilities Investigation/Corrective Measures Study being completed for the site to determine the need and feasibility for future actions.

Table 1
Soil/Sediment Sample Results
PCBs

CAS Number	Units	Guidance	Analyze	K	M	N	P	Q	R	S	T
		values									
12672-29-6	ug/kg	1 - 10	Arochlor-	88	ND						
		mg/kg*	1248								

A shaded value indicates that the value exceeds guidance values.

ND - Not Detected

Table 2
Soil/Sediment Sample Results
Chromium

Analyze	units	guidance values	K	L	M	N	T
Chromium	mg/kg	26.0 (1) Lowest effect	734	582			9.1
Chromium	mg/kg	110.0 (1) Severe effect	734	582			9.1
Chromium	mg/kg	10 or SB* (2)		720	1.3	2.6	

<sup>(1)</sup> New York State Department of Environmental Conservation, "Technical Guidance for Screening Contaminated Sediments", Division of Fish, Wildlife and Marine Resources, January 1999, 39 pp.

(2) New York State Department of Environmental Conservation, Technical Guidance and Administrative Memorandum, HER 4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", Division of Environmental Remediation, January 24, 1994

<sup>\* 1</sup> mg/kg surface, 10 mg/kg 1 foot below surface for soils (note: soil values used, sediment values are based upon total organic carbon content of sediment which were not analyzed in this sampling). 1000 up/kg = 1 mg/kg

<sup>\*</sup>TAG 4046 Soil Cleanup Values, 10 or SB (New York State background = 1.5 - 40 mg/kg), A shaded value indicates that the value exceeds guidance values.

# **FIGURES**

Figure 1
AlTech Specialty Steel Site
Site No. 907022

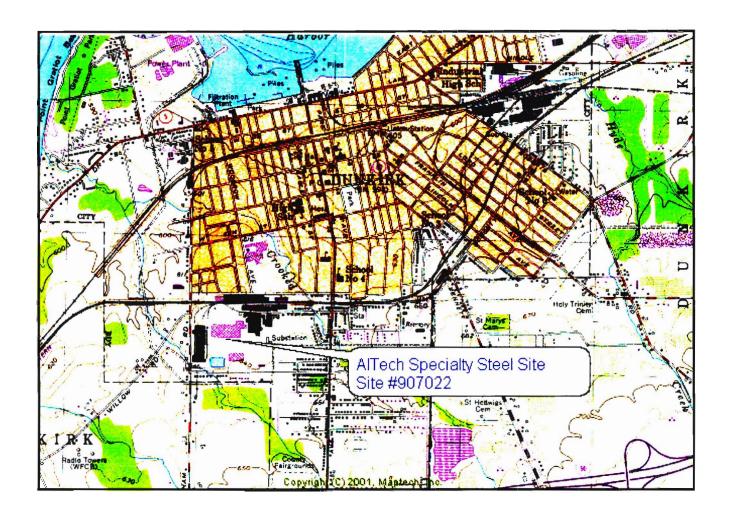
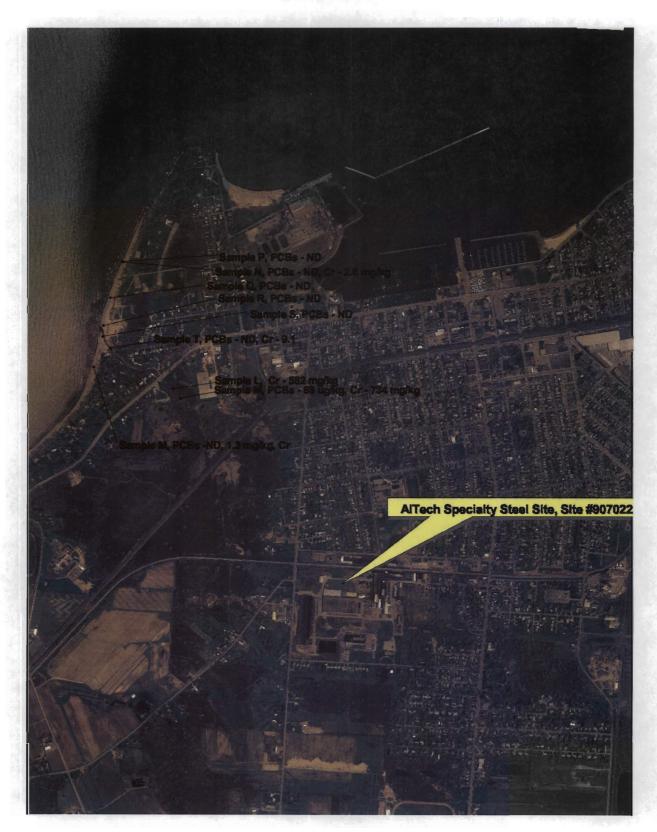


Figure 2
Sampling Locations



## **APPENDICES**

#### ANALYTICAL REPORT

Job#: <u>A05-B198</u>

STL Project#: NY5A946109

Site Name: NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT

Task: NYSDEC Spills - Al Tech Specialty # 907022

Mr. David Szymanski NYSDEC - Region 9 270 Michigan Ave Buffalo, NY 14203

STL Buffalo

Brian J. Fischer Project Manager

### STL Buffalo Current Certifications

STATE	Program	Cert # / Lab ID
Arkansas	SDWA, CWA, RCRA, SOIL	03-054-D/88-0686
California	NELAP SDWA, CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida	NELAP RCRA	E87672
Georgia	SDWA	956
Illinois	NELAP SDWA, CWA, RCRA	200003
lowa	SW/CS	374
Kansas	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	CWA, RCRA	036-999-337
New Hampshire	NELAP SDWA, CWA	233701
New Jersey	SDWA, CWA, RCRA, CLP	NY455
New York	NELAP, AIR, SDWA, CWA, RCRA	10026
North Carolina	CWA	411
North Dakota	SDWA, CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Pennsylvania	Env. Lab Reg.	68-281
South Carolina	RCRA	91013
USDA	FOREIGN SOIL PERMIT	S-41579
Virginia	SDWA	278
Washington	CWA	C254
West Virginia	CWA	252
Wisconsin	CWA	998310390
(19-18) P. 189 (19-18) P. 189 (19-18)		

#### SAMPLE SUMMARY

						SAMP:	LED	RECEIVI	ED .
LAB SAMPLE	<u> </u>	CLIENT	SAMPLE ID	)	<u>MATRIX</u>	DATE	TIME	DATE	TIME
A5B19801	K				SOIL	10/05/2005	09:45	10/06/2005	12:00
A5B19802	L				SOIL	10/05/2005	09:50	10/06/2005	12:00
A5B19803	M				SOIL	10/05/2005	10:05	10/06/2005	12:00
A5B19804	N				SOIL	10/05/2005	10:35	10/06/2005	12:00
A5B19805	P				SOIL	10/05/2005	10:40	10/06/2005	12:00
A5B19806	Q				SOIL	10/05/2005	10:45	10/06/2005	12:00
A5B19807	R				SOIL	10/05/2005	10:50	10/06/2005	12:00
A5B19808	S				SOIL	10/05/2005	11:00	10/06/2005	12:00
A5B19809	Т				SOIL	10/05/2005	11:05	10/06/2005	12:00

METHODS SUMMARY

Job#: <u>A05-B198</u>

STL Project#: NY5A946109

Site Name: NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT

ANALYTICAL

PARAMETER METHOD

NYSDEC-SPILLS- 8082 - POLYCHLORINATED BIPHENYLS-S SW8463 8082

Chromium - Total SW8463 6010

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

#### NON-CONFORMANCE SUMMARY

Job#: <u>A05-B198</u>

STL Project#: NY5A946109

Site Name: NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT

#### General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

#### Sample Receipt Comments

#### A05-B198

Sample Cooler(s) were received at the following temperature(s);  $2.0\,^{\circ}$ C All samples were received in good condition.

#### GC Extractable Data

No deviations from protocol were encountered during the analytical procedures.

#### Metals Data

No deviations from protocol were encountered during the analytical procedures.

\*\*\*\*\*\*

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

"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 his designee, as verified by the following signature."

Brian J. Fischer	
Project Manager	
Date	



#### DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

#### **ORGANIC DATA QUALIFIERS**

ND or U Indicates compound was analyzed for, but not detected.

- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank, as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
- P This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- Indicates coelution.
- \* Indicates analysis is not within the quality control limits.

#### **INORGANIC DATA QUALIFIERS**

- ND or U Indicates element was analyzed for, but not detected. Report with the detection limit value.
- J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
- N Indicates spike sample recovery is not within the quality control limits.
- S Indicates value determined by the Method of Standard Addition.
- E Indicates a value estimated or not reported due to the presence of interferences.
- H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
- \* Indicates the spike or duplicate analysis is not within the quality control limits.
- + Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

[ <u>9</u> ]	Γ		T				Γ - π	8\24	
Rept: AN0326	A5B19805	Reporting Limit	8 8 8 8 8 8 8	32-148 36-153	A5B19809	Reporting Limit	221 231 231 231 231 231 231 231 231 231	36-153	
	P A05-B198 10/05/2005	Sample Value	2 2 2 2 2 2	56 78	T A05-B198 10/05/2005	Sample Value		74 8 84	
	A5B19804	Reporting Limit	666666	32–148 36–153	A5B19808	Reporting Limit	19 19 19 19 19 19 19 19 19 19 19 19 19 1	32-148 36-153	
ACT 22 VYLS-S	N A05-B198 10/05/2005	Sample Value	2 2 2 2 2 2 2	42 7.6	S A05-B198 10/05/2005	Sample Value	ON O	65 76	
REGION 9 REMEDIATION/SPILLS CONTRACT spills - Al Tech Specialty # 907022 .LS- 8082 - POLYCHLORINATED BIPHENYLS-S	A5B19803	Reporting Limit	02 02 02 02 02 02 02 02 02 02 02 02 02 0	32-148 36-153	A5B19807	Reporting Limit	91 91 91 91 91 91	32–148 36–153	
REGION spills LS- 80	M A05-B198 10/05/2005	Sample Value		55 72	R A05-B198 10/05/2005	Sample Value	0 N N N N N N N N N N N N N N N N N N N	20 20 20 20 20 20 20 20 20 20 20 20 20 2	
NYSDEC - REGION NYSDEC Spills NYSDEC-SPILLS- 80	A5B19801	Reporting Limit	200000000000000000000000000000000000000	32-148 36-153	A5B19806	Reporting Limit	± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ±	32-148 36-153	
	K A05-B198 10/05/2005	Sample Value	ON O	76	Q A05-B198 10/05/2005	Sample Value		82 82	
		Units	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	% %		Units	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	% %	
Date: 10/31/2005 Time: 15:28:19	client ID Job No Sample Date	Analyte	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	SURKUGAIE(S) Tetrachloro-m-xylene Decachlorobiphenyl	Client ID Job No Sample Date	Analyte	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1264 Aroclor 1260	Tetrachloro-m-xylene Decachlorobiphenyl	

STL Buffalo

client ID Job No Lab ID Sample Date		K A05-B198 10/05/2005	A5B19801	L A05-B198 10/05/2005	A5B19802	M A05-B198 10/05/2005	A5B19803	N A05-B198 10/05/2005	A5B19804
Analyte	Units	Sample Value	Reporting Limit	Sample	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chromium - Total	MG/KG	734	08.0	582	1.2	1.3	0.56	2.6	0.56

NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT NYSDEC Spills - Al Tech Specialty # 907022 SOLUBLE METALS

Date: 10/31/2005 Time: 15:28:21

		/ /		/ /-:		/ /		( (	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting   Limit
Chromium - Total	MG/KG	734	08.0	582	1.2	1.3	0.56	2.6	0.56
Client ID Job No Sample Date		T A05-B198 10/05/2005	A5B19809						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	   Reporting     Limit
Chromium - Total	MG/KG	9.1	0.63	NA		NA		NA	

Chronology and QC Summary Package

	Reporting Limit	
	Sample Value	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
	Reporting Limit	
	Sample Value	N N N N N N N N N N N N N N N N N N N
	Reporting Limit	
	sample Value	A A A A A A A A A A A A A A A A A A A
A5B1554502	Reporting Limit	16 16 16 16 16 16 32–148 36–153
Method Blank AO5-B198	Sample Value	ON ON ON ON ON ON ON ON ON
	Units	0.06/KG 0.06/KG 0.06/KG 0.06/KG 0.06/KG 0.06/KG
Client ID Job No Lab ID Sample Date	Analyte	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1260 Tetrachloro-m-xylene Decachlorobiphenyl

NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT NYSDEC Spills - Al Tech Specialty # 907022 NYSDEC-SPILLS- 8082 - POLYCHLORINATED BIPHENYLS-S

Date: 10/31/2005 Time: 15:28:32

Rept: ANO32		Reporting   Limit		
		Sample Value	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	NA NA
	Blank A5B1554501	Reporting Limit	17 17 17 17 17	32-148 36-153
RACT 122 NYLS-S	Matrix Spike Blank AO5-B198 A56	Sample Value	140 ND ND ND ND ND 140	89
VIION/SPILLS CONT Specialty # 907C CHLORINATED BIPHE	A5B19803SD	Reporting Limit	20 20 20 20 20 20 20 20	32-148 36-153
NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT NYSDEC Spills - Al Tech Specialty # 907022 NYSDEC-SPILLS- 8082 - POLYCHLORINATED BIPHENYLS-S	M A05-B198 10/05/2005	Sample Value	140 ND ND ND ND ND 210	54 90
NYSDEC - NYSDEC NYSDEC-SPI	A5B19803MS	Reporting Limit	21 21 21 21 21	32-148 36-153
	M A05-B198 10/05/2005	Sample Value	140 ND ND ND ND ND	48 62
		Units	06/ke 06/ke 06/ke 06/ke 06/ke	% %
Date: 10/31/2005 Time: 15:28:32	Client ID Job No Sample Date	Analyte	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	Tetrachloro-m-xylene Decachlorobiphenyl

NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT	NYSDEC Spills - Al Tech Specialty # 907022	SOLUBLE METALS	
Date: 10/31/2005	Time: 15:28:35		

client ID Job No Lab ID Sample Date		Method Blank A05-B198	A5B1546302						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chromium - Total	MG/KG	QN .	0.50	NA		NA		NA	

NYSDEC - REGION 9 REMEDIATION/SPILLS CONTRACT	NYSDEC Spills - Al Tech Specialty # 907022	SOLUBLE METALS	
Date: 10/31/2005	Time: 15:28:35		

Client ID Job No Lab ID Sample Date		LCS CLP Soils AO5-B198	A5B1546301						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chromium - Total	MG/KG	61.1	05.0	NA		NA		NA	

Date : 10/31/2005 15:28:47 Job No: A05-B198			REGI SAMPLE	NYSDEC REGION 9 NYSDEC SAMPLE DATE 10/05/2005							Rept: AN0364	N0364
Client Sample ID: M Lab Sample ID: A5B19803	м A5B19803MS	M A5B19803SD	803sp									
			Conce	Concentration	:		% ~	% Recovery		_		
Analyte	Units of Measure	Sample	Matrix Spike	Matrix Spike Spike Duplicate	Spike MS	Spike Amount     MSD	MS	MSD	Avg	RPD	QC LIMITS RPD   REC.	REC.
NYSDEC-SPILLS- 8082 - POLYCHLORINATED BI Aroclor 1260		0	155	210	207	205	22	102	68	30	35.0	35.0 41-139
Aroclor 1016	UG/KG	0	138	140	202	505	29	89	89	_	35.0	39-131

NYSDEC REGION 9 NYSDEC	
Date : 10/31/2005 15:28:47 Job No: A05-B198	

Client Sample ID: Method Blank Lab Sample ID: A5B1554502

Matrix Spike Blank A5B1554501

		Concentration	ation		
Analyte	Units of Measure	Blank Spike	Spike Amount	% Recovery QC Blank Spike LIMITS	QC LIMITS
NYSDEC-SPILLS- 8082 - POLYCHLORINATED BI					
Aroclor 1260 Aroclor 1016	UG/KG UG/KG	140 137	166 166	85	41-139

STL Buffalo

Date : 10/31/2005 15:28:49 Job No: A05-B198

NYSDEC REGION 9 NYSDEC

Rept: AN0364

LCS CLP Soils A5B1546301 Client Sample ID: Method Blank Lab Sample ID: A5B1546302

		Concentration	ation		
Analyte	Units of Measure	Blank Spike	Spike Amount	% Recovery QC Blank Spike LIMITS	QC LIMITS
SOLUBLE METALS ANALYSIS NYSDEC - SPILLS- CHROMIUM - TOTAL - S MG/KG	MG/KG	61.09	72.80	84	80-120

Rept: ANO374	Page: 1	
NYSDEC	SAMPLE CHRONOLOGY	
Date: 10/31/2005	Time: 15:29:00	

	P A05-B198 A5B19805	10/05/2005 10 10/06/2005 12 10/09/2005 08 10/14/2005 21 YES YES SOIL LOW 1.0 30.74 GRAM
	N AO5-B198 A5B19804	10/05/2005 10:35 10/06/2005 12:00 10/09/2005 08:00 10/14/2005 21:20 YES YES SOIL LOW 1.0 30.45 GRAMS
	M A05-B198 A5B19803	10/05/2005 10:05 10/06/2005 12:00 10/09/2005 08:00 10/14/2005 19:42 YES YES SOIL LOW 1.0 30.58 GRAMS
NYSDEC-SPILLS- 8082 - POLYCHLORINATED BIPHENYLS-S	K A05-B198 A5B19801	10/05/2005 09:45 10/06/2005 12:00 10/09/2005 08:00 10/17/2005 14:38 YES YES SOIL LOW 1.0 30.09 GRAMS
NYSDEC-SPILLS- 8082 - POL	Client Sample ID Job No & Lab Sample ID	Sample Date Received Date Extraction Date Analysis Date Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry

10:45 12:00 08:00 21:59

10:40 12:00 08:00 21:40

10/05/2005 10/06/2005 10/09/2005 10/14/2005 YES YES SOIL LO 1.0 30.63 GR

Q A05-B198 A5B19806

GRAMS <u></u>

GRAMS MO\_

e: 10/31/2005	Date: 10/31/2005	NYSDEC	
le: 15:29:00	Time: 15:29:00	SAMPLE CHRONOLOGY	
+ =	Da	te: 10/31/2005 me: 15:29:00	

Rept: ANO374 Page: 2

Client Sample ID Job No & Lab Sample ID	R A05-B198 A5B19807	S A05-B198 A5B19808	T A05-B198 A5B19809	
Sample Date	10/05/2005 10:50	10/05/2005 11:00	10/05/2005 11:05	
Extraction Date		10/09/2005 12:00	10/09/2005 12:00	
Analysis Date		10/14/2005 22:39	10/14/2005 22:58	
Extraction HT Met?	YES	YES	YES	
Analytical HT Met?	YES	YES	YES	
Sample Matrix	SOIL LOW	SOIL LOW	SOIL LOW	
Dilution Factor	1.0	1.0	1.0	
Sample wt/vol	30.34 GRAMS	30.45 GRAMS	30.15 GRAMS	
% Dry	87.44	85.46	29.62	-

Date: 10/31/2005	9 OC	NYSDEC	Rept: ANO374
Time: 15:29:00		QC SAMPLE CHRONOLOGY	Page: 3
NYSDEC-SPILLS- 8082 - POLYCHLORINATED BIPHENYLS-S			
Client Sample ID M	M	Matrix Spike Blank	
Job No & Lab Sample ID A05-B198 A5B19803MS	A05-B198 A5B19803SD	A05-B198 A5B1554501	

Client Sample ID Job No & Lab Sample ID	M A05-B198 A5B19803MS	M A05-B198 A5B19803SD	Matrix Spike Blank AO5-B198 A5B1554501	
Sample Date	10/05/2005 10:05	10/05/2005 10:05		
Received Date	10/06/2005 12:00	10/06/2005 12:00		
Extraction Date	10/09/2005 08:00	10/09/2005 08:00	10/09/2005 08:00	
Analysis Date	10/14/2005 20:01	10/14/2005 21:00	10/14/2005 18:43	
Extraction HT Met?	YES	YES	1	
Analytical HT Met?	YES	YES	1	
Sample Matrix	SOIL LOW	SOIL LOW	SOIL LOW	
Dilution Factor	1.0	1.0	1.0	
Sample wt/vol	30.26 GRAMS	30.54 GRAMS	30.07 GRAMS	
% Dry	79.52	79.52	100.00	

Date: 10/31/2005 Time: 15:29:00		NY: QC SAMPLE	NYSDEC QC SAMPLE CHRONOLOGY	Rept: ANO374 Page: 4	N0374
NYSDEC-SPILLS- 8082 - POLYCHLORINATED BIPHENYLS-S	YCHLORINATED BIPHENYLS-S				
Client Sample ID Job No & Lab Sample ID	Method Blank A05-B198 A5B1554502				
Sample Date Received Date Extraction Date Analysis Date Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry	10/09/2005 08:00 10/14/2005 19:02 - SOIL LOW 1.0 30.36 GRAMS				

AHT Matrix	SOIL SOIL SOIL SOIL SOIL
AHT	Yes Yes Yes Yes
Analysis THT Date	NA 10/07 19:27 Yes SOIL  NA 10/07 19:41 Yes SOIL  NA 10/07 19:45 Yes SOIL  NA 10/07 19:56 Yes SOIL  NA 10/07 19:55 Yes SOIL
THT	N N N N N N N N N N N N N N N N N N N
TCLP Date	N N N N N N N N N N N N N N N N N N N
Receive Date	10/06 12:00 10/06 12:00 10/06 12:00 10/06 12:00 10/06 12:00
Sample Date	1.00 10/05/2005 09:45 10/06 12:00 1.00 10/05/2005 09:50 10/06 12:00 1.00 10/05/2005 10:05 10/06 12:00 1.00 10/05/2005 10:35 10/06 12:00 1.00 10/05/2005 11:05 10/06 12:00
Dilution Factor	00:1:00
Method	6010 6010 6010 6010 6010
Analyte	Chromium - Total Chromium - Total Chromium - Total Chromium - Total Chromium - Total
Units	MG/KG MG/KG MG/KG MG/KG
Sample ID	<b>∀ ⊣ ∑ ∑ ⊢</b>
Lab ID	A5B19801 A5B19802 A5B19803 A5B19804 A5B19809

NYSDEC SAMPLE CHRONOLOGY

Date: 10/31/2005 15:29:02 Jobno: A05-B198

Rept: AN0369

AHT = Analysis Holding Time Met THT = TCLP Holding Time Met NA = Not Applicable

Rept: AN0369	AHT Matrix	OIL
ot: A	NHT [M	res s
Rep	Analysis   THT Date	NA 10/07 16:30 Yes SOIL NA 10/07 16:35 Yes SOIL
	THT	A A
	TCLP Date	NA NA
	Receive Date	- 12:00 - 12:00
	Sample Date	1 1
	Dilution Factor	1.00
NYSDEC QC CHRONOLOGY	Method	6010 6010
36	Units   Analyte	Chromium - Total Chromium - Total
	Units	MG/KG MG/KG
Date: 10/31/2005 15:29:02 Jobno: A05-B198	Sample ID	A5B1546302 Method Blank A5B1546301 LCS CLP Soils
Date: 10 Jobno: AO	Lab ID	A5B1546302 A5B1546301

AHT = Analysis Holding Time Met THT = TCLP Holding Time Met NA = Not Applicable

Chain of Custody Record

SEVERN STL
Severn Trent Laboratories, Inc.

	1 1					,		L							 1	•		,	24	<b>\24</b>			
Chain of Custody Number	1600		Special Instructions/	Conditions of Receipt												(A fee may be assessed if samples are retained longer than 1 month)		1011	Mel Mill Time / Mills	Date	Date Time		
Date 15 105	-7226 Lab Number /	Analysis (Attach list if more space is needed)	(92)	m, he	Chris	7	2,		7					>		Months		14 6 111	MN Mount			202	
MOSE	7220 7851	Lab Contact		Containers & Preservatives	HOPN HOPN HORN HANDS HANDS HANDS			>	<i>'</i>	>	7	7	>	>		nt Disnocal Bullah Archine Eor	C OC Requirements (Spe		T. Received By	2. Received By	3. Received By	,	
Project Manager	Telgenone Nymber (Area Co		Carrie	Matrix	Air Air Sed.		1 90560	1005/15	1035/4	104010	Systel	ry0501	Sydol1	1/0 sys //		Sample Disposal	Sandahee no	otherso 144	10-06-05-1158	Date Time	Date		the Sample: DINIE Elold Con-
DER.	he	State Zip Code (1/43-2999)			scription Date	454 70-50-01								<b>\</b>		Skin Irritant Poison B		7 Days 121 Days	``\	9			DISTRIBUTION: WHITE Beturned to Client with Bennd CANARY . Stays with the Sample PINK
STL-4124 (0901) Client (N. J. D C. C.	Mohiba	3 Jalo	Project Name and Location (State)	Contract/Purchase Order/Duole No.	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	X	7	W	2	d	O	R	S	<b>\</b>	•	Possible Hazard Identification Non-Hazard	e Required	☐ 48 Hours ☐	C S C S C S C S C S C S C S C S C S C S	2. Rellfiquished By	3. Relinquished By	Comments	DISTRIBITION: WHITE Between to