PHASE II SEDIMENT INVESTIGATION
AND REMEDIAL ALTERNATIVE SCOPING REPORT

CHERRY FARM SITE (NYSDEC SITE NO. 9-15-063)
RIVER ROAD SITE (NYSDEC SITE NO. 9-15-031)
Tonawanda New York

SUBMITTED TO

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS
WASTE REMEDIATION

SUBMITTED BY

CHERRY FARM / RIVER ROAD SITE
PRP GROUP

PREPARED BY

PARSONS ENGINEERING SCIENCE, INC.
180 Lawrence Bell Drive, Suite 100
Williamsville, New York 14221
(716) 633-7074 FAX (716) 633-7195
Buffalo, New York

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NOVEMBER 1996
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NIAGARA RIVER
PHASE II SEDIMENT INVESTIGATION AND REMEDIAL ALTERNATIVES SCOPING REPORT

CHERRY FARM SITE
TONAWANDA, NEW YORK
(NYSDEC SITE NO. 9-15-063)

RIVER ROAD SITE
TONAWANDA, NEW YORK
(NYSDEC SITE NO. 9-15-031)

Submitted to:

THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF HAZARDOUS WASTE REMEDIATION

Submitted by:

THE CHERRY FARM/RIVER ROAD POTENTIALLY RESPONSIBLE PARTIES

Prepared by:

PARSONS ENGINEERING SCIENCE
180 LAWRENCE BELL DRIVE, SUITE 100
WILLIAMSVILLE, NEW YORK 14221
PHONE (716) 633-7074
FAX (716) 633-7195

NOVEMBER1996

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EXECUTIVE SUMMARY

The New York State Department of Environmental Conservation (NYSDEC) Order-on-Consent for the Cherry Farm and the River Road Sites required sampling of river sediments and reporting of the results. A Phase I Sediment Assessment Report was completed in April 1995. Based on the results of the Phase I Report, and comments by NYSDEC, a Phase II Sediment Assessment was undertaken beginning with preparation of a Work Plan in February 1996, followed by sediment sampling in June and July 1996.

The primary objectives of the Phase II Sediment Assessment were to: (1) more accurately delineate the horizontal and vertical extent of sediments impacted by polycyclic aromatic hydrocarbons (PAHs) and metals; and (2) screen and develop preliminary remedial technologies and alternatives. The Phase I Sediment Assessment data were integrated with the newly acquired Phase II data to provide a comprehensive interpretation of the extent of impacted sediment, and to develop a preliminary remedial strategy. Thus, the objectives of the Phase II Sediment Assessment were met, the requirements of the NYSDEC Order-on-Consent were satisfied, and the information and guidance needed for future decision-making related to remedial alternatives has been established.

The Phase II Sediment Assessment work scope consisted primarily of sediment sampling and laboratory analysis for PAHs and metals, followed by evaluation and interpretation of the data, and development of preliminary remedial alternatives. A total of 50 samples were collected, of which 44 were sent for laboratory analysis based on field screening results, including 38 adjacent to the Site, and six upstream of the Site. Samples were collected via a combination of methods, which included a Petite Ponar^{tm} dredge, a Wildco^{tm} sampler, and a pontoon barge with a cathead/tripod assembly. Field screening techniques for PAHs were conducted during the sampling to assist in decision-making regarding the horizontal and vertical extent of the sampling program. River velocity measurements were also conducted during the field effort at three transects perpendicular to the shoreline. The purpose of the velocity measurements was to quantify river velocities for later use in screening remedial technologies relative to sediment containment.

The river substrate material ranged in size and composition throughout the investigation area. The Site lies on the inside of a meander bend of the Niagara River, where the relatively low velocities result in a depositional area. Velocities measured during the Phase II Assessment in the river adjacent to the Site range from 0.5 to 2.5 ft/sec, increasing with distance from shore. A large bed of wild celery extends, approximately, from Station 2000 to 3200, and up to 300 feet from shore. In addition to providing a viable aquatic habitat, the dense vegetation is also expected to promote deposition.

Following receipt of the laboratory data, the Phase II analytical sample results were subjected to a complete data validation procedure, in accordance with USEPA functional

guidelines. The Phase I and II data were then integrated and used to develop data summary and graphical representations of the extent of total PAHs and metals in the river adjacent to the Site. The analytical data (PAHs and metals) were compared to background concentrations (95% upper confidence limit, UCL_{95}), and metals data were also compared to the NYSDEC Severe Effect Level (SEL) criteria.

Based on the results of the sampling completed to date, it can be concluded that the sediments adjacent to the Site contain certain PAHs and metals in excess of the UCL_{95}. The highest concentrations of PAHs (above the UCL_{95}) and metals (above the SEL) are located between Stations 3000 and 4600, at distances from the shoreline of up to 150 feet out from shore. A sample collected by NYSDEC in the drainage swale, below the Tonawanda Coke outfall, contained total PAH concentrations of 234 mg/kg. Chromium, iron, lead, and zinc in this sample had concentrations comparable to Phase I and II sediment sample results.

Based on these observations, an elongated source parallel to the shoreline is plausible, as are potential point sources. The length of the most affected sediment zone roughly corresponds to a segment of the Cherry Farm/River Road shoreline extending from Stations 3000 to 4600, suggesting the Site itself as a source. Areas of the River Road Site lacking cover material prior to the current construction, former sedimentation ponds, drainage swales, and areas of LNAPL occurrence, as well as the active outfall near Station 4600, may all be contributors.

Current shoreline improvements and the recent construction of a shallow groundwater recovery trench associated with the Cherry Farm/River Road remedial design will provide effective containment of sources located within the Cherry Farm/River Road property.

Following evaluation of the Phase II data, a remedial alternatives scoping was conducted to address areas of impacted sediment adjacent to the Site. The remedial scoping process consisted initially of identification and screening of various applicable remedial technologies for impacted river sediments. Following the technology screening, four preliminary remedial alternatives were developed, consisting of combinations of the technologies that were retained during the screening process. These four alternatives are: (1) No Action/Monitoring; (2) Cover In-place; (3) Sediment Removal and Onsite Landfilling; and (4) Sediment Removal and Offsite Landfilling. Each alternative was evaluated against three primary criteria categories: effectiveness, implementability, and cost.

Alternative No. 1, No Action/Monitoring, was not considered effective in protecting against adverse impacts, particularly on aquatic biota and wildlife. Alternative No. 2, Cover In-place, prevents contact with and migration of sediments, but does not address potential leaching of chemical constituents from the sediments into the river. Alternative No. 3, Sediment Removal and Onsite Landfilling, would be effective in reducing potential impacts on human health and the environment by physically removing the most

impacted sediments, and containing them in an onshore section of the Site. Alternative No. 4, Sediment Removal and Onsite Landfilling, is similar to Alternative No. 3, but would be substantially more costly, as a result of disposal costs.

Using the three criteria of effectiveness, implementability, and cost, Alternative No. 3 was selected as the recommended method for reducing potential impacts to human health, fish and wildlife, and the environment. This recommendation includes dredging contaminated sediment via hydraulic dredging equipment. The recommended alternative would include the following primary elements: hydraulic and/or mechanical dredging for sediment removal, silt curtain installation to control resuspension, gravity and/or mechanical dewatering, solidification (if necessary), water treatment (if needed), onsite disposal of excavated sediments, and covering with cover soil and top soil.

This alternative should be able to be completed within one construction season. Onsite work should be completed enough so that any reasonable potential for reimpacting river sediment from onsite activity is removed.

SECTION 1
INTRODUCTION

1.1 INVESTIGATION OBJECTIVES

The Phase II Sediment Assessment for the Cherry Farm/River Road Site was conducted to confirm and supplement the data generated during the Phase I Assessment. The primary objectives of the Phase II Sediment Assessment are to:

1. Characterize in more detail the horizontal and vertical extent of polynuclear aromatic hydrocarbons (PAHs) and selected metals, as methods and site conditions allow; and
2. Provide preliminary information through remedial alternatives scoping, which the NYSDEC could later use in the development of a feasibility study.

1.2 PROJECT BACKGROUND

In accordance with New York State Department of Environmental Conservation (NYSDEC) Order-on-Consent for the Cherry Farm Site (Index No. B9-0046-84-10, NYSDEC Site No. 9-15-063), and the River Road Site (Index No. 89-0047-91-02, Site NO. 9-15-031), the Potentially Responsible Parties (PRP) Group was required to sample river sediments and prepare a technical memorandum or report to the NYSDEC presenting the results. In April 1995, the Phase I Report was submitted to the NYSDEC and the PRP Group. Based on comments by the NYSDEC (Desmond, 1995), a second phase of sediment sampling was completed in July 1996. This report summarizes the results of the Phase II Study.

1.2.1 Site Description

The River Road Site and Cherry Farm Site adjoin each other and are located in the Town of Tonawanda, Erie County, New York (Figure 1.1). The River Road Site is approximately 23 acres in size and is located along the Niagara River , south of the Grand Island Bridge. The northern half of the Site is owned by Mr. Matthew Duggan of Amherst, New York; and the southern portion of the Site is owned by Niagara River World, Inc., and Clarence Materials Corporation (Pineledge Holding Corporation). The Tonawanda Coke Corporation operates two retention ponds near the southwestern boundary of the River Road Site. The Cherry Farm Site is 55 acres in size, and is located immediately north of the River Road Site. The Cherry Farm Site is owned by Niagara Mohawk Power Corporation.

These two sites were at one time part of a larger piece of property owned by the Wickwire-Spencer Steel Company. The Cherry Farm and River Road Sites were used for the disposal of waste from the steel manufacturing process from approximately 1908 to 1963, and were operated as a landfill for the disposal of industrial wastes from facilities in the area from 1963 until about 1970. Flyash, bottom ash, foundry sand, slag, sludge, liquid boiler cleaning waste, concrete rubble, and miscellaneous fill were disposed of on the two sites. Slag covers a significant portion of the River Road Site and parts of the Cherry Farm Site. Due to the common history, former common ownership, and similar remedial programs, it was considered appropriate to combine the remedial program at the two sites (henceforth referred to as the "Site").

1.2.2 Previous Investigations

In November 1993, the NYSDEC collected a total of 12 sediment samples from the river bottom in the vicinity of the Site. Sediment samples were analyzed for the presence of base neutral acid compounds, metals, and PCBs. Results indicated the presence of elevated levels of PAHs and metals.

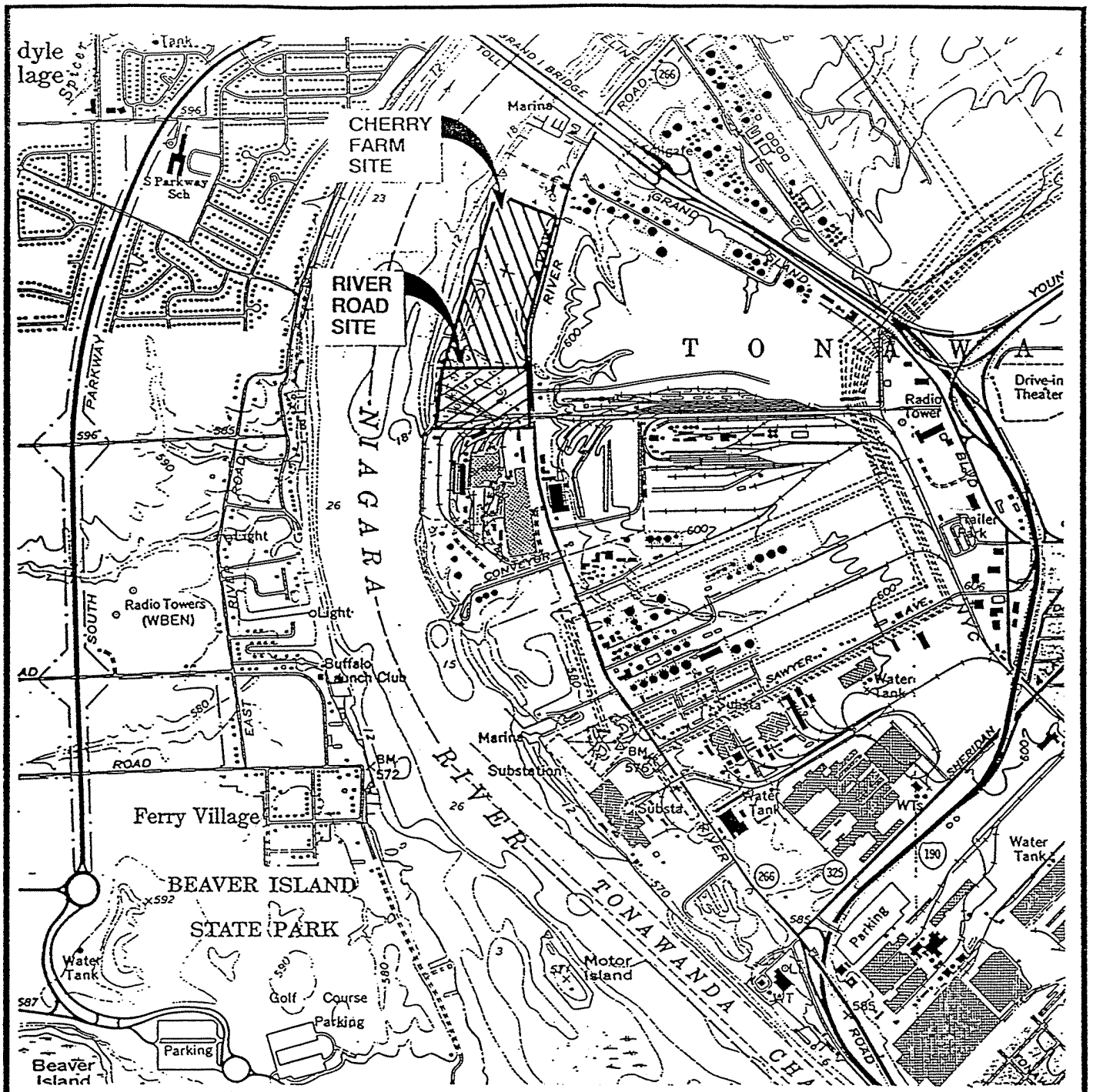
Phase I sediment sampling was conducted in the Niagara River, adjacent to the Site, in October 1994 (Parsons ES, 1995) to determine if there were any impacts to the area. Elevated concentrations of PAHs and metals were observed in sediment adjacent to the two sites at concentrations above background levels. An area of elevated PAHs was also encountered upstream of the Site.

1.3 REPORT ORGANIZATION

This document presents the combined results of the Phase I and II Sediment Assessments, and also identifies and screens several preliminary remedial alternatives. The report is organized into the following sections:

- Executive Summary;
- Section 1 - Introduction - states objectives and presents background information;
- Section 2 - Program Methodology - summarizes the investigative scope of work and field activities;
- Section 3 - Investigation Results - presents results of the Phase I and II Sediment Assessments, and an interpretation of those results;
- Section 4 - Remedial Alternatives Scoping - identifies and screens potential remedial technologies;
- Section 5 -Identification and Screening of Remedial Alternatives - combines technologies into potential remedial alternatives and presents a selected remedy;
- Section 6 - References;
- Appendix A - ENSYS^{tm} Standard Operating Procedures;

- Appendix B - Data Validation Report;
- Appendix C - NYTEST Laboratory Analytical Data;
- Appendix D - UCL_{95} Calculation Tables;
- Appendix E - Velocity Measurements; and
- Appendix F - RECRA Environmental, Inc. Laboratory Analytical Data.



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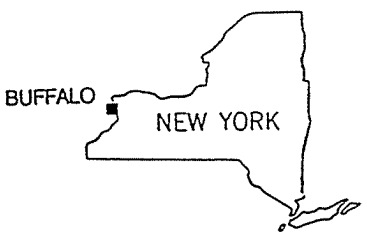

QUADRANGLE LOCATION

N

SCALE

0 2000 4000 FT.

PARSONS ENGINEERING SCIENCE

SITE LOCATION MAP CHERRY FARM / RIVER ROAD SITES

REFERENCE:

U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE,
BUFFALO NW, NEW YORK- ONTARIO, CANADA (1965)
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SECTION 2
PROGRAM METHODOLOGY

2.1 SCOPE OF WORK

The Phase II Sediment Assessment field sampling was undertaken in June and July, 1996. The primary focus of the field effort was to delineate the horizontal and vertical extent of PAHs and selected metals in Niagara River sediments, adjacent to the Site. The scope of work for the field work and subsequent data evaluation included the following primary elements:

- Shoreline survey;
- Sediment sampling;
- Field screening and sample analysis;
- River velocity measurements;
- Database management;
- Data validation; and
- Data evaluation and interpretation.

2.1.1 Shoreline Survey

As part of the Phase I investigation, sampling stations were established along the Site shoreline. In order to provide comparable results, the location of the original sampling transects and the new sampling transect locations were re-established. The transect locations were re-established from existing grid stakes being used for the onsite remedial construction activities.

2.1.2 Sediment Sampling

In accordance with the NYSDEC-approved Work Plan, a total of 50 samples were collected during the Phase II sampling event. Based on PAH field screening results and visual observations, a total of 44 analytical samples were sent to the laboratory for chemical analysis. Those sent for analysis included 38 samples adjacent to the Site, and six upstream of the Site. Field screening methodology is described in more detail in Section 2.1.3. Locations and depths of both the Phase I and II samples are depicted on Figures 2.1A and 2.2B. A listing of the samples collected containing sample identification numbers, depths, Station number, distance from shore, and PAH screening results (Phase II only) is provided in Tables 2.1 and 2.2.

Because the depth of water and the nature of the substrate varies greatly across the investigation area, a number of different techniques were used to collect sediment samples. Originally, samples were to be collected with either a Petite Ponar[tm] dredge or a Wildco[tm] core sampler (Parsons ES, 1996). The river substrate included areas of soft sand and silt, areas covered by a layer of zebra mussels, and scoured areas with only coarse sand and gravel present at the surface. Due to the presence of the coarse materials, and the depth and flow velocity of the water, the Wildco[tm] sampler was only effective for the collection of samples at the stations near shore and in the shallow areas. The Petite Ponar[tm] sampler was found to be more effective in the deeper water areas, but was only useful in sampling the upper portion of sediment (0 to 0.75 feet in depth). Neither of these sampling techniques were very effective for penetrating the thick accumulations of zebra mussels identified at some sampling locations.

In order to extend the sampling area and provide deeper sediment samples at discrete depths, a pontoon barge with a tripod/cathead assembly was used. When using the barge, samples were collected using a three-inch inside diameter split-spoon sampler flushed into the sediment to the intended sampling interval, and driven to depth with a 140-pound drop hammer. River water was used to flush the sampling apparatus into the sediments.

Sediment samples were collected in accordance with the previously approved Field Sampling Plan, Quality Assurance Project Plan, and Health and Safety Plan. Samples were stored on ice after collection, and sent to the laboratory in coolers with ice, within 48 hours of collection. Sediment samples were visually inspected and a description of the material was logged in the field book. Specific characteristics such as grain size; color; presence of organic material; and presence of fill, stains, and odors were recorded. Sediment samples were collected for PAH field screening and subsequent laboratory chemical analysis, as described in the following section.

2.1.3 Field Screening and Sample Analysis

Phase II sediment samples were tested for the presence of chemical compounds using a combination of field screening methods and laboratory analysis. A total of 29 samples were tested using Ensys[tm] PAH test kits. The Ensys[tm] kit uses an immunoassay method in conjunction with a photospectrometer to indicate the range of total PAHs present in the sample. The test kits for the Phase II Sediment Assessment were calibrated for comparison to 10 ppm and 100 ppm standards. The standard operating procedure for the field screening methods is included as Appendix A.

Based on the field screening results and visual observations, a total of 44 analytical samples were sent to the laboratory for chemical analysis. Samples were analyzed for the presence of Target Compound List (TCL) SVOCs, using NYSDEC Analytical Services Protocol (ASP) Method 91-2, and Target Analyte List (TAL) metals using CLP-M methods. In addition to the analytical samples, Quality Assurance/Quality Control (QA/QC) sample sets (MS/MSD/field duplicate) were submitted for analysis at a rate of one set per 20 field samples.

2.1.4 River Velocity Measurements

A series of river velocity and river bottom depth measurements were taken along three transects perpendicular to the shoreline (Station 3200, Station 4000, and Station 4600). The purpose of these readings was to quantify river velocity under what were assumed to be typical flow conditions. Velocities were measured at 25-foot spacing from shore and extended to a distance of 150 feet from shore. Velocity readings were taken at five-foot depth intervals using a Teledyne Gurly-AA meter.

2.1.5 Database Management

All analytical data developed during both the Phase I and Phase II investigation were entered into the Parsons ES *Paradox*™ database. The use of the database allows accurate production of summary tables, completion of statistical operations on subsets of the data, and automated comparison of results to background concentrations or other appropriate standards.

2.1.6 Data Validation

All analytical samples have undergone full data validation using United States Environmental Protection Agency (USEPA) functional guidelines (USEPA, 1988a, 1988b, 1990, and 1992); other USEPA guidance documents; and the provisions of NYSDEC ASP (1989, 1991, and 1993) for organic and inorganic data, and laboratory analytical precision, accuracy, representativeness, completeness, and comparability. All of the data developed from the Phase II investigation were considered to be within the defined quantification limits. A data validation report including a complete set of validated data tables is presented in Appendix B.

2.1.7 Data Evaluation

Phase II analytical data were compared to the background concentration calculated for each parameter detected in the sediment samples. Background values were derived during the Phase I Sediment Assessment by calculating the 95th% Upper Confidence Limit (UCL_{95}) (see Section 3.1) on the arithmetic mean of the background sample set (all stations from Station 5000 to 10000). Phase I and Phase II data were integrated and used to develop tables and maps depicting the horizontal and vertical distribution of total PAHs and metals. Comparisons were made to analytical data from soil samples collected on the Cherry Farm and River Sites during their respective remedial investigations (Dvirka and Bartilucci, 1993; and O'Brien & Gere, 1989). Results of the data evaluation are provided in Section 3.

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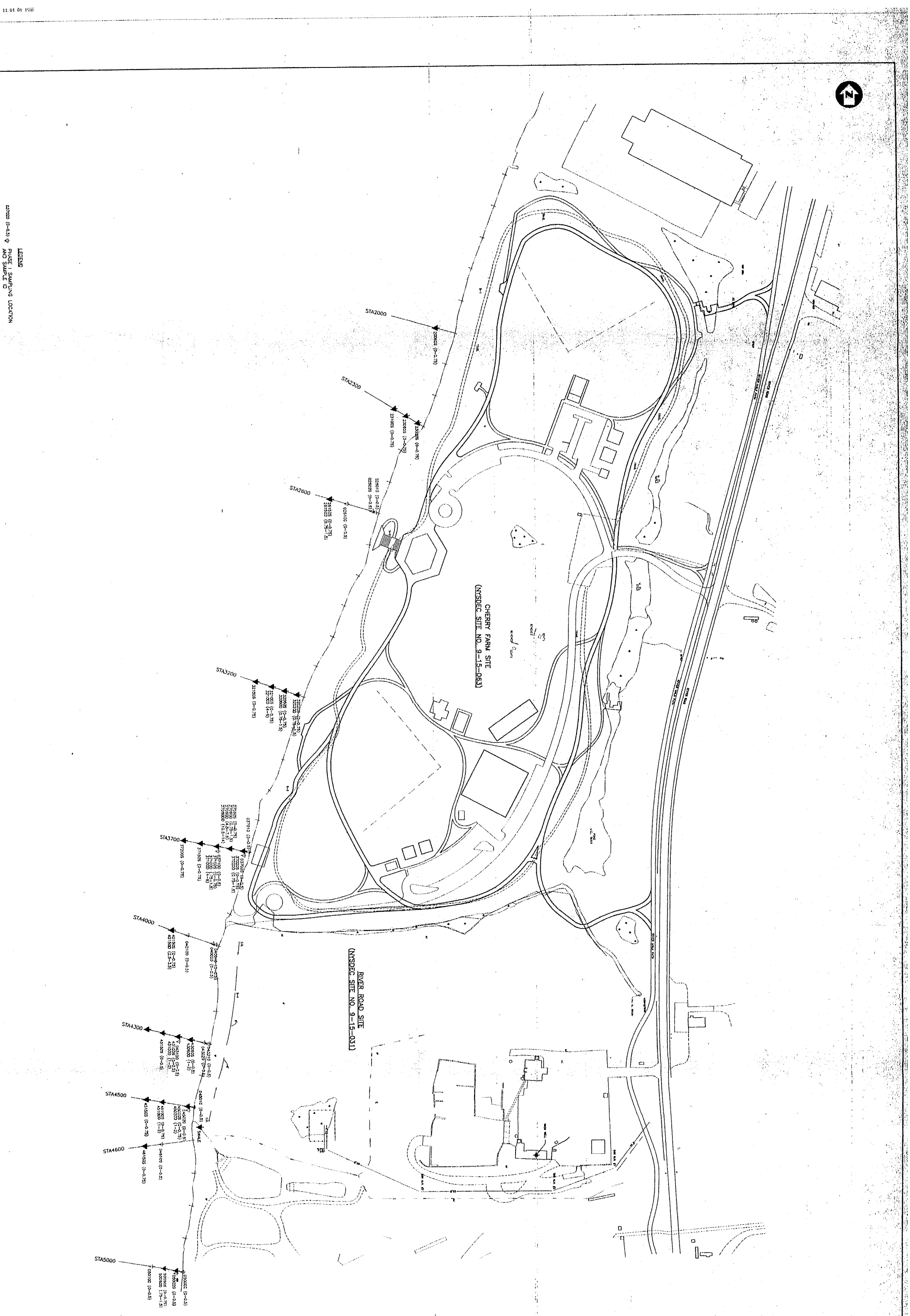
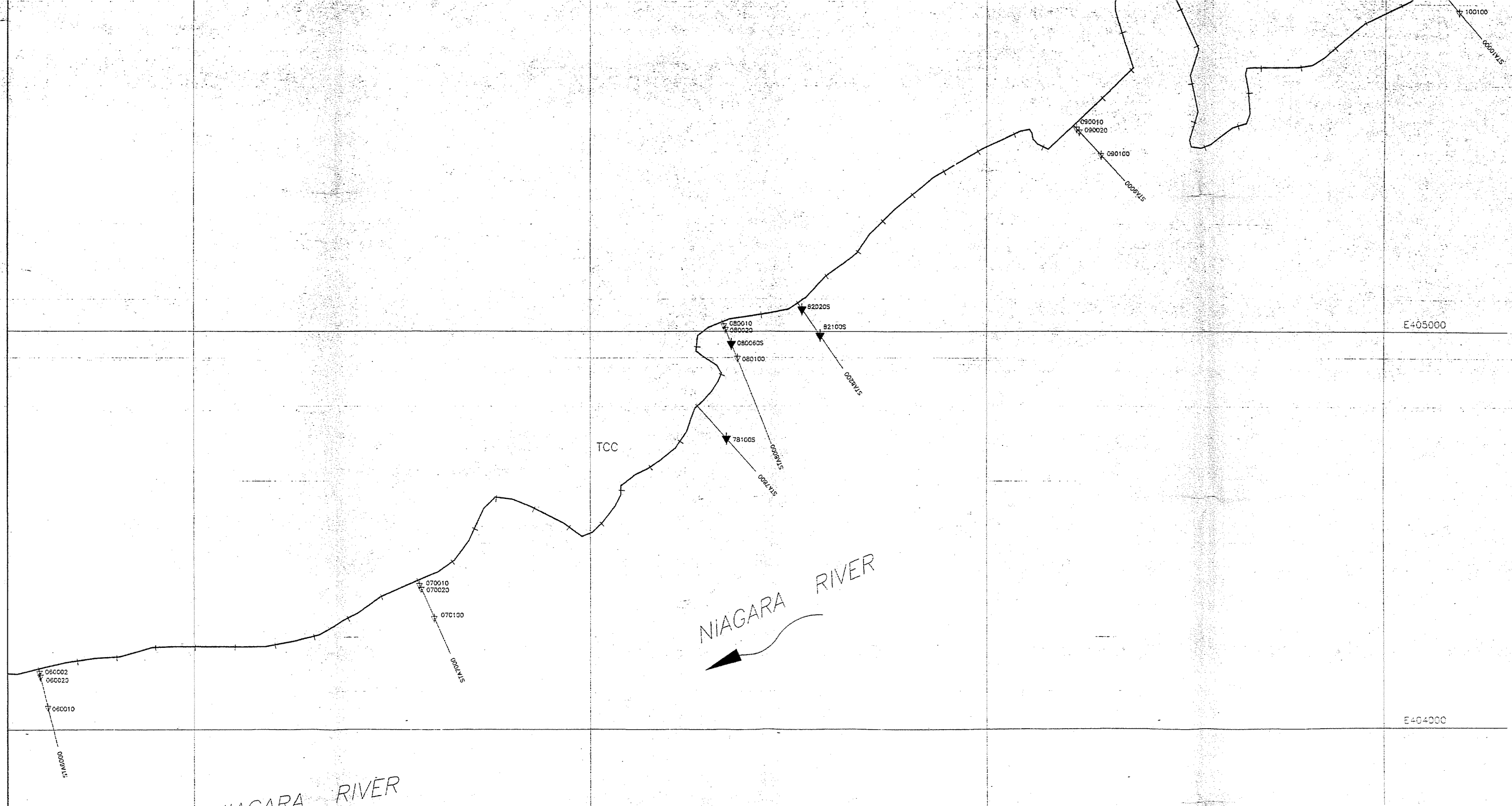


PHASE II SEDIMENT INVESTIGATION CHERRY FARM/RIVER ROAD SITE	CHERRY FARM/RIVER ROAD PRP GROUP	PARSONS ENGINEERING SCIENCE, INC. BUFFALO, NEW YORK (716) 633-7074	Issue Certification	Job No. 726673 Designed JSP Drawn JR Checked Reviewed Approved Reg. No. Date				EWM By	IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
NEARSITE SEDIMENT SAMPLING LOCATIONS									



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Datum Certification

PARSONS ENGINEERING SCIENCE, INC.
BUFFALO, NEW YORK
(716) 633-7074

CHERRY FARM/RIVER ROAD SITE
PRP GROUP

PHASE II SEDIMENT INVESTIGATION
CHERRY FARM/RIVER ROAD SITE

BACKGROUND SEDIMENT SAMPLING LOCATIONS

FIGURE 2.1b

REV 1

TABLE 2.1
CHERRY FARM/RIVER ROAD
SEDIMENT SAMPLING SUMMARY
PHASE I

Sample ID	Station #	Distance from shore (feet)	Date Sampled	Sample Depth (feet)
026010	2600	10	12/14/94	0-0.5
026020	2600	20	12/14/94	0-0.5
026100	2600	100	12/14/94	0-0.5
037010	3700	10	12/14/94	0-0.5
037020	3700	20	12/14/94	0-0.5
037100	3700	100	12/14/94	0-0.5
040010	4000	10	12/14/94	0-0.5
040020	4000	20	12/14/94	0-0.5
040100	4000	100	12/14/94	0-0.5
043010	4300	10	12/14/94	0-0.5
043020	4300	20	12/14/94	0-0.5
043100	4300	100	12/13/94	0-0.5
045010	4500	10	12/13/94	0-0.5
045020	4500	20	12/13/94	0-0.5
046100	4600	100	12/13/94	0-0.5
050002	5000	2	12/13/94	0-0.5
050020	5000	20	12/13/94	0-0.5
050100	5000	100	12/13/94	0-0.5
055002	5500	2	12/13/94	0-0.5
055020	5500	20	12/13/94	0-0.5
055100	5500	100	12/13/94	0-0.5
060002	6000	10	12/13/94	0-0.5
060020	6000	20	12/13/94	0-0.5
060100	6000	100	12/13/94	0-0.5
070010	7000	10	12/13/94	0-0.5
070020	7000	20	12/13/94	0-0.5
070100	7000	100	12/13/94	0-0.5
080010	8000	10	12/13/94	0-0.5
080020	8000	20	12/13/94	0-0.5
080100	8000	100	12/13/94	0-0.5
090010	9000	10	12/13/94	0-0.5
090020	9000	20	12/13/94	0-0.5
090100	9000	100	12/13/94	0-0.5
100010	10000	10	12/13/94	0-0.5
100020	10000	20	12/13/94	0-0.5
100100	10000	100	12/13/94	0-0.5

Table 2.2
CHERRY FARM / RIVER ROAD
SEDIMENT SAMPLING SUMMARY
PHASE II

Sample ID	Station #	Distance from shore (feet)	Date Sampled	Sample Depth (feet)	ENSYS Test Results 10 ppm	ENSYS Test Results 100 ppm	Sent to Lab
SWALE	SWALE	0	6/25/96	0-0.75	Y	N	Y
20060S	2000	60	6/28/96	0-0.75	N	N	Y
23020S	2300	20	6/25/96	0-0.75			Y
23060S	2300	60	6/25/96	0-0.75	Y	N	Y
23100S	2300	100	6/25/96	0-0.75			Y
26150S	2600	150	6/25/96	0-0.75	N	N	Y
26150D	2600	150	6/25/96	0.75-1.5			Y
32020S	3200	20	6/25/96	0-0.75	Y	N	Y
32020D	3200	20	6/25/96	0.75-1.5			Y
32060S	3200	60	6/25/96	0-0.75	Y	N	Y
32060D	3200	60	6/25/96	0.75-1.5			Y
32100S	3200	100	6/25/96	0-0.75			Y
32100D	3200	100	7/02/96	4-6	N	N	Y
32150S	3200	150	6/28/96	0-0.75	N	N	Y
37020S	3700	20	6/26/96	0-0.75			Y
37020D	3700	20	6/26/96	0.75-1.5	Y	Y	Y
37060S	3700	60	6/26/96	0-0.75			Y
37060D	3700	60	6/26/96	0.75-1.5	Y	Y	Y
37060D	3700	60	7/02/96	4.5-7.5	Y	Y	Y
37060DD	3700	60	7/02/96	10.5-14	N	Y	Y
37100S	3700	100	6/26/96	0-0.75			Y
37100D	3700	100	6/26/96	0.75-1.5	Y	Y	Y
37100D	3700	100	7/02/96	4-6			Y
37150S	3700	150	6/26/96	0-0.75	Y	N	Y
37200S	3700	200	7/02/96	0-0.75			Y
40150S	4000	150	6/25/96	0-0.75	N	N	Y
40150D	4000	150	7/02/96	2.5-3.5	Y	Y	Y
43060S	4300	60	6/25/96	0-0.5			Y
43060D	4300	60	7/02/96	1-2			Y
43100S	4300	100	6/25/96	0-0.5			Y
43100D	4300	100	7/02/96	1-2			Y
43150S	4300	150	6/25/96	0-0.5	Y	N	Y
45020S	4500	20	6/25/96	0-0.75	Y	Y	Y
45020D	4500	20	7/01/96	1-2			Y
45100S	4500	100	6/25/96	0-0.75			Y
45100D	4500	100	7/01/96	1-2	Y	Y	Y
45150S	4500	150	6/24/96	0-0.75			Y
46150S	4600	150	6/24/96	0-0.75			Y
50060S	5000	60	6/26/96	0-0.75	N	N	Y
50060D	5000	60	7/02/96	0.75-1.5			Y
78100S	7800	100	7/02/96	0-2			Y
80060S	8000	60	6/26/96	0-0.75	Y	Y	Y
82020S	8200	20	6/26/96	0-0.75	N	N	Y
82100S	8200	100	6/26/96	0-0.75	Y	N	Y
37200	37200	200	6/28/96	0-0.75	N	N	N
43200	43200	200	6/28/96	0-0.75	N	N	N
32100	32100	100	7/1/96	2-4	Y	N	N
37060	37060	60	7/2/96	7.5-10.5	Y	Y	N
37060	37060	60	7/2/96	14-16	N	N	N
43060	43060	60	7/2/96	1.5-3	N	N	N

SECTION 3
INVESTIGATION RESULTS

3.1 INTRODUCTION

Prior to the Phase II Investigation, the chemicals of concern in the river adjacent to the Cherry Farm/River Road Site had been identified as chromium, lead, iron, manganese, zinc, and PAHs (Desmond, 1995). PCBs were not included as a contaminant of concern because PCB concentrations detected above background UCL_{95} were not detected in the vicinity of the Site. The list of specific organic and inorganic compounds of concern was developed from the Phase I data and direction from the NYSDEC. This section focuses on the horizontal and vertical distribution of contaminants of concern in the sediments. For purposes of discussion, Phase I and Phase II results have been combined to present the most complete picture of the distribution of these chemicals in the nearshore river sediment. All analytical results for both Phase I and Phase II are summarized in data tables and presented in full in Appendix C.

The UCL_{95} values are presented in Tables 3.1 and 3.2. Those parameters exceeding the UCL_{95} are flagged on the table by shading. None of the background samples collected during the Phase II investigation were used to re-evaluate the background UCLs. Upstream samples collected during Phase II were used only to further define areas of elevated PAH concentrations, identified during the Phase I investigation. Background values were calculated as UCLs on the mean by the following method:

$$UCL_{95} = X + (t_{95} \times S/n^{1/2})$$

Where:

UCL_{95} = 95th percentile upper confidence limit;

X = sample Mean;

S = standard deviation of the samples;

t_{95} = student t value at selected confidence of 95% (1.725); and

n = number of samples (21).

During the Phase II Sediment Assessment, the background UCL_{95} values calculated from the Phase I data were re-evaluated. As a result, a number of revisions and refinements were made to the calculated values:

- The student t value of 2.08 previously used was based on a 2-tailed t-test which is applicable to establishing the 95 percent confidence interval. In order to estimate the 95 percent upper confidence limit (UCL), the use of a 1-tailed test is more appropriate. As a result, it has been determined that a student t value of 1.725 should be used.

- The analytical results from 22 sediment samples were used to calculate the UCL_{95} values following the Phase I investigation. This data set included the results of one field duplicate sample. UCL_{95} values have been recalculated using a total of 21 samples. The chemical concentrations of the duplicate and the corresponding sample have been combined (averaged). Averaging of the sample and its duplicate is appropriate so that the data will not be skewed.

- In addition, certain background samples required dilutions to bring some of the PAHs into the calibration range of the instruments. During the Phase I calculation of UCL_{95} values, the undiluted concentrations were used. For the UCL_{95} recalculation, the diluted samples were used for those parameters that had exceeded the calibration range of the instruments.

The recalculated UCL_{95} values are slightly lower than those originally calculated. The sum of the PAH background UCL_{95} for the 21 background samples is 43.9 mg/kg. The parameters used for the recalculation of UCL_{95} values are included as Appendix D.

3.2 PHYSICAL CHARACTERISTICS

3.2.1 Physical Description of Sediment

The river substrate material varied in size and composition throughout the investigation area. The nearshore river area by the Cherry Farm/River Road Site is in a generally low-energy depositional environment characterized by finer sediments. Immediately upstream and downstream of the Site, the river has been deepened by dredging to maintain an adequate depth for the mooring of commercial boat traffic. These areas are higher energy environments characterized by coarser substrates. The investigation area can be divided into two zones based on the bed material. Between Stations 3200 and 4600, the riverbed is primarily coarse-grained sand, cinders, and slag material. It appears that any fine-grained sediments have either been washed from this area or have never been deposited. Farther downstream between Stations 2000 and 3200, the bed material is primarily fine to medium grained sand and silt deposits. Farther from shore, the fine-grained material grades to a coarse washed gravel.

In the nearshore area between Stations 2000 and 3200, the finer-grained deposits provide a substrate capable of supporting a community of aquatic grasses. The extent of the vegetated area and the bathymetry of the investigation area have been plotted on a base map and included as Figure 3.1. Most of the sample of the aquatic vegetation recovered consisted of *Vallisneria americana* (wild celery; tapegrass). In addition, samples of *Myriophyllum spicata* (Eurasian watermilfoil) were also recovered.

3.2.2 River Velocity Measurements

River velocity data was collected along three transects perpendicular to the shoreline (Stations 3200, 4000, and 4600). River velocities in the study area, near the Site, ranged from 0.3 to 2.57 feet/second (ft/sec), and increased with distance from shore. Typical river velocities in the portion of the Niagara River near the Site have been reported to be in the range of 5 to 7 ft/sec (USACE, 1995). Traditionally, water levels in the Niagara River are not prone to large fluctuations. Monthly mean water levels recorded at the Huntley Station (upstream of the Site) range from 564 to 566 feet, International Great Lakes Datum (USACE, 1994). The velocity data will be used during the design phase to determine the viability of various containment technologies, such as silt curtains. Velocity data are presented in tabular form in Appendix E.

3.3 ANALYTICAL RESULTS

During the Phase I Investigation, a total of 15 discrete sediment samples (in addition to the 21 background samples) were collected and analyzed for SVOCs, PCBs, inorganic compounds, and total organic carbon (TOC).

During the Phase II Investigation, a total of 43 sediment samples from the Site area and six upstream samples were collected and sent for laboratory chemical analysis. A total of 29 sediment samples were screened for the presence of PAHs using ENSYS™ PAH immunoassay test kits. The ENSYS™ screening was calibrated to a range of 10 ppm and 100 ppm.

Analytical sample collection intervals have been divided into the "shallow zone" (0 - 0.75 feet), and the "deep zone" (greater than 0.75 feet). This division was selected because human health and ecological risk concerns generally focus on the top several inches of sediment. Laboratory analytical results are discussed below, with reference to the shallow and deep zones and the chemicals of concern.

3.3.1 Total PAHs

Shallow Zone

Total PAH concentrations detected in the shallow sediment in the vicinity of the site (Stations 2000 to 4600) ranged in concentration from non-detect to 1,427 mg/kg. In this area, a total of 15 samples were found to contain total PAH concentrations greater than 50 mg/kg. All of the sampling locations with PAH concentrations greater than 50 mg/kg are located between Stations 3200 and 4500, and extend to a distance of up to 150 feet from shore (Figure 3.2).

Deep Zone

In general, total PAH concentrations decrease both with depth into the sediment and with distance from shore (Figure 3.3). Total PAH concentrations in the deep zone ranged from 1.7 mg/kg to 441 mg/kg. PAH concentrations exceeding 50 mg/kg in this zone extend from Stations 3200 to 4500 and out to 150 feet from shore. Concentrations

exceeded 50 mg/kg to a maximum depth of approximately eight feet at Station 3200, 60 feet from shore.

During sampling, slight sheens and strong oil odors were observed at several locations, particularly at Stations 3200 and 3700. Much of the material in this area can be characterized as a dark grey sandy silt having a fairly uniform grain size distribution.

3.3.2 Metals

The NYSDEC, prior to the Phase II Work Plan submittal, identified several metals as being of concern: chromium, iron, lead, manganese, and zinc. These metals were detected in all of the sediment samples collected both from the investigation area and in background locations. The areas of highest metals concentrations (both shallow and deep) correspond fairly well to areas of elevated PAHs. Figure 3.4 and 3.5 depict areas in which the metals of concern exceed the background UCL_{95}. The areas in which chromium and manganese exceeded their respective background levels were smaller than for the other metals.

Metals concentrations were also compared to the Severe Effect Level (SEL), as presented in the NYSDEC Technical Guidance Document for Contaminated Sediments (1993). The results of this analysis are presented in Tables 3.1 and 3.2. The majority of the area, in which metals exceed the SEL, is within the area where PAHs exceed 50 mg/kg. Thus, in general, the areal extent of the five metals of concern, in excess of the SEL, is much more limited than the areas in which these metals exceed the UCL_{95}. As previously mentioned, an area between Stations 2000 and 3200 contains aquatic vegetation. Of the five metals of concern (chromium, iron, lead, manganese, and zinc), only iron, manganese, and zinc exceeded the SEL in the vicinity of the vegetated area. These three metals exceeded the SEL in only three sample locations along Station 2600, and only iron exceeded the SEL further than 20 feet from the shoreline.

3.3.3 Cyanide

Laboratory analysis for cyanide was completed during both the Phase I and Phase II investigations. During data validation however, the majority of the Phase I cyanide data was found to be inaccurate and unusable. Because of this, the background levels established for cyanide are likely to be exceedingly low. Cyanide was detected in the majority of the sediment samples collected during the Phase II investigation. Cyanide concentrations ranged from non-detect to a high of 88.5 mg/kg from sample 32020S (0-0.75 feet). The distribution of cyanide is similar to that of the other metals sampled (Figure 3.5).

3.3.4 Tonawanda Coke Outfall Sample

The NYSDEC collected a time-composite sample of sediment from the swale below the Tonawanda Coke outfall near Station 4600. A sampling "sock" measuring approximately 15 inches in diameter by 12 feet in length was constructed of the synthetic separation fabric being used at the site during construction. The mouth of the sampler

was submerged below the water surface in the swale, and the sampler was weighted in place with rocks. The fabric mesh was an appropriate size to trap fine suspended solids, while allowing water to pass through it. The sampling sock was placed in the swale on September 4, 1996 and removed on September 20, 1996. Solids were collected from the inside of the fabric, placed in two 4-ounce sampling jars, and submitted to the laboratory for chemical analysis. Analytical parameters included SVOCs, pesticides/PCBs, and metals using methods specified in the NYSDEC Analytical Services Protocols (ASP), 1991.

The total PAH concentration in the sample was approximately 234 mg/kg. Certain metals, including chromium, iron, lead, and zinc, had concentrations comparable to Phase I and II sediment sample results. Laboratory analytical results for this sample are presented in Appendix F.

3.4 SUMMARY AND INTERPRETATIONS

Based on the results of the sampling completed to date, it can be concluded that the sediments adjacent to the Site contain certain PAHs and metals in excess of the UCL_{95}. The highest concentrations of PAHs (above the UCL_{95}) and metals (above the SEL) are located between Stations 3000 and 4600 at distances from the shoreline to 150 feet out from shore.

The following significant observations were made based on data collected during the Phase I and II Assessments, and a review of the Remedial Investigation Reports for Cherry Farm and River Road.

- Onsite metals concentrations in soils were found to be, in some cases, less than, and in other cases greater than, those found in the river sediments.

- PAH concentrations in onsite soils were generally more than one order of magnitude less than those in the sediments. However, light non-aqueous phase liquid (LNAPL) found floating on the water table within the Site contained concentrations of total PAHs greater than 1,000 mg/kg (Dvirka & Bartilucci, 1993). This value exceeds the total PAH concentration found in most of the river sediment samples.

- In the vicinity of Stations 3200 and 3700, oily sheens, odors, and stains were observed in the sediments.

- Until recent construction, an east-west trending drainage swale formed the boundary line between the Cherry Farm and River Road Sites.

- Active sedimentation ponds and a discharge point releasing approximately 200 gpm exist just upstream of Station 4500. NYSDEC recently collected a solids sample over a period of 16 days from this discharge point. Results indicated

PAHs in excess of 200 mg/kg and metals concentrations, including chromium, iron, lead, and zinc at levels comparable to Phase I and II sediment sample results.

- Former sedimentation ponds existed near the shoreline in the vicinity of Stations 2800 to 3700 (O'Brien & Gere, 1989). In July 1996, during the remedial construction of the landfill cap, an oily sludge layer was encountered in this area, suggesting the presence of at least one of the former ponds.

- The Site lies on the inside of a meander bend of the Niagara River, where the relatively low current velocities result in a depositional area. Current velocities measured during the Phase II Assessment in the river, adjacent to the Site, ranged from 0.5 to 2.5 ft/sec. Velocities increase with distance from shore.

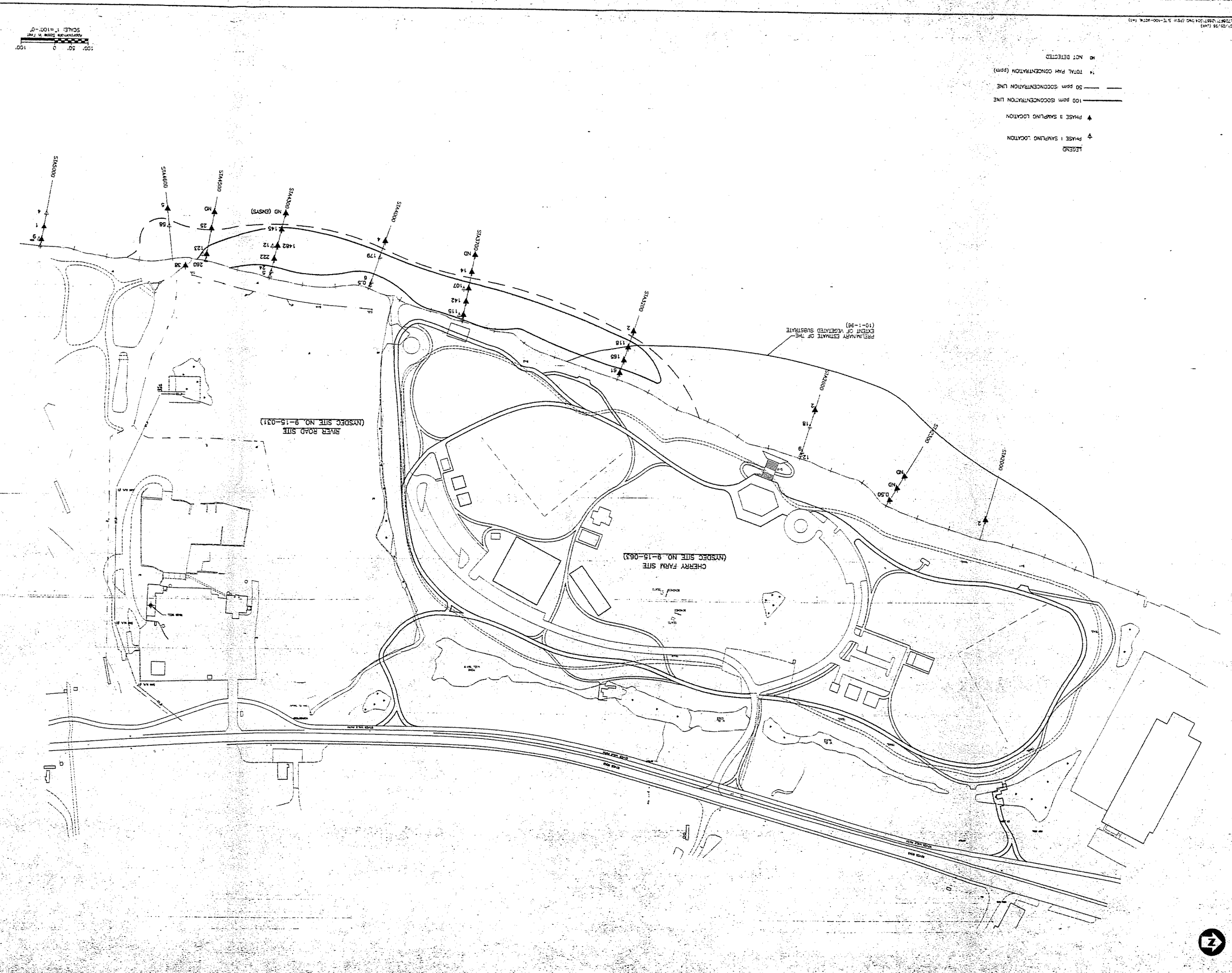
- A large bed of wild celery extending, approximately, from Station 2000 to 3200 and up to 300 feet from shore provides, a viable aquatic habitat and also may promote deposition by reducing current velocities and preventing erosion at the sediment/water interface.

Based on these observations, an elongated source parallel to the shoreline is plausible, as are potential point sources. The length of the most affected sediment zone roughly corresponds to a segment of the Cherry Farm/River Road shoreline extending from Stations 3000 to 4600, suggesting the Site itself as a source. Areas of the River Road Site lacking cover material prior to the current construction, former sedimentation ponds, drainage swales, and areas of LNAPL occurrence, as well as the active outfall near Station 4600, may all be contributors.

The mechanism of initial entry of fill or waste material into the river is unknown. However, several sediment transport mechanisms within the river are possible:

- Gravity sliding perpendicular to the shoreline;
- Suspension and subsequent downstream movement parallel to shore;
- Traction (or bed load) - movement of grains along the bottom;
- Saltation (movement of particles in short, abrupt leaps); and
- Scouring by ice blocks.

Current shoreline improvements associated with the Cherry Farm/River Road remedial design are expected to minimize or eliminate the potential for onsite soils to be eroded and deposited in the river. Also, the recent construction of a shallow groundwater recovery trench, parallel to the shoreline, is intended to prevent the movement of LNAPL to the river. This combination of remedial measures provides effective containment of sources located within the Cherry Farm/River Road property. Potential remedial technologies and alternatives to address the affected sediments are presented in Sections 4 and 5.



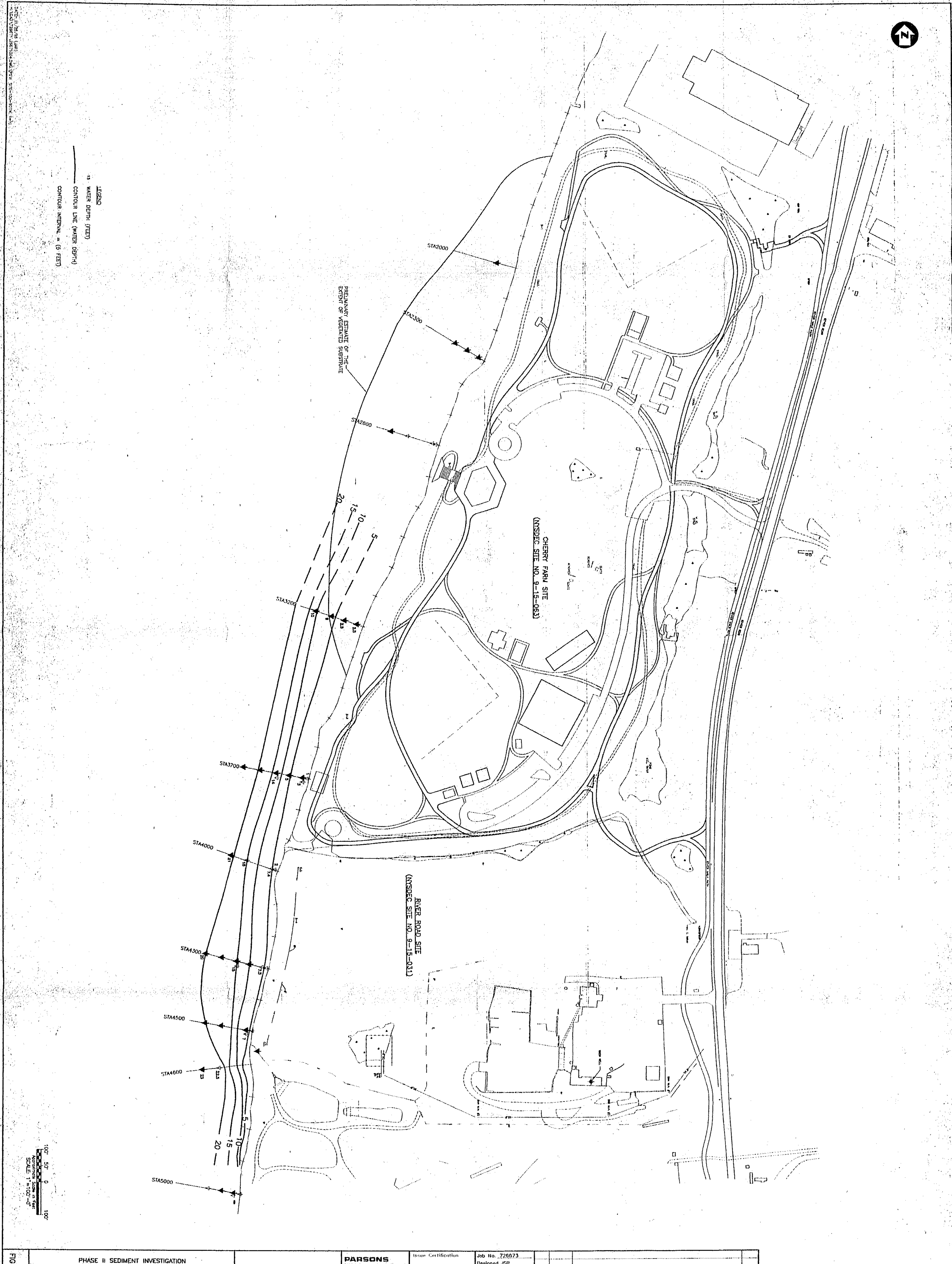


FIGURE 3.1	PHASE II SEDIMENT INVESTIGATION CHERRY FARM/RIVER ROAD SITE	CHERRY FARM/RIVER ROAD PRP GROUP	**PARSONS ENGINEERING SCIENCE, INC.**	Issue Certification	Job No. 726073 Designed JSP Drawn JR Checked Reviewed Approved Reg. No. Date
REV. —	PRELIMINARY BATHYMETRIC DATA MAP (JULY 1, 1996)		BUFFALO, NEW YORK (716) 633-7074		

Rev	Date	Description	By
			EWM

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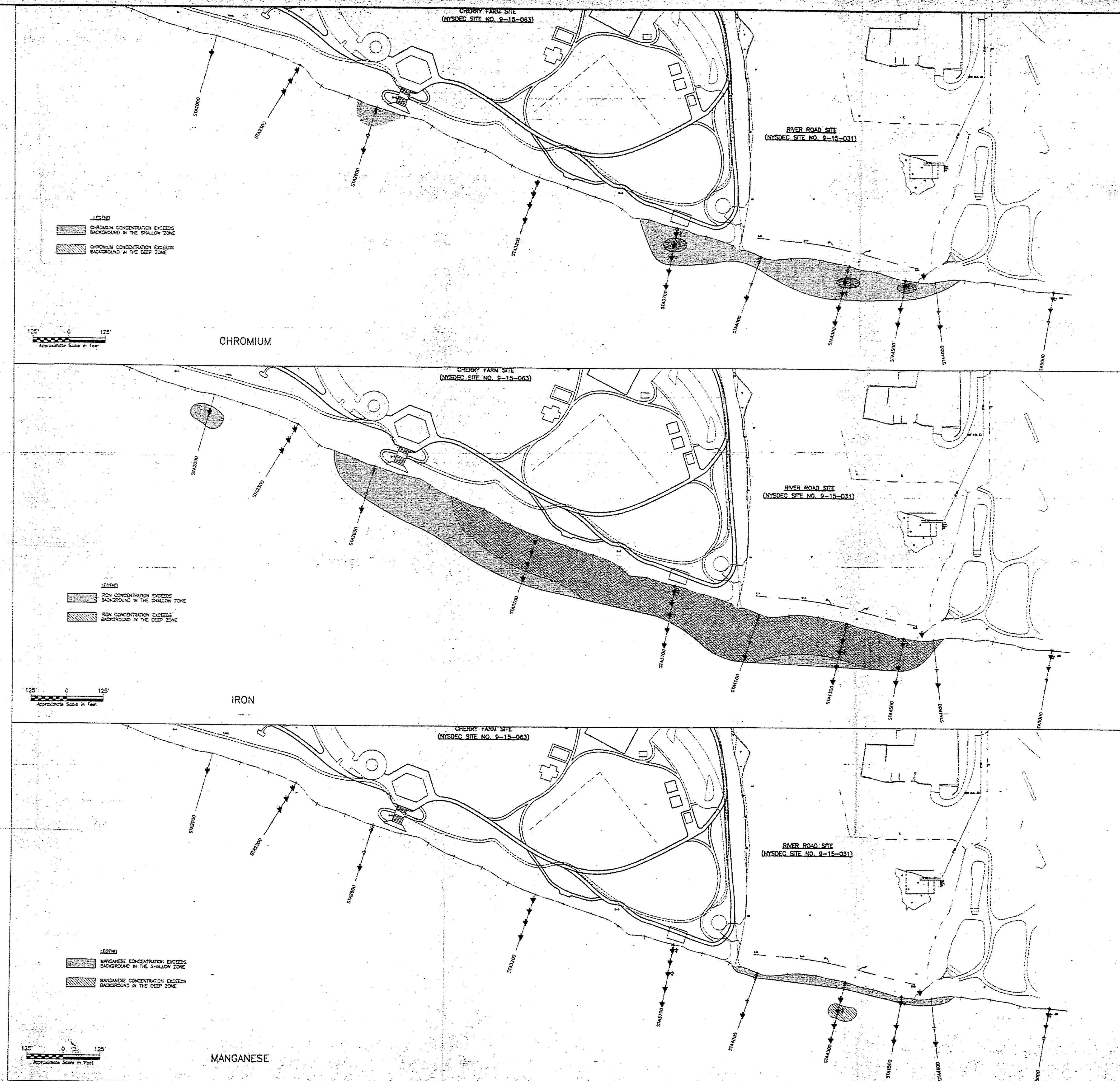

PHASE II SEDIMENT INVESTIGATION
CHERRY FARM/RIVER ROAD SITE

METALS EXCEEDANCES IN SEDIMENT
CHROMIUM, IRON, MANGANESE

FIGURE 3.4 | REV. 1

CHERRY FARM/RIVER ROAD
PRP GROUP

PARSONS ENGINEERING SCIENCE, INC.
BUFFALO, NEW YORK
(718) 633-7074

Issue Certification

Job No. 726623
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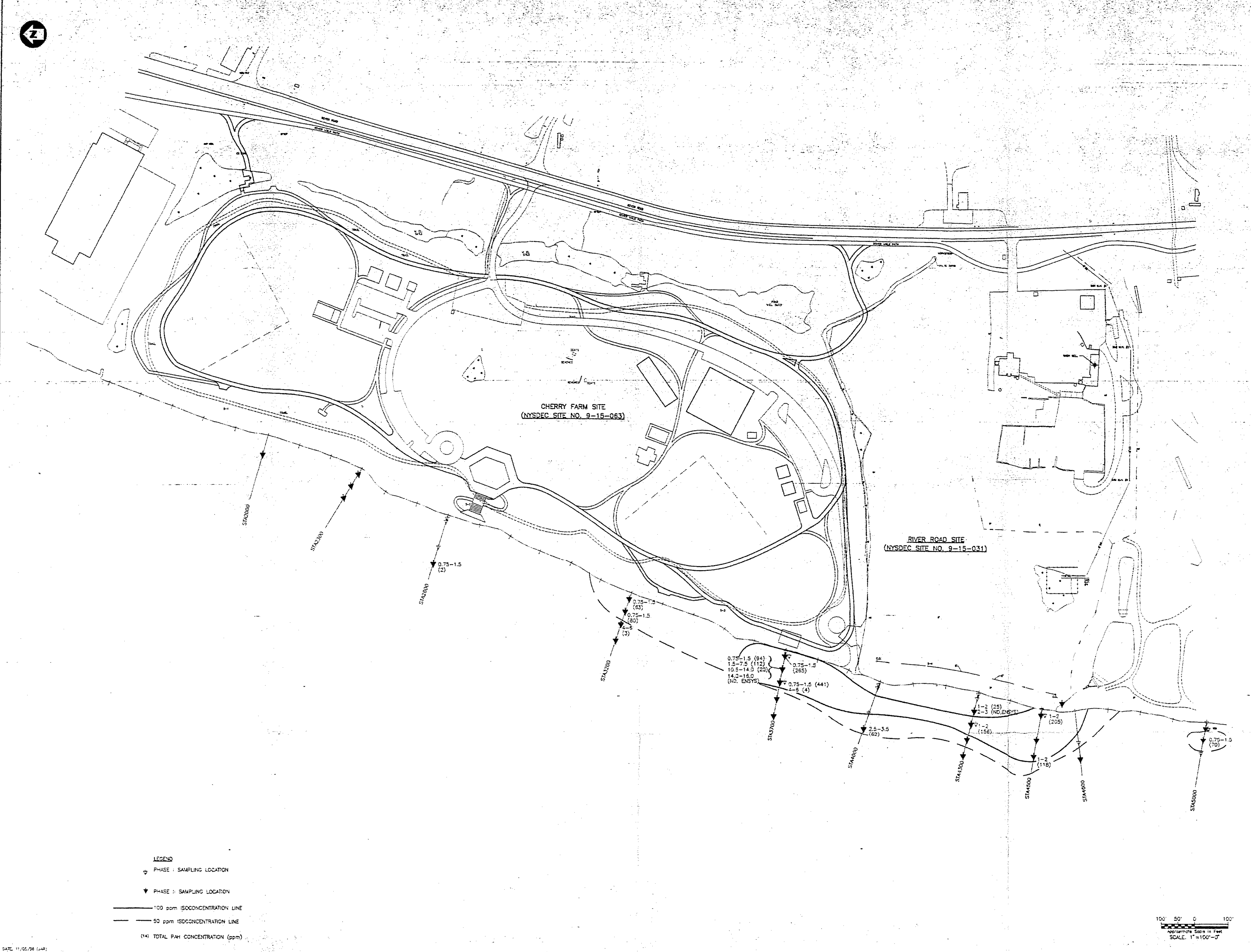

PHASE II SEDIMENT INVESTIGATION
CHERRY FARM/RIVER ROAD SITE

PAH CONCENTRATIONS
IN THE DEEP ZONE (>0.75 FEET)

FIGURE 3.3 | REV. –

CHERRY FARM/RIVER ROAD
PRP GROUP

PARSONS ENGINEERING SCIENCE, INC.
BUFFALO, NEW YORK
(716) 633-7074

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FIGURE 3.5

PHASE II SEDIMENT INVESTIGATION
CHERRY FARM/RIVER ROAD SITE

METALS EXCEEDANCES IN SEDIMENT
CYANIDE, LEAD, ZINC

CHERRY FARM/RIVER ROAD
PRP GROUP

PARSONS ENGINEERING SCIENCE, INC.
BUFFALO, NEW YORK
(716) 633-7024

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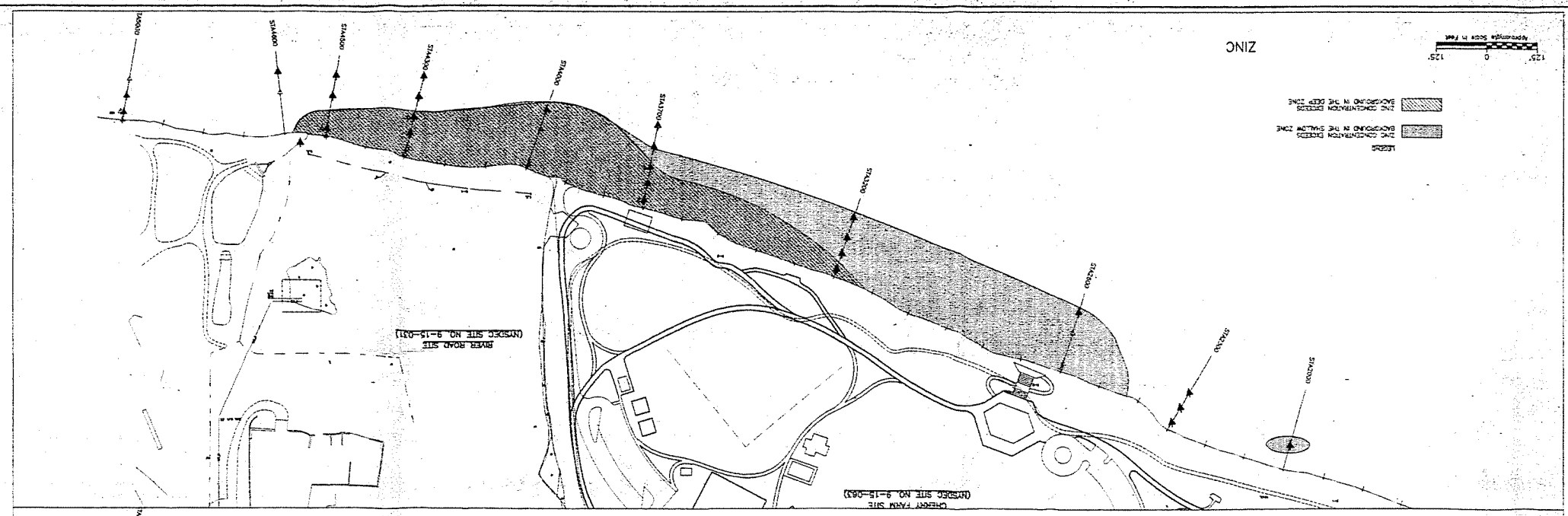


"I, A MEMBER OF THE NEW YORK STATE BAR, HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED BY A LICENSED PROFESSIONAL ENGINEER ACTING WITHIN THE SCOPE OF HIS LICENSE AND THAT I HAVE REVIEWED THIS DRAWING AND FIND IT TO BE ACCEPTABLE TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND IN CONFORMANCE WITH THE SCOPE OF THE AUTHORIZATION."

Table 3.1
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Standard Exceedancy Summary - Phase I						
CAS NO.	COMPOUND	95 % UCL-S	UNITS	Maximum Concentration	No. of Exceedancies / No. of Samples	Locations of Concentrations above the 95 % UCL-S
	SEMIVOLATILES					
85-68-7	Butylbenzylphthalate	170	UG/KG	170 J	0/36	NONE
86-74-8	Carbazole	1485	UG/KG	1485 J	0/36	NONE
84-74-2	Di-n-butylphthalate	140	UG/KG	140 J	0/36	NONE
132-64-9	Dibenzofuran	1300	UG/KG	19000 J	3/36	040100, 043100, 045020
91-57-6	2-Methylnaphthalene	230	UG/KG	55000 J	5/36	037020(AVG); 040100, 043100, 045020, 046100
106-44-5	4-Methylphenol	560	UG/KG	560 J	0/36	NONE
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	6000	4/36	040100, 050020, 080100, 090020
	PAHs					
83-32-9	Acenaphthene	900	UG/KG	14000 J	4/36	040100, 043100, 045020, 046100
208-96-8	Acenaphthylene	1051	UG/KG	52000 J	9/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100
120-12-7	Anthracene	1594	UG/KG	74000 J	9/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100
56-55-3	Benzo(a)anthracene	2949	UG/KG	82000 J	10/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100, 090010 (AVG)
50-32-8	Benzo(a)pyrene	2394	UG/KG	71000 J	9/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	34000 J	8/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080100
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	29000 J	9/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	40000 J	8/36	037100, 040100, 043100, 045010, 045020, 046100, 080100, 090010 (AVG)
219-01-9	Chrysene	3157	UG/KG	94000 J	10/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100, 090010(AVG)
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	800 J	5/36	037100, 040100, 045010, 045020, 046100
206-44-0	Fluoranthene	9002	UG/KG	150000 J	10/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100, 090010 (AVG)
86-73-7	Fluorene	1267	UG/KG	100000 J	9/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	23000 J	9/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100
91-20-3	Naphthalene	770	UG/KG	54000 J	9/36	026010, 037010, 037020(AVG), 040100, 043020, 043100, 045010, 045020, 046100
85-01-8	Phenanthrene	7336	UG/KG	390000 J	8/36	037100, 040100, 043100, 045010, 045020, 080010, 080100, 090010 (AVG)
129-00-0	Pyrene	6170	UG/KG	220000 J	10/36	037100, 040100, 043100, 045010, 045020, 046100, 080010, 080020, 080100, 090010 (AVG)
	Total PAHs					
	PCBs					
12672-29-6	Aroclor-1248	808	UG/KG	2000 J	8/36	055002, 055020, 060002 (AVG), 060020, 070020, 080100, 090100, 100100
11096-82-5	Aroclor-1260	386	UG/KG	2300 J	1/36	50020
	INORGANICS					
7429-90-5	Aluminum	7534	MG/KG	18400	4/36	040010, 090020, 090100, 100010
7440-36-0	Antimony	7.11	MG/KG	27.4 J	11/36	026020, 026100, 037010, 037020 (AVG), 037100, 040010, 040020, 043100, 045010, 045020, 100100
7440-38-2	Arsenic	7.8	MG/KG	21.2	15/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040020, 040100, 043100, 045010, 045020, 050002, 090020, 090100, 100010
7440-39-3	Barium	70.8	MG/KG	167	13/36	026020, 037010, 037020(AVG), 040010, 043010, 045010, 045020, 050002, 070010, 090100, 100010, 100020, 100100
7440-41-7	Beryllium	0.517	MG/KG	1.8 J	14/36	026020, 037010, 037020 (AVG), 037100, 040010, 040020, 043010, 043020, 043100, 045010, 045020, 050002, 070010, 100010
7440-43-9	Cadmium	1.287	MG/KG	5.3	19/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040010, 040020, 040100, 043020, 043100, 045010, 045020, 050002, 070010, 090010(AVG), 090020, 090100, 100020
7440-70-2	Calcium	28651	MG/KG	174000 J	15/36	037010, 037020(AVG), 040010, 040020, 040100, 043010, 045010, 045020, 046100, 050002, 050100, 070010, 070100, 100010, 100100
7440-47-3	Chromium	50.9	MG/KG	717	13/36	026010, 026020, 037010, 037100, 040010, 040020, 043010, 043100, 045010, 045020, 050002, 070010, 100010
7440-48-4	Cobalt	9	MG/KG	30.2	15/36	026010, 026020, 026100, 037010, 037020 (AVG), 037100, 040010, 040020, 040100, 043020, 043100, 045020, 050002, 090100, 100010
7440-50-8	Copper	57.2	MG/KG	257	7/36	037100, 040100, 043010, 043020, 050002, 090100, 100010
7439-89-6	Iron	26702	MG/KG	187000	17/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040010, 040020, 040100, 043010, 043020, 043100, 045010, 045020, 050002, 070010, 100010
7439-92-1	Lead	49.8	MG/KG	249 J	19/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040010, 040020, 040100, 043010, 043020, 043100, 045010, 045020, 050002, 070010, 070020, 090100, 100010
7439-95-4	Magnesium	6431	MG/KG	27100	8/36	040010, 043010, 043100, 045010, 070010, 070100, 090100, 100010
7439-96-5	Manganese	6574	MG/KG	46300	4/36	040010, 043010, 045010, 050002
7439-97-6	Mercury	0.202	MG/KG	0.48	11/36	037020(AVG), 037100, 040100, 045010, 070010, 070020, 090010 (AVG), 090020, 090100, 100010, 100020
7440-02-0	Nickel	23	MG/KG	57.7	14/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040100, 043020, 043100, 050002, 055002, 070010, 090100, 100010
7440-09-7	Potassium	839	MG/KG	1840 J	6/36	037010, 070020, 090020, 090100, 100010, 100020
7440-22-4	Silver	1.5	MG/KG	4.2 J	3/36	046100, 080020, 090100
7440-62-2	Vanadium	23.3	MG/KG	190	18/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040010, 040020, 040100, 043010, 043020, 043100, 045010, 045020, 050002, 070010, 090100, 100010
7440-66-6	Zinc	129.3	MG/KG	470 J	19/36	026010, 026020, 026100, 037010, 037020(AVG), 037100, 040010, 040020, 040100, 043010, 043020, 043100, 045020, 070010, 070020, 080100, 090100, 100010, 100020
57-12-5	Cyanide	-	MG/KG	0	0/36	NONE
	OTHER					
7440-44-0	Total Organic Carbon	55311	MG/KG	123933	6/30	040100, 043020, 090020, 090100, 100010, 100020

Bold Face - Indicates the maximum concentration detected for the sampling round.

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY SEDIMENT EXCEEDANCY SUMMARY PHASE I		NYSDEC Severe Effect Level	UNITS:	Maximum Concentration	No. of Exceedancies / No. of Location	Location of Concentrations
CAS NO.	COMPOUND					
	TOTAL METALS					
7429-90-5	Aluminum	NS	MG/KG	18400	0/36	NONE
7440-36-0	Antimony	25 L	MG/KG	27.4 J	1/36	037100
7440-38-2	Arsenic	33 P	MG/KG	21.2	0/36	NONE
7440-39-3	Barium	NS	MG/KG	167	0/36	NONE
7440-41-7	Beryllium	NS	MG/KG	1.8 J	0/36	NONE
7440-43-9	Cadmium	9 L	MG/KG	5.3	0/36	NONE
7440-70-2	Calcium	NS	MG/KG	174000 J	0/36	NONE
7440-47-3	Chromium	110 P	MG/KG	717	5/36	037100, 040010, 043010, 045010, 070010
7440-48-4	Cobalt	NS	MG/KG	30.2	0/36	NONE
7440-50-8	Copper	110 P	MG/KG	257	1/36	050002
7439-89-6	Iron	40000 P	MG/KG	187000	16/36	026010, 026020, 026100, 037010, 037020[AVG], 037100, 040010, 040020, 040100 043010, 043020, 043100, 045010, 045020, 050002, 070010
7439-92-1	Lead	110 L	MG/KG	249 J	5/36	037020[AVG], 037100, 043010, 043020, 070010
7439-95-4	Magnesium	NS	MG/KG	27100	0/36	NONE
7439-96-5	Manganese	1100 L	MG/KG	46300	15/36	026010, 026020, 037010, 037020[AVG], 037100, 040010, 040020, 040100, 043010, 043020, 043100, 045010, 045020, 050002, 070010
7439-97-6	Mercury	1.3 L	MG/KG	0.55	0/36	NONE
7440-02-0	Nickel	50 L	MG/KG	57.7	1/36	050002
7440-09-7	Potassium	NS	MG/KG	1840 J	0/36	NONE
7440-22-4	Silver	2.2 L	MG/KG	4.2 J	3/36	046100, 080020, 090100
7440-62-2	Vanadium	NS	MG/KG	190	0/36	NONE
7440-66-6	Zinc	270 L	MG/KG	470 J	9/36	026010, 026020, 037020[AVG], 037100, 040020, 040100, 043020, 043100, 045020

Source: Technical Guidance for Screening Contaminated Sediments.
NYSDEC Division of Fish and Wildlife and Division of Marine Resources,
Nov. 1993.

L - Long and Morgan, 1990.
P - Persaud et. al., 1992.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I		95 %	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	026010 0-0.5' 2276022 NYTEST CF2 SOIL 12/14/94 3/08/95	026020 0-0.5' 2276021 NYTEST CF2 SOIL 12/14/94 3/08/95	026100 0-0.5' 2276020 NYTEST CF2 SOIL 12/14/94 3/08/95	037020 (AVG) 0-0.5' 2275911 NYTEST - CF1 SOIL 12/14/94 3/08/95
CAS NO.	COMPOUND	UCL-S	UNITS:				
	SEMIVOLATILES						
85-68-7	Butylbenzylphthalate	170	UG/KG	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG	ND	ND	ND	ND
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	140 J	72 J	ND	270 J
91-57-6	2-Methylnaphthalene	230	UG/KG	200 J	87 J	ND	360 J
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND
	PAHs						
83-32-9	Acenaphthene	900	UG/KG	94 J	ND	ND	ND
208-96-8	Acenaphthylene	1051	UG/KG	180 J	110 J	380 J	260 J
120-12-7	Anthracene	1594	UG/KG	300 J	420 J	630 J	580 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	1200	920	2100	1950 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	660 J	570	1300	1600 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	560 J	450 J	970	1800 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	260 J	240 J	550 J	755 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	600 J	490	1100	1220 J
219-01-9	Chrysene	3157	UG/KG	1200	1000	2300	2000 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	ND	ND
206-44-0	Fluoranthene	9002	UG/KG	2000	1600	3300	4050 J
86-73-7	Fluorene	1267	UG/KG	240 J	100 J	180 J	520 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	260 J	240 J	580 J	750 J
91-20-3	Naphthalene	770	UG/KG	1900	720	650 J	9400 J
85-01-8	Phenanthrene	7336	UG/KG	830 J	530	1200	1800 J
129-00-0	Pyrene	6170	UG/KG	1700	1400	2600	3000 J
	Total PAHs	43730		11984	8790	17840	29685
	PCBs						
12672-29-6	Aroclor-1248	808	UG/KG	340 J	260 J	150 J	110 J
11096-82-5	Aroclor-1260	386	UG/KG	ND	ND	ND	62 J
	INORGANICS						
7429-90-5	Aluminum	7534	MG/KG	4120	4780	4320	5760
7440-36-0	Antimony	7.11	MG/KG	ND	12 J	12.3 J	15.5 J
7440-38-2	Arsenic	7.6	MG/KG	10.9	14	9.4	17.3
7440-39-3	Barium	70.8	MG/KG	58.6	73.6	42.3 J	99.9
7440-41-7	Beryllium	0.517	MG/KG	ND	0.85 J	ND	0.65 J
7440-43-9	Cadmium	1.287	MG/KG	2.4 J	3.8 J	3.4 J	2.5
7440-70-2	Calcium	28651	MG/KG	19900 J	17100 J	14600 J	31400
7440-47-3	Chromium	50.9	MG/KG	55.4 J	51.3 J	28.4 J	39.4
7440-48-4	Cobalt	9	MG/KG	11.5 J	15.3	10.2 J	14.9
7440-50-8	Copper	57.2	MG/KG	39.4 J	44.7 J	29.3 J	41.3
7439-89-6	Iron	26702	MG/KG	62400 J	126000 J	65400 J	111500
7439-92-1	Lead	49.8	MG/KG	73.1	103	60.7	111 J
7439-95-4	Magnesium	6431	MG/KG	3780	3610	4900	4740
7439-96-5	Manganese	6574	MG/KG	1430	1640	889	2500
7439-97-6	Mercury	0.202	MG/KG	0.2 J	0.15 J	0.19 J	0.48
7440-02-0	Nickel	23	MG/KG	23.6	32.8	25.6	26.4
7440-09-7	Potassium	839	MG/KG	600 J	475 J	583 J	509 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	37.5	52.3	31	47.1
7440-66-6	Zinc	129.3	MG/KG	279 J	470 J	246 J	314 J
57-12-5	Cyanide	-	MG/KG	R	R	R	ND
	OTHER						
7440-44-0	Total Organic Carbon	55311	MG/KG	41786 J	31580 J	35862 J	54541

Bold Face - Indicates the maximum concentration detected for the sampling round.

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I		95 %	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	037100 0-0.5' 2275910 NYTEST CF1 SOIL 12/14/94 3/08/95	040010 0-0.5' 2275909 NYTEST CF1 SOIL 12/14/94 3/08/95	040020 0-0.5' 2275908 NYTEST CF1 SOIL 12/14/94 3/08/95	040100 0-0.5' 2275907 NYTEST CF1 SOIL 12/14/94 3/08/95	043010 0-0.5' 2275903 NYTEST CF1 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UCL-S	UNITS:					
	SEMIVOLATILES							
85-68-7	Butylbenzylphthalate	170	UG/KG	ND	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG	780 J	ND	86 J	570 J	49 J
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	870 J	ND	ND	1600 J	ND
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	ND	ND	1400 J	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	2400 J	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	540 J	ND	ND	1400 J	ND
208-96-8	Acenaphthylene	1051	UG/KG	1500 J	ND	ND	3100 J	58 J
120-12-7	Anthracene	1594	UG/KG	14000 J	ND	170 J	10000	110 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	14000 J	48 J	580 J	14000	450 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	14000 J	46 J	460 J	12000	460 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	11000 J	46 J	360 J	11000	370 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	7900 J	42 J	220 J	5200	290 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	9300 J	48 J	480 J	6800	430 J
219-01-9	Chrysene	3157	UG/KG	14000 J	68 J	670 J	15000	500 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	540 J	ND	ND	520 J	ND
206-44-0	Fluoranthene	9002	UG/KG	56000 J	130 J	1100 J	29000	950 J
86-73-7	Fluorene	1267	UG/KG	2900 J	ND	130 J	5200	43 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	7000 J	ND	200 J	5000 J	260 J
91-20-3	Naphthalene	770	UG/KG	650 J	ND	310 J	3600 J	180 J
85-01-8	Phenanthrene	7336	UG/KG	35000 J	82 J	560 J	28000	340 J
129-00-0	Pyrene	6170	UG/KG	32000 J	100 J	890 J	28000	780 J
	Total PAHs	43730		220330	610	6130	177820	5221
	PCBs							
12672-29-6	Aroclor-1248	808	UG/KG	200 J	ND	120 J	320 J	ND
11096-82-5	Aroclor-1260	386	UG/KG	ND	ND	340 J	ND	ND
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	5980	8980	4850	5090	7150
7440-36-0	Antimony	7.11	MG/KG	27.4 J	11.9 J	11.3 J	ND	ND
7440-38-2	Arsenic	7.6	MG/KG	13.4	6 J	11.6	21.2	7.2
7440-39-3	Barium	70.8	MG/KG	68.6	163	54.3	64.4	141
7440-41-7	Beryllium	0.517	MG/KG	1.1 J	1.4	0.78 J	ND	1.1 J
7440-43-9	Cadmium	1.287	MG/KG	3.7	2.6	2.4	2.7	0.52 J
7440-70-2	Calcium	28651	MG/KG	24500	130000	30700	45400	122000
7440-47-3	Chromium	50.9	MG/KG	134	717	85.3	43.8	593
7440-48-4	Cobalt	9	MG/KG	19.2	12.1	9.5 J	12.2 J	7.8 J
7440-50-8	Copper	57.2	MG/KG	88.7	45.6	54.3	57.5	63
7439-89-6	Iron	26702	MG/KG	152000	117000	76300	90900	67500
7439-92-1	Lead	49.8	MG/KG	249 J	86.7 J	102 J	109 J	131 J
7439-95-4	Magnesium	6431	MG/KG	5680	23500	5040	4300	27100
7439-96-5	Manganese	6574	MG/KG	4810	25200	2670	1550	18100
7439-97-6	Mercury	0.202	MG/KG	0.3	ND	ND	0.38	ND
7440-02-0	Nickel	23	MG/KG	37.2	13.7	19.3	23.3	19.1
7440-09-7	Potassium	839	MG/KG	444 J	644 J	345 J	618 J	550 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	74.2	190	49.1	39.6	158
7440-66-6	Zinc	129.3	MG/KG	999 J	164 J	291 J	334 J	136 J
57-12-5	Cyanide	-	MG/KG	ND	ND	ND	ND	ND
	OTHER							
7440-44-0	Total Organic Carbon	55311	MG/KG	38127	45177	46883	76222	40210

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I		95 %	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	043020 0-0.5' 2275902 NYTEST CF1 SOIL 12/13/94 3/08/95	043100 0-0.5' 2275901 NYTEST CF1 SOIL 12/13/94 3/08/95	045010 0-0.5' 2276018 NYTEST CF2 SOIL 12/13/94 3/08/95	045020 0-0.5' 2276016 NYTEST CF2 SOIL 12/13/94 3/08/95	046100 0-0.5' 2276015 NYTEST CF2 SOIL 12/14/94 3/08/95
CAS NO.	COMPOUND	UCL-S	UNITS:					
	SEMIVOLATILES							
85-68-7	Butylbenzylphthalate	170	UG/KG	ND	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG	250 J	ND	240 J	950 J	620 J
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND	19000 J	1200 J	6400	1200
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	55000 J	ND	750 J	560 J
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND	140 J
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	ND	14000 J	230 J	1400 J	1500
208-96-8	Acenaphthylene	1051	UG/KG	300 J	52000 J	3500 J	9900	1100
120-12-7	Anthracene	1594	UG/KG	730 J	74000 J	15000 J	37000	2200
56-55-3	Benzo(a)anthracene	2949	UG/KG	2000 J	82000 J	26000 J	36000	6300
50-32-8	Benzo(a)pyrene	2394	UG/KG	1900 J	71000 J	14000 J	21000	3400
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	1600 J	34000 J	13000 J	18000	3400
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	1200 J	29000 J	7900 J	13000	1800
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	1600 J	40000 J	5100 J	8000	2300
219-01-9	Chrysene	3157	UG/KG	1900 J	94000 J	26000 J	37000	6100
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	640 J	800 J	220 J
206-44-0	Fluoranthene	9002	UG/KG	4400 J	150000 J	63000 J	110000	10000
86-73-7	Fluorene	1267	UG/KG	350 J	100000 J	4000 J	15000	2000
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	1000 J	23000 J	7400 J	11000	1700
91-20-3	Naphthalene	770	UG/KG	910 J	54000 J	840 J	2600 J	1300
85-01-8	Phenanthrene	7336	UG/KG	2500 J	390000 J	29000 J	83000	5800
129-00-0	Pyrene	6170	UG/KG	3400 J	220000 J	49000 J	87000	8400
	Total PAHs	43730		23790	1427000	262610	491700	57520
	PCBs							
12672-29-6	Aroclor-1248	808	UG/KG	240 J	90 J	50 J	210 J	710 J
11096-82-5	Aroclor-1260	386	UG/KG	140	ND	ND	ND	ND
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	4410	3800	5430	3960	3160
7440-36-0	Antimony	7.11	MG/KG	ND	10.6 J	11.8 J	15 J	ND
7440-38-2	Arsenic	7.6	MG/KG	7.2	20.7 J	9.2	13	3.6
7440-39-3	Barium	70.8	MG/KG	42.3 J	65.6	167	72.3	24.1 J
7440-41-7	Beryllium	0.517	MG/KG	0.7 J	0.8 J	0.8 J	0.63 J	0.25 J
7440-43-9	Cadmium	1.287	MG/KG	3.1	5.3	3.1 J	4.4 J	0.81 J
7440-70-2	Calcium	28651	MG/KG	26600	19700	174000 J	35500 J	29100 J
7440-47-3	Chromium	50.9	MG/KG	48.7	61.1	535 J	73.6 J	8 J
7440-48-4	Cobalt	9	MG/KG	12.8	20.2	6.5 J	13.4	2.6 J
7440-50-8	Copper	57.2	MG/KG	60.1	47	20.9 J	43.8 J	5 J
7439-89-6	Iron	26702	MG/KG	86700	187000	52800 J	119000 J	9000 J
7439-92-1	Lead	49.8	MG/KG	114 J	94.7 J	73.3	81	10.4
7439-95-4	Magnesium	6431	MG/KG	5030	5980	15900	3500	4530
7439-96-5	Manganese	6574	MG/KG	1480	2890	17400	2990	260
7439-97-6	Mercury	0.202	MG/KG	ND	0.18	0.44 J	0.12 J	ND
7440-02-0	Nickel	23	MG/KG	24.9	36.8	14.8	21.1	11.6
7440-09-7	Potassium	839	MG/KG	530 J	416 J	758 J	264 J	554 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	2.8 J
7440-62-2	Vanadium	23.3	MG/KG	44.4	57.8	167	51.5	10.3 J
7440-66-6	Zinc	129.3	MG/KG	333 J	312 J	118 J	366 J	52.8 J
57-12-5	Cyanide	-	MG/KG	ND	ND	R	R	R
	OTHER							
7440-44-0	Total Organic Carbon	55311	MG/KG	56345	34858	20207 J	22597 J	NA

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I		95 %	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	050002 0-0.5' 2275906 NYTEST CF1 SOIL 12/13/94 3/08/95	050020 0-0.5' 2275905 NYTEST CF1 SOIL 12/13/94 3/08/95	050100 0-0.5' 2275904 NYTEST CF1 SOIL 12/13/94 3/08/95	055002 0-0.5' 2276012 NYTEST CF2 SOIL 12/13/94 3/08/95	055020 0-0.5' 2276011 NYTEST CF2 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UCL-S	UNITS:					
	SEMIVOLATILES							
85-68-7	Butylbenzylphthalate	170	UG/KG	170 J	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG	230 J	200 J	ND	ND	ND
84-74-2	Di-n-butylphthalate	140	UG/KG	140 J	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	130 J	ND	ND	190 J	150 J
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	ND	ND	97 J	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	2100 J	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	100 J	ND	ND	130 J	160 J
208-96-8	Acenaphthylene	1051	UG/KG	ND	ND	ND	200 J	160 J
120-12-7	Anthracene	1594	UG/KG	160 J	240 J	87 J	400 J	470 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	500 J	730 J	320 J	840 J	1100
50-32-8	Benzo(a)pyrene	2394	UG/KG	250 J	630 J	310 J	540 J	740 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	380 J	650 J	240 J	540 J	700 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	140 J	300 J	170 J	230 J	320 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	420 J	550 J	310 J	440 J	680 J
219-01-9	Chrysene	3157	UG/KG	970 J	850 J	350 J	910 J	1100
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	9002	UG/KG	3300 J	1900 J	810 J	2200	2800
86-73-7	Fluorene	1267	UG/KG	140 J	120 J	ND	420 J	340 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	130 J	300 J	160 J	240 J	330 J
91-20-3	Naphthalene	770	UG/KG	ND	100 J	ND	210 J	140 J
85-01-8	Phenanthrene	7336	UG/KG	2500 J	1200 J	380 J	1800	2100
129-00-0	Pyrene	6170	UG/KG	2000 J	1500 J	670 J	1700	2100
	Total PAHs	43730		10990	9070	3807	10800	13240
	PCBs							
12672-29-6	Aroclor-1248	808	UG/KG	300 J	440 J	470 J	1100 J	1100 J
11096-82-5	Aroclor-1260	386	UG/KG	ND	2300 J	ND	ND	ND
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	6600	4540	2340	4100	3650
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	ND	ND
7440-38-2	Arsenic	7.6	MG/KG	12.2	6.7	4.2	4.8	4.7
7440-39-3	Barium	70.8	MG/KG	143	43.7 J	21.3 J	30 J	32.7 J
7440-41-7	Beryllium	0.517	MG/KG	1 J	ND	ND	0.27 J	0.26 J
7440-43-9	Cadmium	1.287	MG/KG	2.3 J	0.56 J	0.51 J	ND	ND
7440-70-2	Calcium	28651	MG/KG	40500	15200	44900	16100 J	16000 J
7440-47-3	Chromium	50.9	MG/KG	64.5	16.6	6.9	42.3 J	14 J
7440-48-4	Cobalt	9	MG/KG	30.2	4.5 J	2.7 J	4.1 J	4 J
7440-50-8	Copper	57.2	MG/KG	257	34.5	7.9	21.5 J	22.6 J
7439-89-6	Iron	26702	MG/KG	86000	18600	8220	13000 J	11800 J
7439-92-1	Lead	49.8	MG/KG	70.7 J	28.4 J	8.7 J	22	21.8
7439-95-4	Magnesium	6431	MG/KG	5410	5280	5900	5390	5090
7439-96-5	Manganese	6574	MG/KG	46300	864	369	287	333
7439-97-6	Mercury	0.202	MG/KG	ND	ND	ND	ND	ND
7440-02-0	Nickel	23	MG/KG	57.7	14.5	12.9	26.9	11.5
7440-09-7	Potassium	839	MG/KG	739 J	777 J	401 J	586 J	539 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	33.7	16.3	11.6	12.2 J	11.4 J
7440-66-6	Zinc	129.3	MG/KG	84.2 J	100 J	46.5 J	97.2 J	88.8 J
57-12-5	Cyanide	-	MG/KG	ND	ND	ND	R	R
	OTHER							
7440-44-0	Total Organic Carbon	55311	MG/KG	NA	NA	NA	NA	NA

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I		95 %	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED: UNITS:	055100 0-0.5' 2276010 NYTEST CF2 SOIL 12/13/94 3/08/95	060002[AVG] 0-0.5' 2276008 NYTEST CF2 SOIL 12/13/94 3/08/95	060020 0-0.5' 2276007 NYTEST CF2 SOIL 12/13/94 3/08/95	060100 0-0.5' 2276006 NYTEST CF2 SOIL 12/13/94 3/08/95	070010 0-0.5' 2276005 NYTEST CF2 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UCL-S						
	SEMIVOLATILES							
85-68-7	Butylbenzylphthalate	170	UG/KG	ND	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG	ND	120 J	54 J	ND	ND
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND	97 J	110 J	ND	ND
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	ND	102 J	190 J	ND	ND
208-96-8	Acenaphthylene	1051	UG/KG	ND	ND	140 J	ND	ND
120-12-7	Anthracene	1594	UG/KG	ND	295 J	290 J	ND	100 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	ND	675	700	ND	310 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	ND	395 J	440	ND	200 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	ND	405 J	400 J	ND	200 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	ND	165 J	210 J	ND	130 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	ND	330 J	360 J	ND	220 J
219-01-9	Chrysene	3157	UG/KG	ND	745	700	ND	340 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	9002	UG/KG	97 J	1450 J	1600	ND	780 J
86-73-7	Fluorene	1267	UG/KG	ND	175 J	280 J	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	ND	175 J	220 J	ND	130 J
91-20-3	Naphthalene	770	UG/KG	ND	155 J	95 J	ND	100 J
85-01-8	Phenanthrene	7336	UG/KG	ND	1115	1400	ND	530 J
129-00-0	Pyrene	6170	UG/KG	ND	1150	1300	ND	580 J
	Total PAHs	43730		97	7332	8325	ND	3620
	PCBs							
12672-29-6	Aroclor-1248	808	UG/KG	400 J	925 J	840 J	620 J	120 J
11096-82-5	Aroclor-1260	386	UG/KG	ND	ND	ND	ND	ND
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	3100	2645	2580	3710	6600
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	ND	ND
7440-38-2	Arsenic	7.6	MG/KG	4.5	4.2	3	6.6	7
7440-39-3	Barium	70.8	MG/KG	24.1 J	30 J	20.1 J	25.6 J	135
7440-41-7	Beryllium	0.517	MG/KG	0.25 J	0.26 J	0.26 J	0.2 J	0.95 J
7440-43-9	Cadmium	1.287	MG/KG	ND	0.66 J	ND	ND	4.3 J
7440-70-2	Calcium	28651	MG/KG	24000 J	17200 J	16800 J	14200 J	33500 J
7440-47-3	Chromium	50.9	MG/KG	9.5 J	14 J	14.2 J	7.7 J	239 J
7440-48-4	Cobalt	9	MG/KG	4.1 J	3.3 J	3 J	3.4 J	7.3 J
7440-50-8	Copper	57.2	MG/KG	5.1 J	13.5 J	3.8 J	3.2 J	49.9 J
7439-89-6	Iron	26702	MG/KG	10300 J	17800 J	8140 J	9540 J	42400 J
7439-92-1	Lead	49.8	MG/KG	10.6	48.9	12.9	16.5	156
7439-95-4	Magnesium	6431	MG/KG	6250	3715	4220	3750	13200
7439-96-5	Manganese	6574	MG/KG	285	287	222	199	6070
7439-97-6	Mercury	0.202	MG/KG	ND	ND	ND	ND	0.23 J
7440-02-0	Nickel	23	MG/KG	9.4	10.1 J	8.1 J	8.9	23.9
7440-09-7	Potassium	839	MG/KG	458 J	304 J	403 J	436 J	654 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	10.5 J	9.9 J	8.1 J	9.6	52.9
7440-66-6	Zinc	129.3	MG/KG	50.5 J	74.7 J	52 J	47 J	213 J
57-12-5	Cyanide	-	MG/KG	R	R	R	R	R
	OTHER							
7440-44-0	Total Organic Carbon	55311	MG/KG	16349 J	18030 J	7719 J	15552 J	26517 J

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	070020 0-0.5' 2276004 NYTEST CF2 SOIL 12/13/94 3/08/95	070100 0-0.5' 2276003 NYTEST CF2 SOIL 12/13/94 3/08/95	080010 0-0.5' 2276002 NYTEST CF2 SOIL 12/13/94 3/08/95	080020 0-0.5' 2276001 NYTEST_ - CF2 SOIL 12/13/94 3/08/95	080100 0-0.5' 2275921 NYTEST CF1 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	95 % UCL-S	UNITS:					
	SEMIVOLATILES							
85-68-7	Butylbenzylphthalate	170	UG/KG	ND	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG	ND	ND	280 J	220 J	ND
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND	ND	1300	1100	ND
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	ND	230 J	180 J	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	74 J	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND	3100 J
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	ND	45 J	860 J	900 J	ND
208-96-8	Acenaphthylene	1051	UG/KG	ND	ND	1600	1200	2400 J
120-12-7	Anthracene	1594	UG/KG	400 J	90 J	2700	2100	7200 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	970 J	180 J	6000	3700	14000 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	650 J	120 J	3300	2600	12000 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	610 J	130 J	3200	2400	13000 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	380 J	72 J	1800	1400	6400 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	580 J	92 J	1800	1600	9300 J
219-01-9	Chrysene	3157	UG/KG	1000 J	180 J	5000	3600	15000 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	160 J	110 J	ND
206-44-0	Fluoranthene	9002	UG/KG	2300 J	480	17000	10000	45000 J
86-73-7	Fluorene	1267	UG/KG	360 J	74 J	2800	2300	4200 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	340 J	67 J	1700	1400	5800 J
91-20-3	Naphthalene	770	UG/KG	450 J	58 J	750 J	770 J	ND
85-01-8	Phenanthrene	7336	UG/KG	1400 J	400 J	14000	7200	39000 J
129-00-0	Pyrene	6170	UG/KG	1700 J	340 J	12000	6500	30000 J
	Total PAHs	43730		11140	2328	73670	47780	203300
	PCBs							
12672-29-6	Aroclor-1248	808	UG/KG	960 J	180 J	150 J	140 J	1200 J
11096-82-5	Aroclor-1260	386	UG/KG	ND	ND	ND	ND	ND
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	5750	3630	3140	3250	4220
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	ND	ND
7440-38-2	Arsenic	7.6	MG/KG	5.6	3.1	5.3	5	5.3 J
7440-39-3	Barium	70.8	MG/KG	44.6 J	24 J	22.4 J	21.7 J	37.6 J
7440-41-7	Beryllium	0.517	MG/KG	0.35 J	0.28 J	0.27 J	0.26 J	ND
7440-43-9	Cadmium	1.287	MG/KG	ND	0.57 J	ND	ND	ND
7440-70-2	Calcium	28651	MG/KG	15600 J	40200 J	4700 J	4270 J	8970
7440-47-3	Chromium	50.9	MG/KG	24.6 J	6.9 J	13.1 J	12.9 J	14.1
7440-48-4	Cobalt	9	MG/KG	8.8 J	4.5 J	3.9 J	5.3 J	5.3 J
7440-50-8	Copper	57.2	MG/KG	45.2 J	8.7 J	5.7 J	6.3 J	22.2
7439-89-6	Iron	26702	MG/KG	17000 J	12700 J	18700 J	15900 J	11000
7439-92-1	Lead	49.8	MG/KG	71	7.5	12.8	14.2	22.6 J
7439-95-4	Magnesium	6431	MG/KG	5270	8380	2320	2170	3610
7439-96-5	Manganese	6574	MG/KG	452	230	247	232	157
7439-97-6	Mercury	0.202	MG/KG	0.21 J	ND	ND	ND	ND
7440-02-0	Nickel	23	MG/KG	21.2	20.6	11.9	15.4	16.5
7440-09-7	Potassium	839	MG/KG	1050 J	384 J	249 J	426 J	690 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	4.2 J	ND
7440-62-2	Vanadium	23.3	MG/KG	17.8	10.1 J	18.4	16.9	14.1
7440-66-6	Zinc	129.3	MG/KG	162 J	67.3 J	111 J	99.8 J	132 J
57-12-5	Cyanide	-	MG/KG	R	R	R	R	ND
	OTHER							
7440-44-0	Total Organic Carbon	55311	MG/KG	48296 J	6838 J	7188 J	4472 J	43214

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I				SAMPLE ID:	090010[AVG]	090020	090100	100010	100020
				DEPTH:	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
				LAB ID:	2275920	2275917	2275916	2275915	2275914
				SOURCE:	NYTEST	NYTEST	NYTEST	NYTEST_ _	NYTEST
				SDG:	CF1	CF1	CF1	CF1	CF1
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	12/13/94	12/13/94	12/13/94	12/13/94	12/13/94
		95 %		VALIDATED:	3/08/95	3/08/95	3/08/95	3/08/95	3/08/95
CAS NO.	COMPOUND	UCL-S		UNITS:					
	SEMIVOLATILES								
85-68-7	Butylbenzylphthalate	170	UG/KG		ND	ND	ND	ND	ND
86-74-8	Carbazole	1485	UG/KG		1485 J	ND	400 J	ND	150 J
84-74-2	Di-n-butylphthalate	140	UG/KG		ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG		ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	230	UG/KG		ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG		ND	310 J	560 J	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG		ND	6000	ND	ND	ND
	PAHs								
83-32-9	Acenaphthene	900	UG/KG		465 J	ND	ND	ND	ND
208-96-8	Acenaphthylene	1051	UG/KG		ND	ND	ND	ND	ND
120-12-7	Anthracene	1594	UG/KG		1165 J	ND	ND	ND	170 J
56-55-3	Benzo(a)anthracene	2949	UG/KG		3450 J	ND	1200 J	ND	520 J
50-32-8	Benzo(a)pyrene	2394	UG/KG		1120 J	ND	ND	1300 J	430 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG		1125 J	ND	ND	1600 J	580 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG		1140 J	ND	720 J	ND	230 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG		2700 J	ND	ND	1300 J	400 J
219-01-9	Chrysene	3157	UG/KG		4050 J	86 J	1700 J	ND	690 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG		ND	ND	ND	ND	ND
206-44-0	Fluoranthene	9002	UG/KG		11300 J	340 J	720 J	3800 J	1500 J
86-73-7	Fluorene	1267	UG/KG		490 J	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG		1140 J	ND	640 J	ND	210 J
91-20-3	Naphthalene	770	UG/KG		ND	ND	ND	ND	ND
85-01-8	Phenanthrene	7336	UG/KG		7500 J	230 J	470 J	1600 J	850 J
129-00-0	Pyrene	6170	UG/KG		8300 J	260 J	540 J	2600 J	1100 J
	Total PAHs	43730			43945	916	5990	12200	6680
	PCBs								
12672-29-6	Aroclor-1248	808	UG/KG		220 J	260 J	850 J	360 J	600 J
11096-82-5	Aroclor-1260	386	UG/KG		ND	ND	210	260	ND
	INORGANICS								
7429-90-5	Aluminum	7534	MG/KG		5415	15700	12200	18400	7100
7440-36-0	Antimony	7.11	MG/KG		ND	ND	ND	ND	ND
7440-38-2	Arsenic	7.6	MG/KG		5	8.4	9.6	16.1	6.4
7440-39-3	Barium	70.8	MG/KG		27.7 J	46.5 J	79.5 J	166	91.5
7440-41-7	Beryllium	0.517	MG/KG		ND	ND	ND	1.8 J	ND
7440-43-9	Cadmium	1.287	MG/KG		2 J	1.4 J	3.3 J	ND	1.5 J
7440-70-2	Calcium	28651	MG/KG		13200	12700	19200	37400	26800
7440-47-3	Chromium	50.9	MG/KG		15.3	27.6	38.5	54.3	23.9
7440-48-4	Cobalt	9	MG/KG		5.1 J	4.9 J	11.8 J	11.7 J	8.2 J
7440-50-8	Copper	57.2	MG/KG		24.4	32.1	81.4	61.9	45.6
7439-89-6	Iron	26702	MG/KG		11800	15900	25400	36800	20500
7439-92-1	Lead	49.8	MG/KG		9.7 J	16.4 J	73.8 J	75 J	34.1 J
7439-95-4	Magnesium	6431	MG/KG		4855	5750	8430	6850	6410
7439-96-5	Manganese	6574	MG/KG		259	370	578	350	317
7439-97-6	Mercury	0.202	MG/KG		0.33	0.37	0.38	0.47	0.25
7440-02-0	Nickel	23	MG/KG		15.7	17.7	34.8	27.9	16.2
7440-09-7	Potassium	839	MG/KG		608 J	1060 J	1430 J	1840 J	975 J
7440-22-4	Silver	1.5	MG/KG		ND	ND	3.8 J	ND	ND
7440-62-2	Vanadium	23.3	MG/KG		14.8 J	22.8	24.7	44.5	22.4
7440-66-6	Zinc	129.3	MG/KG		102.2 J	123 J	238 J	169 J	138 J
57-12-5	Cyanide	-	MG/KG		ND	ND	ND	ND	ND
	OTHER								
7440-44-0	Total Organic Carbon	55311	MG/KG		35042	83359	123933	91433	84238

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.1 continued
Cherry Farm / River Road Site
Phase I Validated Sediment Analytical Data

Cherry Farm\River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase I			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	100100 0-0.5' 2275913 NYTEST CF1 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	95 % UCL-S	UNITS:	
	SEMIVOLATILES			
85-68-7	Butylbenzylphthalate	170	UG/KG	ND
86-74-8	Carbazole	1485	UG/KG	120 J
84-74-2	Di-n-butylphthalate	140	UG/KG	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND
91-57-6	2-Methylnaphthalene	230	UG/KG	ND
106-44-5	4-Methylphenol	560	UG/KG	500 J
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND
	PAHs			
83-32-9	Acenaphthene	900	UG/KG	ND
208-96-8	Acenaphthylene	1051	UG/KG	ND
120-12-7	Anthracene	1594	UG/KG	340 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	730 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	590 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	540 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	300 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	570 J
219-01-9	Chrysene	3157	UG/KG	840 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND
206-44-0	Fluoranthene	9002	UG/KG	1800 J
86-73-7	Fluorene	1267	UG/KG	ND
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	280 J
91-20-3	Naphthalene	770	UG/KG	ND
85-01-8	Phenanthrene	7336	UG/KG	1200 J
129-00-0	Pyrene	6170	UG/KG	1300 J
	Total PAHs	43730		8490
	PCBs			
12672-29-6	Aroclor-1248	808	UG/KG	2000 J
11096-82-5	Aroclor-1260	386	UG/KG	200
	INORGANICS			
7429-90-5	Aluminum	7534	MG/KG	5330
7440-36-0	Antimony	7.11	MG/KG	17.6 J
7440-38-2	Arsenic	7.6	MG/KG	7.5
7440-39-3	Barium	70.8	MG/KG	71.4
7440-41-7	Beryllium	0.517	MG/KG	ND
7440-43-9	Cadmium	1.287	MG/KG	ND
7440-70-2	Calcium	28651	MG/KG	62500
7440-47-3	Chromium	50.9	MG/KG	15.3
7440-48-4	Cobalt	9	MG/KG	4.6 J
7440-50-8	Copper	57.2	MG/KG	17.5
7439-89-6	Iron	26702	MG/KG	14600
7439-92-1	Lead	49.8	MG/KG	23.3 J
7439-95-4	Magnesium	6431	MG/KG	3780
7439-96-5	Manganese	6574	MG/KG	225
7439-97-6	Mercury	0.202	MG/KG	ND
7440-02-0	Nickel	23	MG/KG	12.5
7440-09-7	Potassium	839	MG/KG	496 J
7440-22-4	Silver	1.5	MG/KG	ND
7440-62-2	Vanadium	23.3	MG/KG	14.6
7440-66-6	Zinc	129.3	MG/KG	74 J
57-12-5	Cyanide	-	MG/KG	ND
	OTHER			
7440-44-0	Total Organic Carbon	55311	MG/KG	12472

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site
Tonawanda, NY
Validated Sediment Analytical Data
Standard Exceedancy Summary - Phase II

CAS NO.	COMPOUND	95 % UCL-S	UNITS	Maximum Concentration	No. of Exceedances / No. of Samples	Locations of Concentrations above the 95 % UCL-S
	SEMIVOLATILES					
84-74-2	Di-n-butylphthalate	140	UG/KG	320 J	1/44	32100S
132-64-9	Dibenzofuran	1300	UG/KG	5700 J	12/44	32060S, 37020S, 37020D, 37060D, 37100D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 80060S
106-46-7	1,4-Dichlorobenzene	-	UG/KG	150 J	1/44	32100S
84-66-2	Diethylphthalate	-	UG/KG	130 J	4/44	32100D[1/2/3] 37060D, 37100D, 43100D
105-67-9	2,4-Dimethylphenol	-	UG/KG	98 J	1/43	32100S
106-44-5	4-Methylphenol	560	UG/KG	3300 J	6/43	37060D, 37060S (AVG), 37150S, 40150S, 43150S, 46150S
100-02-7	4-Nitrophenol	-	UG/KG	175 J	1/43	32100D[1/2/3]
108-95-2	Phenol	-	UG/KG	630 J	9/43	32100S, 37020D, 37060D, 37060S[1/2/3], 37100S, 37150S, 40150S, 45020D, 46150S
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	1400 J	0/44	NONE
	PAHs					
83-32-9	Acenaphthene	900	UG/KG	6900 J	12/44	32060S, 37020S, 37020D, 37060D, 37100D, 40150D, 43060S, 43100D, 43150S, 45020D, 45100D, 80060S
208-96-8	Acenaphthylene	1051	UG/KG	26000 J	19/44	32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37100S, 37100D, 40150D, 43060S, 43060D, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
120-12-7	Anthracene	1594	UG/KG	12000 J	21/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 37100S, 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
56-55-3	Benzo(a)anthracene	2949	UG/KG	19000 J	21/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 37100S, 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
50-32-8	Benzo(a)pyrene	2394	UG/KG	15000 J	20/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S, SWALE(AVG)
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	20000 J	22/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 37100S, 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S, SWALE(AVG)
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	6200 J	12/44	32020S, 32020D, 32060S, 32060D, 37020D, 37060S(AVG), 43060S, 43150S, 45020S, 50060D, 80060S, SWALE(AVG)
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	7400 J	15/44	32060S, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S,
219-01-9	Chrysene	3157	UG/KG	20000 J	20/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S[1/2/3], 37100S, 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 80060S
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	2000 J	20/44	32020S, 32020D, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100S, 45100D, 50060D, 80060S, SWALE(AVG)
206-44-0	Fluoranthene	9002	UG/KG	39000 J	18/44	32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060S(AVG), 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S,
86-73-7	Fluorene	1267	UG/KG	10000 JD	22/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 37100S, 37100D, 40150D, 43060S, 43060D, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	6600 J	16/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020D, 37060S (AVG), 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S, SWALE(AVG)
91-57-6	2-Methylnaphthalene	230	UG/KG	36000 J	23/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060DD, 37060S(AVG), 37100S, 37100D, 43060S, 43060D, 43100D, 43100S, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
91-20-3	Naphthalene	770	UG/KG	320000 J	20/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060DD, 37060S(AVG), 37100S, 37100D, 43060S, 43060D, 43100D, 43150S, 45020S, 45020D, 45100D, SWALE(AVG)
85-01-8	Phenanthrene	7336	UG/KG	40000 J	17/44	32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37100S, 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
129-00-0	Pyrene	6170	UG/KG	32000 J	21/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060S(AVG), 37100S, 37100D, 40150D, 43060S, 43100D, 43150S, 45020S, 45020D, 45100D, 50060D, 80060S
	INORGANICS					
7429-90-5	Aluminum	7534	MG/KG	12700	3/44	23100S, 26150S, 26150D
7440-36-0	Antimony	7.11	MG/KG	17.3 J	2/44	43060D, 43100D
7440-38-2	Arsenic	7.6	MG/KG	37.4 J	22/44	20060S, 32020D, 32060S, 32060D, 32100S, 32150S, 37020S, 37020D, 37060D, 37060D, 37060DD, 37060S(AVG), 37100S, 37100D, 40150D, 43060S, 43060D, 43100S, 43100D, 45020D, 45100D, SWALE(AVG)
7440-39-3	Barium	70.8	MG/KG	224	7/44	37060D, 37060S(AVG), 43060S, 43060D, 43100D, 45020D, SWALE(AVG)
7440-41-7	Beryllium	0.517	MG/KG	1.4 J	9/44	26150S, 37060D, 37060S(AVG) 40150D, 43060D, 43100D, 45020D, 50060D, SWALE(AVG)
7440-43-9	Cadmium	1.287	MG/KG	2.5 J	6/44	32060S, 32060D, 37060D, 43060D, 43100D, 45020D
7440-70-2	Calcium	28651	MG/KG	129000	14/44	23100S, 32150S, 37060D, 37150S, 40150S, 43060S, 43150S, 45020S, 45020D, 45100S, 46150S, 50060S, 78100S, SWALE(AVG)
7440-47-3	Chromium	50.9	MG/KG	522 J	8/44	37060D, 43060S, 43060D, 43100S, 43100D, 45020S, 45020D, SWALE(AVG)
7440-48-4	Cobalt	9	MG/KG	13.3 J	3/44	23100S, 43060D, 43100D
7440-50-8	Copper	57.2	MG/KG	213	3/44	37060D, 43060D, 45020D
7439-89-6	Iron	26702	MG/KG	300000	27/44	20060S, 26150S, 32020S, 32020D, 32060S, 32060D, 32100S, 32100D(AVG), 32150S, 37020S, 37060D, 37060D, 37060DD, 37060S(AVG), 37100S, 37100D, 40150S, 40150D, 43060S, 43060D, 43100S, 43100D, 43150S, 45020D, 45100S, 45100D, SWALE(AVG)
7439-92-1	Lead	49.8	MG/KG	214	13/44	26150S, 32020S, 32020D, 32060S, 32060D, 37020D, 37060D, 37060S(AVG), 37100D, 40150D, 43060D, 43100D, 45020D
7439-95-4	Magnesium	6431	MG/KG	31200 J	11/44	23060S, 23100S, 26150S, 26150D, 32150S, 37060D, 45020D, 45100S, 45150S, 78100S, SWALE(AVG)
7439-96-5	Manganese	6574	MG/KG	10145	2/44	43100D, SWALE(AVG)
7439-97-6	Mercury	0.202	MG/KG	2.3	17/44	32020S, 32020D, 32060S, 32060D, 32100S, 37020S, 37020D, 37060D, 37060D, 37060DD, 37060S (AVG), 37100S, 37100D, 40150D, 43060D, 43100D, 45020D
7440-02-0	Nickel	23	MG/KG	40.6	8/44	23100S, 26150S, 26150D, 37060D, 40150D, 43060D, 45020D, 45100S,
7440-09-7	Potassium	839	MG/KG	2550	11/44	20060S, 23060S, 23100S, 26150S, 26150D, 32100D (AVG), 37060D, 37060DD, 40150S, 50060D, 78100S
7782-49-2	Selenium	-	MG/KG	1.03	25/44	20060S, 26150D, 32020D, 32060S, 32060D, 32100D (AVG), 32150S, 37020D, 37060D, 37060D, 37060DD, 37060S(AVG), 37100S, 37100D, 37150S, 40150S, 40150D, 43060S, 43100S, 45020D, 45100D, 46150S, 50060D, 78100S, SWALE (AVG)
7440-22-4	Silver	1.5	MG/KG	6.6	3/44	37060D, 43100D, 80060S
7440-23-5	Sodium	-	MG/KG	571 J	44/44	ALL LOCATIONS
7440-28-0	Thallium	-	MG/KG	1.8 J	11/44	32020S, 32060S, 32100S, 37020S, 37020D, 37060D, 37060S(AVG), 37100S, 37100D, 40150S, 45020S
7440-62-2	Vanadium	23.3	MG/KG	84.6 J	11/44	26150S, 37060D, 37060DD, 37060S(AVG), 40150D, 43060S, 43060D, 43100D, 45020S, 45020D, SWALE(AVG)
7440-66-6	Zinc	129.3	MG/KG	702 J	18/44	20060S, 26150S, 32020S, 32020D, 32060S, 32060D, 32150S, 37020S, 37060D, 37060DD, 37060S(AVG), 37100D, 40150S, 40150D, 43060S, 43060D, 43100D, 45020D
57-12-5	Cyanide	-	MG/KG	88.5	35/44	20060S, 23020S, 23100S, 26150S, 26150D, 32020S, 32020D, 32060S, 32060D, 32100S, 32100D(AVG), 32150S, 37020S, 37020D, 37060D, 37060D, 37060DD, 37060S(AVG), 37100S, 37100D, 37100D, 37150S, 40150S, 40150D, 43060S, 43060D, 43100S, 43100D, 43150S, 45020S,45020D, 45100S, 45100D, 50060S, SWALE (AVG)

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY SEDIMENT EXCEEDANCY SUMMARY PHASE II		NYSDEC Severe Effect Level	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED: UNITS:	Maximum Concentration	No. of Exceedancies / No. of Locations	Location of Concentrations
CAS NO.	COMPOUND					
	TOTAL METALS					
7429-90-5	Aluminum	NS	MG/KG	12700	0/44	NONE
7440-36-0	Antimony	25 L	MG/KG	17.3 J	0/44	NONE
7440-38-2	Arsenic	33 P	MG/KG	37.4 J	2/44	32060S, SWALE(AVG)
7440-39-3	Barium	NS	MG/KG	395	0/44	NONE
7440-41-7	Beryllium	NS	MG/KG	1.4 J	0/44	NONE
7440-43-9	Cadmium	9 L	MG/KG	2.5 J	0/44	NONE
7440-70-2	Calcium	NS	MG/KG	129000	0/44	NONE
7440-47-3	Chromium	110 P	MG/KG	870 J	3/44	45020S, 45020D, SWALE[AVG]
7440-48-4	Cobalt	NS	MG/KG	13.3 J	0/44	NONE
7440-50-8	Copper	110 P	MG/KG	213	1/44	37060D
7439-89-6	Iron	40000 P	MG/KG	300000	19/44	20060S, 32020S, 32020D, 32060S, 32060D, 32100S[AVG], 32150S, 37060S[AVG], 37060D, 37060DD, 37100S 37100D, 40150S, 40150D, 43060S, 43060D, 43100D, 45020D, SWALE[AVG]
7439-92-1	Lead	110 L	MG/KG	214	5/44	32060S, 32060D, 37060S, 37060D, 45020D
7439-95-4	Magnesium	NS	MG/KG	31200 J	0/44	NONE
7439-96-5	Manganese	1100 L	MG/KG	16400	13/44	32150S, 37060S, 37060D, 37060D, 37060DD, 40150D, 43060S, 43060D, 43100S, 43100D, 45020S, 45020D, SWALE[AVG]
7439-97-6	Mercury	1.3 L	MG/KG	2.3	3/44	37020S, 37020D, 37060S
7440-02-0	Nickel	50 L	MG/KG	40.6	0/44	NONE
7440-09-7	Potassium	NS	MG/KG	2550	0/44	NONE
7782-49-2	Selenium	.8	MG/KG	1.4	4/44	32060S, 32060D, 45020D, SWALE[AVG]
7440-22-4	Silver	2.2 L	MG/KG	6.6	3/44	37060D, 43100D, 80060S
7440-23-5	Sodium	154.2	MG/KG	571 J	10/44	37060D, 37150S, 40150S, 43060S, 43150S, 45100S, 46150S, 50060S, 50060D, SWALE[AVG]
7440-28-0	Thallium	.78	MG/KG	1.8 J	6/44	32020S, 32060S, 32100S, 37020S, 37060S[AVG], 37060D
7440-62-2	Vanadium	NS	MG/KG	120 J	0/44	NONE
7440-66-6	Zinc	270 L	MG/KG	702 J	9/44	32060S, 32060D, 37060S, 37060D, 37060DD, 37100D, 43060D, 43100D, 45020D

Source: Technical Guidance for Screening Contaminated Sediments.
NYSDEC Division of Fish and Wildlife and Division of Marine Resources,
Nov. 1993.

L - Long and Morgan, 1990.
P - Persaud et. al., 1992.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	20060S 0-0.75' 070040-22 NYTEST CFSED2 SEDIMENT 6/28/96 9/26/96	23020S 0-0.75' 070032-01 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	23060S 0-0.75' 070032-02 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	26150S 0-0.75' 070032-04 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	95 % UCL-S	UNITS:				
	SEMIVOLATILES						
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	270 J	ND	ND	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	120 J	ND	ND	ND
	PAHs						
83-32-9	Acenaphthene	900	UG/KG	ND	ND	ND	ND
208-96-8	Acenaphthylene	1051	UG/KG	ND	ND	ND	ND
120-12-7	Anthracene	1594	UG/KG	ND	ND	ND	60 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	150 J	66 J	ND	260 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	170 J	60 J	ND	210 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	210 J	84 J	ND	220 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	110 J	ND	ND	140 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	ND	ND	ND	ND
219-01-9	Chrysene	3157	UG/KG	190 J	88 J	ND	350 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	ND	51 J
206-44-0	Fluoranthene	9002	UG/KG	200 J	95 J	ND	340 J
86-73-7	Fluorene	1267	UG/KG	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	100 J	ND	ND	100 J
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	ND	ND	ND
91-20-3	Naphthalene	770	UG/KG	120 J	60 J	ND	ND
85-01-8	Phenanthrene	7336	UG/KG	82 J	ND	ND	180 J
129-00-0	Pyrene	6170	UG/KG	180 J	87 J	ND	330 J
	Total PAHs	43960		1512	540	ND	2241
	INORGANICS						
7429-90-5	Aluminum	7534	MG/KG	4750	5440	5980	12700
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	ND
7440-38-2	Arsenic	7.6	MG/KG	9.1	5.3	3.3	5.5
7440-39-3	Barium	70.8	MG/KG	39	43.2	23 J	62.6
7440-41-7	Beryllium	0.517	MG/KG	0.35 J	0.32 J	0.25 J	0.56 J
7440-43-9	Cadmium	1.287	MG/KG	1.1 J	0.61 J	0.31 J	0.78 J
7440-70-2	Calcium	28651	MG/KG	11300	18800	10800	16700
7440-47-3	Chromium	50.9	MG/KG	21.5	36.3 J	9.5 J	21.3 J
7440-48-4	Cobalt	9	MG/KG	5.9 J	6.1 J	6.5 J	9
7440-50-8	Copper	57.2	MG/KG	25.5	15.9	12.3	34.6
7439-89-6	Iron	26702	MG/KG	41100	18100	12000	27300
7439-92-1	Lead	49.8	MG/KG	41.5	19.8	8	57.1
7439-95-4	Magnesium	6431	MG/KG	4100	5480 J	6640 J	9100 J
7439-96-5	Manganese	6574	MG/KG	556	561	148	328
7439-97-6	Mercury	0.202	MG/KG	0.13 J	ND	ND	0.18
7440-02-0	Nickel	23	MG/KG	20.8	18.2	17.2	27.6
7440-09-7	Potassium	839	MG/KG	878	809	1190	2550
7782-49-2	Selenium	-	MG/KG	0.25 J	ND	ND	ND
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND
7440-23-5	Sodium	-	MG/KG	97.5 J	126 J	104 J	138 J
7440-28-0	Thallium	-	MG/KG	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	15.4	14.1 J	14.1 J	25.2 J
7440-66-6	Zinc	129.3	MG/KG	191	109 J	48.4 J	139 J
57-12-5	Cyanide	-	MG/KG	0.81 J	2.1	ND	0.72 J

Bold Face - Indicates the maximum concentration detected for the sampling round.

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II		95 %	SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	26150D 0.75-1.5' 070032-05 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32020S 0-0.75' 070032-06 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32020D 0.75-1.5' 070032-07 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32060S 0-0.75" 070032-08 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32060D 0.75-1.5' 070032-09 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND	700 J	500 J	1500 J	740 J
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND	290 J
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	ND	530 J	430 J	1100 J	680 J
208-96-8	Acenaphthylene	1051	UG/KG	ND	650 J	720 J	2000 J	1300 J
120-12-7	Anthracene	1594	UG/KG	59 J	2100 J	1800 J	9900 J	2500 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	210 J	4900 J	5400 J	11000 J	6300 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	150 J	3700 J	4200 J	9200 J	4900 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	170 J	4700 J	5200 J	10000 J	5800 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	79 J	1500 J	1600 J	5000 J	1500 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	ND	1600 J	1800 J	4200 J	1900 J
219-01-9	Chrysene	3157	UG/KG	210 J	4900 J	5400 J	13000 J	7100 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	510 J	410 J	ND	380 J
206-44-0	Fluoranthene	9002	UG/KG	320 J	8900 J	9600 J	23000 J	10000 J
86-73-7	Fluorene	1267	UG/KG	ND	1600 J	1600 J	3800 J	2400 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	81 J	1700 J	1800 J	5000 J	1800 J
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	1300 J	1200 J	4300 J	2500 J
91-20-3	Naphthalene	770	UG/KG	ND	8100 J	8600 J	35000 J	16000 J
85-01-8	Phenanthrene	7336	UG/KG	210 J	7100 J	5800 J	14000 J	9100 J
129-00-0	Pyrene	6170	UG/KG	250 J	7100 J	7900 J	20000 J	10000 J
	Total PAHs	43960		1739	61090	63460	164500	84060
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	11100	1970	2020	3030 J	2450
7440-36-0	Antimony	7.11	MG/KG	ND	2.4 J	3.8 J	ND	6.3 J
7440-38-2	Arsenic	7.6	MG/KG	4.4	1.6	23.2	37.4 J	30.4
7440-39-3	Barium	70.8	MG/KG	51.9	33.7	27.9 J	32.3 J	25.8 J
7440-41-7	Beryllium	0.517	MG/KG	0.47 J	0.29 J	0.27 J	0.36 J	0.27 J
7440-43-9	Cadmium	1.287	MG/KG	0.31 J	0.7	0.57 J	1.4 J	1.5
7440-70-2	Calcium	28651	MG/KG	11400	6710	5940	7960 J	6700
7440-47-3	Chromium	50.9	MG/KG	16.7 J	22.1 J	19.1 J	25.3 J	21.4 J
7440-48-4	Cobalt	9	MG/KG	8.3	3.3 J	3 J	4 J	3.9 J
7440-50-8	Copper	57.2	MG/KG	28.6	26.7	25.5	35.4 J	35.4
7439-89-6	Iron	26702	MG/KG	19000	55200	49300	54400 J	49200
7439-92-1	Lead	49.8	MG/KG	42.3	57.1	51.4	199 J	145
7439-95-4	Magnesium	6431	MG/KG	7180 J	1010 J	963 J	1500 J	1150 J
7439-96-5	Manganese	6574	MG/KG	255	682	642	867 J	726
7439-97-6	Mercury	0.202	MG/KG	0.13	0.32	0.3	0.76 J	0.54
7440-02-0	Nickel	23	MG/KG	24.3	14.4	12.5	15 J	14
7440-09-7	Potassium	839	MG/KG	2020	182 J	195 J	434 J	237 J
7782-49-2	Selenium	-	MG/KG	0.38 J	ND	0.4 J	0.81 J	0.92
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	0.67 J	0.9 J
7440-23-5	Sodium	-	MG/KG	125 J	35.6 J	37.4 J	69.7 J	64.5 J
7440-28-0	Thallium	-	MG/KG	ND	1.3 J	ND	1.8 J	ND
7440-62-2	Vanadium	23.3	MG/KG	21.4 J	13.7 J	11.8 J	12.8 J	11.1 J
7440-66-6	Zinc	129.3	MG/KG	93.3 J	247 J	205 J	699 J	702 J
57-12-5	Cyanide	-	MG/KG	0.34 J	86.5	35.3	39.8 J	53.5

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID:	32100S	32100D[AVG]	32150S	37020S	37020D
			DEPTH:	0-0.75'	4-6'	0-0.75'	0-0.75'	0.75-1.5'
			LAB ID:	070032-10	070071-01	070040-21	070040-04	070040-05
			SOURCE:	NYTEST	NYTEST	NYTEST	NYTEST	NYTEST
			SDG:	CFSED1	CFSED3	CFSED2	CFSED2	CFSED2
			MATRIX:	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
			SAMPLED:	6/25/96	7/02/96	6/28/96	6/26/96	6/26/96
		95 %	VALIDATED:	9/25/96	9/26/96	9/26/96	9/26/96	9/26/96
CAS NO.	COMPOUND	UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	320 J	ND	90 J	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	1000 J	ND	ND	1400 J	3400 J
106-46-7	1,4-Dichlorobenzene	-	UG/KG	150 J	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	48 J	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	98 J	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	290 J	ND	ND	300 J	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	175 J	ND	ND	ND
108-95-2	Phenol	-	UG/KG	180 J	ND	ND	77 J	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	1400 J	ND	94 J	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	530 J	ND	ND	1900 J	5400 J
208-96-8	Acenaphthylene	1051	UG/KG	1200 J	ND	ND	1300 J	2800 J
120-12-7	Anthracene	1594	UG/KG	2400 J	56 J	53 J	3400 J	11000 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	9400 J	280 J	140 J	8000 J	19000 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	7400 J	270 J	140 J	6700 J	15000 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	9100 J	265 J	150 J	9400 JD	20000 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	1300 J	120 J	75 J	790 J	3900 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	3700 J	107 J	ND	4000 J	7400 J
219-01-9	Chrysene	3157	UG/KG	8900 J	285 J	160 J	7200 J	18000 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	390 J	ND	ND	370 J	1600 J
206-44-0	Fluoranthene	9002	UG/KG	14000 JD	525 J	240 J	17000 JD	39000 J
86-73-7	Fluorene	1267	UG/KG	2000 J	ND	ND	2700 J	7200 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	1700 J	120 J	83 J	1100 J	5300 J
91-57-6	2-Methylnaphthalene	230	UG/KG	2700 J	ND	ND	3000 J	6600 J
91-20-3	Naphthalene	770	UG/KG	33000 JD	325 J	82 J	55000 JD	46000 J
85-01-8	Phenanthrene	7336	UG/KG	8300 J	145 J	160 J	10000 JD	28000 J
129-00-0	Pyrene	6170	UG/KG	12000 JD	430 J	220 J	13000 JD	27000 J
	Total PAHs	43960		118020	2928	1503	144860	265200
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	2230	4750	4090	1920	1550
7440-36-0	Antimony	7.11	MG/KG	ND	3.2 J	4.1 J	2.7 J	3.4 J
7440-38-2	Arsenic	7.6	MG/KG	19.5	4.6	11.1	17.1	20.1
7440-39-3	Barium	70.8	MG/KG	28.7 J	35.1	33.7	39.1	16.8 J
7440-41-7	Beryllium	0.517	MG/KG	0.3 J	0.35 J	0.37 J	0.18 J	0.13 J
7440-43-9	Cadmium	1.287	MG/KG	0.52 J	0.47 J	ND	0.85	0.5 J
7440-70-2	Calcium	28651	MG/KG	7220	16500	118000	7000	8600
7440-47-3	Chromium	50.9	MG/KG	12.9 J	17.2	17.5	18.7	14
7440-48-4	Cobalt	9	MG/KG	3.1 J	5.5 J	5.1 J	2.4 J	2.1 J
7440-50-8	Copper	57.2	MG/KG	19.5	21.3	18.8	23.9	56.7
7439-89-6	Iron	26702	MG/KG	51300	38550	47800	35500	20100
7439-92-1	Lead	49.8	MG/KG	32.8	28.1	24.4	41.9	55.9
7439-95-4	Magnesium	6431	MG/KG	1310 J	5045	13300	1320	1720
7439-96-5	Manganese	6574	MG/KG	969	641	1860	860	233
7439-97-6	Mercury	0.202	MG/KG	0.29	0.09 J	ND	1.4	2.3
7440-02-0	Nickel	23	MG/KG	6.8 J	14.2	16.7	7.8	7.9
7440-09-7	Potassium	839	MG/KG	201 J	942	370 J	257 J	320 J
7782-49-2	Selenium	-	MG/KG	ND	0.19 J	0.3 J	ND	0.47 J
7440-22-4	Silver	1.5	MG/KG	0.64 J	ND	ND	0.44 J	ND
7440-23-5	Sodium	-	MG/KG	39.1 J	146 J	126 J	24.9 J	36.2 J
7440-28-0	Thallium	-	MG/KG	1.7 J	ND	ND	1.1 J	0.42 J
7440-62-2	Vanadium	23.3	MG/KG	10.1 J	14.7	12.2	7.5 J	5.3 J
7440-66-6	Zinc	129.3	MG/KG	129 J	116 J	133	139	129
57-12-5	Cyanide	-	MG/KG	28.6	2.9	5.9 J	18.8 J	28.9 J

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37060D 0.75-1.5' 070040-03 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37060D 4.5-7.5' 070071-04 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37060DD 10.5-14' 070071-14 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37060S[AVG] 0-0.75'- 070040-02 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37100S 0-0.75' 070040-06 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	95 % UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	600 J	1900 J	500 J	780 J	560 J
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	65 J	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	1200 J	93 J	ND	670 J	65 J
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	630 J	ND	ND	380 J	150 J
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	91 J	ND	ND	ND	130 J
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	380 J	2800 J	710 J	370 J	600 J
208-96-8	Acenaphthylene	1051	UG/KG	1100 J	1300 J	370 J	455 J	1800 J
120-12-7	Anthracene	1594	UG/KG	1600 J	5100 J	1000 J	2600 J	2400 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	5000 J	7000 J	1300 J	6450 J	3200 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	4000 J	5400 J	1100 J	4045 J	1600 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	6200 J	7300 JD	1400 J	6150 J	3700 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	690 J	820 J	570 J	2110 J	460 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	2200 J	3000 J	510 J	3400 J	1200 J
219-01-9	Chrysene	3157	UG/KG	4600 J	6200 J	1300 J	6400 J	3800 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	250 J	390 J	150 J	600 J	130 J
206-44-0	Fluoranthene	9002	UG/KG	9000 J	17000 JD	3500 J	12500 J	7300 J
86-73-7	Fluorene	1267	UG/KG	1400 J	3600 J	1000 J	1700 J	1800 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	910 J	1100 J	610 J	2495 J	550 J
91-57-6	2-Methylnaphthalene	230	UG/KG	1500 J	3000 J	250 J	1700 J	5000 J
91-20-3	Naphthalene	770	UG/KG	43000 JD	21000 JD	1000 J	32500 J	59000 JD
85-01-8	Phenanthrene	7336	UG/KG	5200 J	15000 JD	3100 J	7100 J	7700 J
129-00-0	Pyrene	6170	UG/KG	6600 J	12000 JD	2400 J	9000 J	6400 J
	Total PAHs	43960		94040	111950	20270	99475	106740
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	1860	7160	4640	5210	1910
7440-36-0	Antimony	7.11	MG/KG	ND	ND	3.4 J	2.5 J	4.4 J
7440-38-2	Arsenic	7.6	MG/KG	19.3	15.3	9.2	14.8	26.2
7440-39-3	Barium	70.8	MG/KG	56.8	90.9 J	51.8	224	26.5 J
7440-41-7	Beryllium	0.517	MG/KG	0.2 J	0.71 J	0.47 J	0.7 J	0.26 J
7440-43-9	Cadmium	1.287	MG/KG	0.71 J	2.4 J	0.52 J	1 J	0.37 J
7440-70-2	Calcium	28651	MG/KG	6730	38900	19100	20420	5500
7440-47-3	Chromium	50.9	MG/KG	13.3	66.4	14.1	36	19.5
7440-48-4	Cobalt	9	MG/KG	2 J	8.9 J	5.6 J	7.4 J	3.6 J
7440-50-8	Copper	57.2	MG/KG	17.8	213	47.4	37.5	31.9
7439-89-6	Iron	26702	MG/KG	35300	103000	56700	126050	59800
7439-92-1	Lead	49.8	MG/KG	37.8	214	48.7	113.1	46.1
7439-95-4	Magnesium	6431	MG/KG	1190	8940	4830	2950	1100
7439-96-5	Manganese	6574	MG/KG	1210	1430	1410	2965	982
7439-97-6	Mercury	0.202	MG/KG	0.85	1.3 J	0.46 J	1.2	0.73
7440-02-0	Nickel	23	MG/KG	6.8	35.5	12.9	14.4 J	14.4
7440-09-7	Potassium	839	MG/KG	214 J	1470 J	885	480 J	115 J
7782-49-2	Selenium	-	MG/KG	0.35 J	0.28 J	0.27 J	0.43 J	0.35 J
7440-22-4	Silver	1.5	MG/KG	0.54 J	2.4 J	ND	ND	ND
7440-23-5	Sodium	-	MG/KG	33.3 J	162 J	136 J	78.6 J	26.9 J
7440-28-0	Thallium	-	MG/KG	1.3 J	ND	ND	0.88 J	0.74 J
7440-62-2	Vanadium	23.3	MG/KG	7.6 J	25.2 J	23.8	27	9.4
7440-66-6	Zinc	129.3	MG/KG	114	520 J	275 J	304	113
57-12-5	Cyanide	-	MG/KG	12.3 J	21.8	30.3	36.2 J	29.7 J

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37100D 0.75-1.5' 070040-07 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37100D 4-6' 070071-05 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37150S 0-0.75' 070040-08 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37200S 0-0.75'- 070071-03 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	40150S 0-0.75' 070032-11 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	95 % UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	5700 J	190 J	130 J	ND	ND
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	130 J	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	2600 J	ND	3300 J
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	ND	ND	140 J	ND	120 J
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	170 J	ND	460 J
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	ND	1100 J	130 J	ND	ND
208-96-8	Acenaphthylene	1051	UG/KG	26000 J	76 J	340 J	ND	ND
120-12-7	Anthracene	1594	UG/KG	3600 J	88 J	610 J	ND	ND
56-55-3	Benzo(a)anthracene	2949	UG/KG	3700 J	120 J	1000 J	ND	270 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	ND	86 J	980 J	ND	260 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	3000 J	100 J	1100 J	ND	370 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	ND	45 J	420 J	ND	180 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	ND	49 J	430 J	ND	ND
219-01-9	Chrysene	3157	UG/KG	4000 J	120 J	1100 J	ND	330 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	150 J	ND	ND
206-44-0	Fluoranthene	9002	UG/KG	11000 J	340 J	2200 J	ND	680 J
86-73-7	Fluorene	1267	UG/KG	7900 J	970 J	350 J	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	ND	42 J	440 J	ND	190 J
91-57-6	2-Methylnaphthalene	230	UG/KG	36000 J	76 J	150 J	ND	ND
91-20-3	Naphthalene	770	UG/KG	320000 J	140 J	450 J	ND	500 J
85-01-8	Phenanthrene	7336	UG/KG	17000 J	260 J	2100 J	ND	560 J
129-00-0	Pyrene	6170	UG/KG	9000 J	270 J	1900 J	ND	560 J
	Total PAHs	43960		441400	3882	13850	ND	3920
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	1160	2240	2140	1530	5430
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	ND	3.8 J
7440-38-2	Arsenic	7.6	MG/KG	18.2	0.43 J	5.1	2.4	3.5
7440-39-3	Barium	70.8	MG/KG	20.3 J	14.8 J	22 J	5.8 J	59.9
7440-41-7	Beryllium	0.517	MG/KG	0.18 J	0.18 J	0.17 J	0.11 J	0.41 J
7440-43-9	Cadmium	1.287	MG/KG	0.38 J	0.2 J	0.6 J	0.2 J	0.75 J
7440-70-2	Calcium	28651	MG/KG	3280	9320	48900	7810	48600
7440-47-3	Chromium	50.9	MG/KG	13.9	6.2	5.7	2.9	12 J
7440-48-4	Cobalt	9	MG/KG	2.3 J	2.4 J	1.9 J	2 J	6.3 J
7440-50-8	Copper	57.2	MG/KG	31	6.5	10.6	2.3 J	33
7439-89-6	Iron	26702	MG/KG	45200	17600	8940	4350	41000
7439-92-1	Lead	49.8	MG/KG	65.4	9.3	9	3.8	20.2
7439-95-4	Magnesium	6431	MG/KG	567 J	2870	1760	2640	3390 J
7439-96-5	Manganese	6574	MG/KG	765	318	161	72.7	402
7439-97-6	Mercury	0.202	MG/KG	1	0.1 J	0.03 J	0.07 J	ND
7440-02-0	Nickel	23	MG/KG	11.1	5.8	9.2	4.4 J	20.3
7440-09-7	Potassium	839	MG/KG	105 J	443 J	367 J	314 J	900
7782-49-2	Selenium	-	MG/KG	0.27 J	ND	0.23 J	ND	0.47 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	ND
7440-23-5	Sodium	-	MG/KG	19.3 J	99 J	236 J	76.3 J	430 J
7440-28-0	Thallium	-	MG/KG	0.51 J	ND	ND	ND	0.32 J
7440-62-2	Vanadium	23.3	MG/KG	7.7	12.6	5.1 J	4.1 J	13.8 J
7440-66-6	Zinc	129.3	MG/KG	316	55.9 J	41.5	22.4 J	139 J
57-12-5	Cyanide	-	MG/KG	20.5 J	1.9	2.3 J	ND	1.6

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID:	40150D	43060S	43060D	43100S	43100D
			DEPTH:	2.5-3.5'	0-0.5'	1-2'	0-0.5'-	1-2'
			LAB ID:	070071-12	070032-12	070071-06	070032-13	070071-07
			SOURCE:	NYTEST	NYTEST	NYTEST	NYTEST	NYTEST
			SDG:	CFSED3	CFSED1	CFSED3	CFSED1	CFSED3
			MATRIX:	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
			SAMPLED:	7/02/96	6/25/96	7/02/96	6/25/96	7/02/96
		95 %	VALIDATED:	9/26/96	9/25/96	9/26/96	9/25/96	9/26/96
CAS NO.	COMPOUND	UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	770 J	2100 J	390 J	200 J	1700 J
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	ND	ND	ND	59 J
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	150 J	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	2600 J	1600 J	480 J	120 J	1400 J
208-96-8	Acenaphthylene	1051	UG/KG	1500 J	4700 J	1600 J	320 J	2700 J
120-12-7	Anthracene	1594	UG/KG	2900 J	12000 J	47 J	520 J	7700 JD
56-55-3	Benzo(a)anthracene	2949	UG/KG	4400 J	17000 J	1200 J	880 J	13000 JD
50-32-8	Benzo(a)pyrene	2394	UG/KG	3600 J	14000 J	910 J	860 J	10000 JD
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	4500 J	15000 J	810 J	880 J	12000 JD
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	850 J	6200 J	360 J	500 J	1300 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	1500 J	4600 J	290 J	ND	5000 J
219-01-9	Chrysene	3157	UG/KG	4200 J	20000 J	50 J	920 J	12000 JD
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	290 J	2000 J	110 J	ND	500 J
206-44-0	Fluoranthene	9002	UG/KG	12000 JD	29000 J	2100 J	1500 J	30000 JD
86-73-7	Fluorene	1267	UG/KG	3400 J	7400 J	2000 J	480 J	5300 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	1100 J	6600 J	310 J	450 J	1800 J
91-57-6	2-Methylnaphthalene	230	UG/KG	120 J	6300 J	4100 J	300 J	320 J
91-20-3	Naphthalene	770	UG/KG	740 J	3300 J	1800 J	360 J	2100 J
85-01-8	Phenanthrene	7336	UG/KG	8300 JD	40000 J	6400 J	2200 J	27000 JD
129-00-0	Pyrene	6170	UG/KG	9600 JD	32000 J	2700 J	1600 J	24000 JD
	Total PAHs	43960		62000	221900	25267	11890	156220
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	4700	3330	6240	990	5430
7440-36-0	Antimony	7.11	MG/KG	ND	4.4 J	17.3 J	ND	12.9 J
7440-38-2	Arsenic	7.6	MG/KG	15.2	16.7	19.4	14.5	15
7440-39-3	Barium	70.8	MG/KG	54.4 J	94.1	116 J	22 J	154
7440-41-7	Beryllium	0.517	MG/KG	0.88 J	0.38 J	1.4 J	0.14 J	1.3 J
7440-43-9	Cadmium	1.287	MG/KG	0.98 J	ND	1.3 J	0.44 J	1.9 J
7440-70-2	Calcium	28651	MG/KG	25900	91600	13800	8700	16000
7440-47-3	Chromium	50.9	MG/KG	41.8	58.7 J	58.3	62.1 J	52.6
7440-48-4	Cobalt	9	MG/KG	8.2 J	4.9 J	13.3 J	2.3 J	9.9 J
7440-50-8	Copper	57.2	MG/KG	50.1	34.1	84.4	12.5	54.5
7439-89-6	Iron	26702	MG/KG	151000	64500	300000	37900	257000
7439-92-1	Lead	49.8	MG/KG	54.9	35.4	85.2	13.1	62.6
7439-95-4	Magnesium	6431	MG/KG	5220	4650 J	2210 J	2460 J	2340 J
7439-96-5	Manganese	6574	MG/KG	2510	3140	5470	1410	7730
7439-97-6	Mercury	0.202	MG/KG	0.24 J	0.18	0.38 J	0.05 J	0.96 J
7440-02-0	Nickel	23	MG/KG	30.5	19	39.4	10	11.9 J
7440-09-7	Potassium	839	MG/KG	497 J	341 J	ND	108 J	379 J
7782-49-2	Selenium	-	MG/KG	0.35 J	ND	0.43 J	0.36 J	ND
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	2.4 J
7440-23-5	Sodium	-	MG/KG	125 J	339 J	28.1 J	31.8 J	47.6 J
7440-28-0	Thallium	-	MG/KG	ND	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	26.9 J	40.5 J	43.2	10 J	43.8
7440-66-6	Zinc	129.3	MG/KG	250 J	198 J	463 J	86.4 J	279 J
57-12-5	Cyanide	-	MG/KG	22	15.8	24.9	20.1	23.4

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	43150S 0-0.5' 070032-14 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45020S 0-0.75' 070032-17 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45020D 1-2' 070071-08 NYTEST CFSED3 SEDIMENT 7/01/96 9/26/96	45100S 0-0.75' 070032-18 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45100D 1-2' 070071-09 NYTEST CFSED3 SEDIMENT 7/01/96 9/26/96
CAS NO.	COMPOUND	95 % UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	59 J	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	3700 J	1600 J	4200 J	480 J	3900 J
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	920 J	ND	ND	450 J	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	ND	ND	65 J	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	6900 J	570 J	960 J	580 J	2900 J
208-96-8	Acenaphthylene	1051	UG/KG	1600 J	2800 J	12000 JD	ND	2300 J
120-12-7	Anthracene	1594	UG/KG	8900 J	6400 J	11000 JD	1100 J	6700 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	7500 J	7900 J	11000 JD	1800 J	8100 JD
50-32-8	Benzo(a)pyrene	2394	UG/KG	7200 J	7400 J	5000 J	1500 J	6700 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	7300 J	8200 J	9100 JD	1800 J	7200 JD
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	4200 J	3800 J	1200 J	760 J	1000 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	3500 J	2900 J	4000 J	690 J	2900 JD
219-01-9	Chrysene	3157	UG/KG	7900 J	7600 J	11000 JD	1800 J	7600 JD
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	810 J	900 J	460 J	210 J	400 J
206-44-0	Fluoranthene	9002	UG/KG	24000 J	25000 JD	25000 JD	4400 J	20000 JD
86-73-7	Fluorene	1267	UG/KG	6100 J	3400 J	10000 JD	710 J	6500 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	4000 J	4000 J	1600 J	830 J	1400 J
91-57-6	2-Methylnaphthalene	230	UG/KG	790 J	530 J	9500 JD	190 J	240 J
91-20-3	Naphthalene	770	UG/KG	1700 J	1300 J	30000 JD	220 J	700 J
85-01-8	Phenanthrene	7336	UG/KG	32000 J	22000 JD	39000 JD	4800 J	26000 JD
129-00-0	Pyrene	6170	UG/KG	20000 J	18000 JD	24000 JD	3500 J	17000 JD
	Total PAHs	43960		145400	122700	204840	24890	117640
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	3360	3090	6040	2500	2750
7440-36-0	Antimony	7.11	MG/KG	ND	3.9 J	ND	2.8 J	2.3 J
7440-38-2	Arsenic	7.6	MG/KG	5.7	0.24 J	19	5.9	10.2
7440-39-3	Barium	70.8	MG/KG	49.6	41.8	126 J	33.8	19.1 J
7440-41-7	Beryllium	0.517	MG/KG	0.25 J	0.14 J	0.94 J	0.17 J	0.31 J
7440-43-9	Cadmium	1.287	MG/KG	0.36 J	0.44 J	2.5 J	0.68 J	0.64
7440-70-2	Calcium	28651	MG/KG	67100	43500	83500	79800	18500
7440-47-3	Chromium	50.9	MG/KG	16 J	204 J	165	33.8 J	17.9
7440-48-4	Cobalt	9	MG/KG	3.6 J	0.68 J	8.6 J	3.8 J	3.3 J
7440-50-8	Copper	57.2	MG/KG	21.6	7	77.9	27.2	18.2
7439-89-6	Iron	26702	MG/KG	35300	18000	162000	32100	26800
7439-92-1	Lead	49.8	MG/KG	15.7	9	114	20	26.6
7439-95-4	Magnesium	6431	MG/KG	3810 J	5640 J	8470	31200 J	4120
7439-96-5	Manganese	6574	MG/KG	843	5760	6070	745	986
7439-97-6	Mercury	0.202	MG/KG	0.03 J	0.05 J	0.67 J	0.04 J	0.15 J
7440-02-0	Nickel	23	MG/KG	11.4	2.9 J	40.6	30	11.9
7440-09-7	Potassium	839	MG/KG	663 J	63.5 J	ND	497 J	414 J
7782-49-2	Selenium	-	MG/KG	ND	ND	0.98 J	ND	0.67
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	ND	ND
7440-23-5	Sodium	-	MG/KG	471 J	47.5 J	130 J	197 J	89.7 J
7440-28-0	Thallium	-	MG/KG	ND	0.21 J	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	13.9 J	49.3 J	54.9	12.3 J	10.8
7440-66-6	Zinc	129.3	MG/KG	82.6 J	37.5 J	564 J	67.2 J	110 J
57-12-5	Cyanide	-	MG/KG	5	15.2	18	3	10

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	45150S 0-0.75' 070032-19 NYTEST CFSED1 SEDIMENT 6/24/96 9/25/96	46150S 0-0.75' 070040-14 NYTEST CFSED2 SEDIMENT 6/24/96 9/26/96	50060S 0-0.75' 070040-09 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	50060D 0.75-1.5' 070071-10 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	78100S 0-2' 070071-11 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96
CAS NO.	COMPOUND	95 % UCL-S	UNITS:					
	SEMIVOLATILES							
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	ND	71 J	ND	1000 J	ND
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	NA	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	1200 J	NA	75 J	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	NA	ND	ND
108-95-2	Phenol	-	UG/KG	ND	93 J	NA	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	240 J	120 J	ND	ND
	PAHs							
83-32-9	Acenaphthene	900	UG/KG	ND	48 J	ND	610 J	ND
208-96-8	Acenaphthylene	1051	UG/KG	ND	100 J	ND	1400 J	ND
120-12-7	Anthracene	1594	UG/KG	ND	190 J	ND	3900 J	ND
56-55-3	Benzo(a)anthracene	2949	UG/KG	ND	390 J	120 J	5300 J	ND
50-32-8	Benzo(a)pyrene	2394	UG/KG	ND	340 J	130 J	4600 J	ND
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	ND	440 J	180 J	5400 J	ND
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	ND	110 J	47 J	1600 J	ND
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	ND	190 J	72 J	2200 J	ND
219-01-9	Chrysene	3157	UG/KG	ND	430 J	160 J	180 J	ND
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	ND	ND	ND	490 J	ND
206-44-0	Fluoranthene	9002	UG/KG	ND	990 J	270 J	14000 JD	ND
86-73-7	Fluorene	1267	UG/KG	ND	130 J	ND	2600 J	ND
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	ND	130 J	59 J	1800 J	ND
91-57-6	2-Methylnaphthalene	230	UG/KG	ND	ND	ND	340 J	ND
91-20-3	Naphthalene	770	UG/KG	ND	150 J	ND	500 J	ND
85-01-8	Phenanthrene	7336	UG/KG	ND	740 J	150 J	14000 JD	ND
129-00-0	Pyrene	6170	UG/KG	ND	680 J	220 J	11000 JD	ND
	Total PAHs	43960		ND	5058	1408	69820	ND
	INORGANICS							
7429-90-5	Aluminum	7534	MG/KG	2590	2210	2880	5490	5800
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	2.6 J	ND
7440-38-2	Arsenic	7.6	MG/KG	ND	4.7	3.1	4.6	3.5
7440-39-3	Barium	70.8	MG/KG	13.4 J	36.6	25.6	41.3	14.1 J
7440-41-7	Beryllium	0.517	MG/KG	0.1 J	0.11 J	0.17 J	0.61 J	0.28 J
7440-43-9	Cadmium	1.287	MG/KG	0.52 J	0.34 J	0.29 J	0.42 J	0.24 J
7440-70-2	Calcium	28651	MG/KG	21500	129000	61000	21200	37700
7440-47-3	Chromium	50.9	MG/KG	4.9 J	6.3	6.5	14.9	10.2
7440-48-4	Cobalt	9	MG/KG	3.1 J	1.9 J	2.4 J	3.6 J	5.2 J
7440-50-8	Copper	57.2	MG/KG	8.1	9.8	7.6	26.3	14.2
7439-89-6	Iron	26702	MG/KG	8940	5570	6980	13700	11800
7439-92-1	Lead	49.8	MG/KG	7.4	5.4	22.2	15.4	10.7
7439-95-4	Magnesium	6431	MG/KG	7550 J	3890	4130	4290	15300
7439-96-5	Manganese	6574	MG/KG	203	158	201	180	216
7439-97-6	Mercury	0.202	MG/KG	ND	ND	ND	0.09 J	0.1 J
7440-02-0	Nickel	23	MG/KG	10.2	7	9	12.6	16.4
7440-09-7	Potassium	839	MG/KG	449 J	457 J	546 J	847	1410
7782-49-2	Selenium	-	MG/KG	ND	0.48 J	ND	0.27 J	0.19 J
7440-22-4	Silver	1.5	MG/KG	ND	ND	ND	0.36 J	ND
7440-23-5	Sodium	-	MG/KG	90.8 J	571 J	276 J	159 J	122 J
7440-28-0	Thallium	-	MG/KG	ND	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	9 J	5.4 J	7.4	11.9	12.6
7440-66-6	Zinc	129.3	MG/KG	46.5 J	37.2	40.8	65.7 J	36.9 J
57-12-5	Cyanide	-	MG/KG	ND	ND	0.31 J	ND	ND

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

Table 3.2 continued
Cherry Farm / River Road Site
Phase II Validated Sediment Analytical Data

Cherry Farm/River Road Site Tonawanda, NY Validated Sediment Analytical Data Detected Compound Summary - Phase II			SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	80060S 0-0.75' 070040-10 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	82020S 0-0.75' 070040-11 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	82100S 0-0.75' 070040-12 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	SWALE[AVG] 0-0.75' 070032-15 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	95 % UCL-S	UNITS:				
	SEMIVOLATILES						
84-74-2	Di-n-butylphthalate	140	UG/KG	ND	ND	ND	ND
132-64-9	Dibenzofuran	1300	UG/KG	4000 J	ND	ND	470 J
106-46-7	1,4-Dichlorobenzene	-	UG/KG	ND	ND	ND	ND
84-66-2	Diethylphthalate	-	UG/KG	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	-	UG/KG	ND	ND	ND	ND
106-44-5	4-Methylphenol	560	UG/KG	ND	ND	ND	ND
100-02-7	4-Nitrophenol	-	UG/KG	ND	ND	ND	ND
108-95-2	Phenol	-	UG/KG	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	1647	UG/KG	ND	ND	ND	130 J
	PAHs						
83-32-9	Acenaphthene	900	UG/KG	4100 J	ND	ND	350 J
208-96-8	Acenaphthylene	1051	UG/KG	3600 J	ND	ND	505 J
120-12-7	Anthracene	1594	UG/KG	9000 J	ND	ND	880 J
56-55-3	Benzo(a)anthracene	2949	UG/KG	12000 J	ND	ND	2600 J
50-32-8	Benzo(a)pyrene	2394	UG/KG	9900 J	80 J	ND	2450 J
205-99-2	Benzo(b)fluoranthene	2522	UG/KG	12000 J	ND	ND	3550 J
191-24-2	Benzo(g,h,i)perylene	1320	UG/KG	4700 J	ND	ND	1950 J
207-08-9	Benzo(k)fluoranthene	1904	UG/KG	4200 J	ND	ND	1400 J
219-01-9	Chrysene	3157	UG/KG	10000 J	ND	ND	2900 J
53-70-3	Dibenz(a,h)anthracene	160	UG/KG	1100 J	ND	ND	505 J
206-44-0	Fluoranthene	9002	UG/KG	33000 J	ND	53 J	4300 J
86-73-7	Fluorene	1267	UG/KG	7900 J	ND	ND	565 J
193-39-5	Indeno(1,2,3-cd)pyrene	1234	UG/KG	4900 J	ND	ND	2000 J
91-57-6	2-Methylnaphthalene	230	UG/KG	520 J	ND	ND	195 J
91-20-3	Naphthalene	770	UG/KG	730 J	ND	51 J	3800 J
85-01-8	Phenanthrene	7336	UG/KG	37000 J	ND	ND	2300 J
129-00-0	Pyrene	6170	UG/KG	24000 J	ND	ND	3800 J
	Total PAHs	43960		178650	80	104	34050
	INORGANICS						
7429-90-5	Aluminum	7534	MG/KG	3900	3520	3610	6900
7440-36-0	Antimony	7.11	MG/KG	ND	ND	ND	ND
7440-38-2	Arsenic	7.6	MG/KG	3.9	3.4	2.3	31.8
7440-39-3	Barium	70.8	MG/KG	24.4 J	12.4 J	17.7 J	128.1
7440-41-7	Beryllium	0.517	MG/KG	0.23 J	0.16 J	0.18 J	0.8 J
7440-43-9	Cadmium	1.287	MG/KG	0.49 J	ND	0.49 J	0.62 J
7440-70-2	Calcium	28651	MG/KG	13100	5600	5760	49250
7440-47-3	Chromium	50.9	MG/KG	12	6.7	6.6	522 J
7440-48-4	Cobalt	9	MG/KG	4 J	4.2 J	4.2 J	4.8 J
7440-50-8	Copper	57.2	MG/KG	10.9	4.8	9.6	54.5
7439-89-6	Iron	26702	MG/KG	8590	9320	7960	77650
7439-92-1	Lead	49.8	MG/KG	15.2	6.3	7.2	28.2
7439-95-4	Magnesium	6431	MG/KG	2600	3510	3360	10410 J
7439-96-5	Manganese	6574	MG/KG	119	85.7	87.4	10145
7439-97-6	Mercury	0.202	MG/KG	0.04 J	0.06 J	ND	0.17
7440-02-0	Nickel	23	MG/KG	13.5	9.3	11.4	18.3
7440-09-7	Potassium	839	MG/KG	653	671	742	264 J
7782-49-2	Selenium	-	MG/KG	ND	ND	ND	1.03
7440-22-4	Silver	1.5	MG/KG	6.6	ND	ND	ND
7440-23-5	Sodium	-	MG/KG	119 J	87.7 J	135 J	113.3 J
7440-28-0	Thallium	-	MG/KG	ND	ND	ND	ND
7440-62-2	Vanadium	23.3	MG/KG	14.2	13.3	8.8	84.8 J
7440-66-6	Zinc	129.3	MG/KG	78.6	32	44.8	128 J
57-12-5	Cyanide	-	MG/KG	ND	ND	ND	19.1

Bold Face - Indicates the maximum concentration detected for the sampling roun

- Indicates a concentration above the 95% UCL-S.

TABLE 3.3
CHERRY FARM/RIVER ROAD SITE
SEDIMENT GEOTECHNICAL DATA

Sample Location	Gravel (%)	Sand (%)	Silt/Clay (%)	Moisture Content (%)
100100	35.4	62.6	2.0	34
100020	9.7	64.5	25.8	43
100010	2.4	55.1	42.5	98
090100	0.0	22.1	77.9	112
090020	0.8	69.5	29.7	31
090010	0.2	73.3	26.5	47
080100	2.9	76.5	20.6	41
080020	1.6	97.5	0.9	30
080010	1.0	96.7	2.3	28
070100	43.1	54.3	2.6	24
070020	0.5	80.4	19.1	64
070010	55.6	43.1	1.3	26
060100	56.0	43.0	1.0	17
060020	3.9	93.2	2.9	26
060002	1.6	90.8	7.6	29
055100	6.1	93.2	0.7	25
055020	1.2	84.7	14.1	31
055002	0.0	82.2	17.8	33
050100	4.7	94.1	1.2	27
050020	1.2	84.7	14.1	31
050002	14.1	75.0	10.9	31
046100	10.1	89.8	0.1	31
045020	51.2	48.1	0.7	23
045010	46.1	38.1	15.8	28
043100	40.6	58.8	0.6	28
043020	26.9	60.8	12.3	27
043010	49.2	49.5	1.3	21
040100	10.8	75.0	14.2	44
040020	46.8	42.4	10.8	31
040010	69.1	30.0	0.9	18
037100	41.1	57.2	1.7	35
037020	27.2	59.2	13.6	33
037010	21.3	70.1	8.6	22
026100	0.2	79.6	20.2	35
026020	0.1	88.9	11.0	32
026010	1.9	88.5	9.6	28

SECTION 4
REMEDIAL ALTERNATIVES SCOPING FOR RIVER SEDIMENT

The purpose of this section is to identify the remedial alternatives scoping objectives, the alternative evaluation criteria, and the screening of potential remedial technologies for river sediment adjacent to the Site.

4.1 REMEDIAL ALTERNATIVES SCOPING OBJECTIVES

The primary objective of the remedial alternatives scoping is to provide preliminary information which could ultimately be used in the development of a Feasibility Study (FS). Various technologies are evaluated for effectiveness. Retained technologies are grouped together to form a remedial alternative. Each alternative is evaluated on the basis of effectiveness, implementability, and cost. The objective of the screening process is to narrow the list of potential technologies and alternatives. Screening streamlines the alternatives scoping process while ensuring that the most reasonable alternatives are being considered.

4.2 ALTERNATIVE EVALUATION CRITERIA

Each alternative is analyzed against the following three main criteria categories as described in the work plan submitted to NYSDEC in February, 1996: effectiveness, implementability, and cost. Table 4.1 presents a detailed list of criteria for each category to be used in the comparative analysis of alternatives.

4.2.1 Effectiveness

These evaluation criteria address a remedial action in terms of its permanence and quantity/nature of residual remaining at the Site. The alternatives are evaluated with respect to the extent and effectiveness of the controls that may be required to manage river sediment, and the operating system that may be necessary for the remedy to remain effective. In addition, the alternatives are evaluated for their effectiveness at addressing the goals and objectives of the future use for the Site. The effectiveness and permanence of a long-term remedial alternative includes consideration of the following:

- Protection of human health and the environment;
- Magnitude of the risk during and after remediation; and
- Compatibility with future land use.

4.2.2 Implementability

This evaluation criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of the services and materials required during its implementation. The implementability criterion considers the following: technical feasibility, availability, and administrative feasibility.

4.2.3 Cost

This evaluation criterion typically includes capital costs, and operation and maintenance costs. However, only direct capital costs will be considered in this report. Because a cleanup goal has not been defined, each alternative will be evaluated through a cost sensitivity analysis. Direct capital costs include labor, equipment, and material expenses necessary to implement the remedial actions. Operation and maintenance costs are the annual costs incurred after the remedial actions are constructed. These costs include those components which are necessary to ensure the continued effectiveness of the remedial actions. Cost estimates are used for comparative purposes, and their accuracy is approximately +50/-30 percent.

Alternatives are evaluated individually for their ability to meet each of the balancing criteria. They are then compared to each other in order to identify alternative(s) which provide the best relative "balance".

4.3 REMEDIAL TECHNOLOGY SCREENING

Technologies and process options identified and screened for the Cherry Farm/River Road Site are presented in Table 4.2. These technologies and options are categorized into general response actions which include no action, institutional actions, containment, sediment isolation, removal, dewatering, treatment, and disposal. Screening rationale for each technology or process option are presented in this section. The technologies and process options under each general response action are discussed below.

4.3.1 No Action

The No Action option needs to be considered as a baseline with which to compare other technologies. Under No Action, the existing site conditions would not be changed. is technically implementable but does not address existing PAH and metals no action concentrations in the sediment.

4.3.2 Institutional Actions

Institutional actions include deed restrictions on access to the site, posting advisories, and monitoring of sediments in the Niagara River.

Deed restrictions are legal tools that inhibit or prevent future development of a property. The Niagara River is regulated by New York State Office of General Services. The State could put deed restrictions on the property. However, the river is accessible to

the general public. Advisories are a more passive way to restrict river use, and they could be an effective deterrent to public usage.

Monitoring would be effective for documenting changes in river sediment conditions over time and would be easily implementable. Posting advisories and monitoring could be implemented, if needed, as part of any remedial alternative.

4.3.3 Containment

Containment technologies include various covering and capping options for contaminated sediments. Riprap stone could be used to cover areas to prevent direct contact with contaminated sediments. The riprap covering option would not be effective as a stand-alone technology, but could be combined with other technologies to form an effective alternative.

Two types of capping are armoring and a fabric-formed concrete cap. The effectiveness of the two proposed sediment caps is not proven. Armoring is a sediment containment technology in which a porous clean fill material, held in place between two layers of geotextile fabric, is placed over the affected sediments. Stone fill is placed above the top layer of fabric to "armor" the sediments. Armoring is still in the developmental stages and has not been demonstrated at full scale over a long period of time. Due to the erosion by continuous river currents and relatively steep slopes (10 percent) on the river bottom, it would be extremely difficult to maintain the stability and integrity of such a cap. Therefore, the technology of sediment armoring is eliminated from further consideration.

An articulated fabric-formed concrete cap is typically 4- to 6-inches thick and is composed of rectangular concrete blocks cast in place in a staggered pattern, and linked together by reinforcing cables. The blocks are inserted between two continuous layers of nylon fabric, prior to mortar injection. Cables allow the concrete blocks to articulate with changing soil and water conditions, and the nylon fabric allows water to escape while keeping solids in-place. The articulated cap is easy to install underwater, requires minimal maintenance, and has been widely used for a number of purposes including embankment erosion control, slope protection, rechannelization, and canal lining. However, the articulated cap has no proven record of application for waste containment. In addition, maintenance of the cap would be difficult due to the steep slopes (10 percent) at the river bottom. Thus, the articulated concrete cap technology is also eliminated from further consideration.

4.3.4 Isolation Technologies

Three isolation technologies were identified for possible application prior to and/or during sediment excavation. They include vertical barriers such as sheetpile walls and cofferdams. Other isolation technologies, such as silt curtains, could also be used in conjunction with one of these technologies.

A sheetpile wall is an array of interlocking steel sheetpiles. Each sheetpile can be fabricated to the required length and is typically 2 to 3 feet wide and less than 1-inch thick. A sheetpile wall would be effective as a hydraulic barrier to keep a disturbed area isolated from the river. Additional hydraulic control, such as pumping from within the isolated area, could be applied to enhance the effectiveness for a regular sheetpile wall that is not water-tight. Sealable joint sheetpiles are available if a water-tight seal is required. A sheetpile wall would be implementable, although additional structural support, such as beams, would most likely be required to maintain the wall stability in moving water. Sheetpile walls can be effective and have been retained.

A cofferdam is made of an array of circular earth-filled cells formed with sheetpile walls. A cofferdam would be effective both as a hydraulic and structural barrier and would eliminate the need for wet excavation, thereby, reducing the environmental impacts associated with sediment resuspension. However, up to 200,000 square feet of sheetpiles and 600,000 cubic yards of fill would be required to be installed and removed for the clean-up of the Cherry Farm/River Road Site. Therefore, implementation of this technology would be too costly to be practical for such a project when other alternatives do exist. Cofferdams, therefore, will not be incorporated into a remedial alternative.

Silt curtains are a fabric curtain hung across a water body and weighted at the bottom to contain suspended sediment particles. Silt curtains, if they are installed correctly for the particular application, can be an effective way to contain resuspended sediment particles. Because of the continuous river current, the silt curtain should be securely anchored by means of a series of pipe piles spaced at approximately 10-foot intervals. The fabric of the silt curtain would then be securely fastened to continuous tension members and fastened to the top and bottom of the pipe piles. Silt curtains have been retained as a potential remedial technology.

4.3.5 Removal Technologies

Removal technologies identified include mechanical excavation/dredging, hydraulic dredging, and pneumatic dredging. A comparison of these technologies is provided in Table 4.2.

Mechanical dredging removes sediments by direct application of mechanical forces to dislodge sediment material. The force is commonly applied, and the material is scooped away with a bucket. The most commonly used mechanical dredge is the clamshell dredge. Conventional clamshell dredges have widespread application for the removal of contaminated sediments. Recently, some clamshell buckets have been modified to reduce sediment resuspension and to achieve level cuts. However, when a modified clamshell bucket is used, other sediment resuspension controls, such as temporary sheetpile walls and/or silt curtains, may also be warranted. Mechanical dredging has been retained as a potential remedial technology.

Hydraulic dredging typically includes centrifugal pumps to remove and transport sediments in a liquid-slurry form. Often a cutterhead, or similar device, is fitted to the

suction end of the dredge to assist in dislodging bottom materials. Hydraulic dredges are usually barge-mounted and are widely available in the U.S. However, due to the hydraulic principals involved, hydraulic dredging cannot remove large debris (e.g., >6"). Hydraulic dredging can also cause significant sediment resuspension and large volumes of water would need to be managed onshore. Hydraulic dredging has been retained as a potential remedial technology.

Pneumatic dredging uses compressed air and/or hydrostatic pressure to remove sediments. It produces slurries of higher solids concentration than hydraulic dredging and causes less resuspension of bottom materials. However, its application has been limited to removal of soft, fine grained, sludge-like material and has not been demonstrated effectively on sediments with debris or on consolidated sediments such as those found at the Cherry Farm/River Road Site. Also, pneumatic dredging is not effective in shallow waters (e.g., less than seven feet deep). In addition, pneumatic dredging has had limited application and is not readily available in the United States. Thus, pneumatic dredging has not been retained as a potential remedial technology.

4.3.6 Dewatering Technologies

Dredged sediment would need to be dewatered prior to disposal. Potentially applicable technologies identified for sediment dewatering include recessed chamber presses, belt filter presses, and gravity dewatering.

Recessed chamber presses are based on applying mechanical force to a series of filter fabric chambers filled with sediment slurry to remove sediment water. It is capable of obtaining a greater percent solids than the belt filter press and other dewatering options. Recessed chamber presses are typically used to dewater sludges containing mostly clay-sized particles. It is more labor and energy intensive than the other dewatering options. Based on grain size analysis of sediments found adjacent to the Site, this technology would not be the most effective method for dewatering.

A belt filter press removes sediment water by pressing sediment between moving belts. It is less effective for sediments containing a higher percentage of clay-sized particles. Subsequent solidification may be required to achieve an adequate sediment compressive strength for landfill disposal. The belt filter press technology has been retained as a potential remedial technology.

Gravity dewatering removes water by placing sediments on a porous or highly permeable bed, and relies on gravity to drain the material. It achieves relatively low percent solids and the dewatered sediments would need solidification for offsite landfilling. This would significantly increase the volume for disposal. However, for some sandy sediments, such as those found adjacent to the Site, gravity dewatering would be effective. Consequently, gravity dewatering has been retained as a potential remedial technology.

4.3.7 Treatment Technologies

The process option used for treating water filtrate generated from sediment dewatering is typically granular filtration followed by activated carbon adsorption. Other proven technologies are available depending on the treatment requirements. These proven technologies are the most applicable based on the contaminants of concern (PAHs), and currently available treatment systems. Filtration and carbon absorption, for example, are effective for removal of PAHs. These technologies can be implemented easily due to their widespread availability and relatively simple components. Therefore, granular filtration, followed by activated carbon adsorption, has been retained for formation of remedial alternatives.

Potential applicable technologies identified for treatment of contaminated sediments include physical, chemical, thermal, and biological forms of treatment. These technologies are briefly described in Table 4.2. However, except for reducing moisture content to increase handling capability, sediment treatment process options are eliminated from further consideration due to the effectiveness and implementability problems associated with them. Onsite treatment would not be practical for the sediments due to the large mobilization cost associated with onsite treatment technologies and the small quantity of sediments. Solidification, however, has been retained because it would be an effective and implementable means of improving material handling.

4.3.8 Disposal

Potentially applicable disposal technologies include onsite and offsite landfilling. Landfilling of sediments containing PAHs can be done without prior treatment in accordance with existing regulations. Onsite landfilling could be easily accomplished due to the large available land space. Offsite landfilling could be accomplished as well; however, this technology would be more costly than onsite landfilling. Both technologies have been retained because they can be effective forms of disposal.

TABLE 4.1
COMPARATIVE ANALYSIS CRITERIA

Effectiveness

- Protection of human health and the environment;
- Magnitude of risk remaining after remediation; and
- Compatibility with future land use.

Implementability

- Technical feasibility;
- Availability; and
- Administrative feasibility.

Cost

- Direct capital cost.

Table 4.2
Cherry Farm/River Road - Niagara River Sediment
Remedial Technologies Screening

General Response Action	Technology Type	Process Options	Description	Effectiveness	Retained ?	
					Yes	No
No Action	No Action	None	No remedial actions	Not effective, however, will be retained as a baseline alternative for comparative purposes.	X	
Institutional Actions	Access Control	Deed Restrictions	Deeds for property in the areas of influence would include restrictions on access.	The property in the Niagara River is owned by New York State (Office of General Services). The State could put deed restrictions on the property, however, the river is accessible to the general public.		X
	Advisories	Posting Advisories	NYSDOH could post advisories along impacted areas of the river to caution potential river users.	Potentially effective means of identifying areas of concern.	X	
	Monitoring	Sediment Monitoring	Periodic sampling and analysis of sediments.	Effective means of documenting changes in chemical characteristics over time.	X	
Containment	Sediment Covering	Rip Rap	Stone fill placed over contaminated sediment areas.	Not effective as a stand alone technology, however, could be combined with other technologies.	X	
		Armoring Capping	Porous clean fill material over contaminated sediments held in place between two layers of geotextile fabric. Stone fill placed above top layer of fabric to "armor" the sediments.	Technology is not proven for waste containment.		X
		Articulated Fabric Formed Concrete Cap	Rectangular concrete blocks cast between two continuous layers of nylon fabric. Blocks are linked together by reinforcing cables which allow the cap to articulate.	Technology is not proven for waste containment.		X
Sediment Isolation	Vertical Barriers	Sheetpile Wall	Steel sheetpiles installed around contaminated area to prevent the mobilization of contaminated sediment or to provide a temporary hydraulically contained area for sediment removal.	Can be effective for a large area, however not cost effective for the sediment area being considered.	X	

Table 4.2
Cherry Farm/River Road - Niagara River Sediment
Remedial Technologies Screening

General Response Action	Technology Type	Process Options	Description	Effectiveness	Retained ?	
					Yes	No
Sediment Isolation (Cont.)		Cofferdam	Earth-filled interlocking sheetpile rings constructed around contaminated area and water pumped out in order to isolate the sediment for excavation.	Can be effective for a large area, however not cost effective for the sediment area being considered.		X
		Silt Curtain	Fabric curtain hung across a water body to retain suspended sediment particles from moving through.	Effective means to control sediment resuspention, if installed properly.	X	
Removal	Excavation	Mechanical Dredging	Physical removal of waste sediments using conventional earth moving equipment.	Effective means of excavating sediments, however, potential for resuspension of contaminated sediments exists.	X	
		Hydraulic Dredging	Wet excavation technology utilizing pumps to remove sediments in a liquid slurry form.	Could be effective if sediment can be pumped in a liquid slurry. Large volume of water will be removed in addition to the sediment.	X	
		Pneumatic Dredging	Wet excavation technology utilizing compressed air and/or hydrostatic pressure to remove sediments in a liquid slurry form. Produces slurries of higher solid concentrations and causes less sediment resuspension then hydraulic dredging.	Only effective for soft, fine grained sediment. Pneumatic dredging equipment has limited availability.		X
Dewatering	Dewatering	Recessed Chamber Press	Water removed by forcing sludge type material against filter cloth lining chambers in a filter press.	Effective, but costly and energy intensive. More effective for clayey silts.		X
		Belt Filter Press	Water removed by pressing sludge type material; between moving belts.	Sensitive to incoming feed characteristics. Less effective on sediments with high percent fines.	X	
		Gravity	Water removed by placing sediments on porous surface so water drains off by gravity.	Can be effective method if a large area can be utilized for dewatering.	X	

Table 4.2
Cherry Farm/River Road - Niagara River Sediment
Remedial Technologies Screening

General Response Action	Technology Type	Process Options	Description	Effectiveness	Retained ?	
					Yes	No
Sediment Treatment	Physical Treatment	Solidification	Process to mix an absorbent solid such as flyash or lime with wet sediment to improve material handling.	Effective for increasing mechanical strength of sediment, however, can be costly and not increased effectiveness over other technologies.		X
	Thermal Treatment	Incineration	Combustion/oxidation of waste materials at high temperatures.	Effective on distruction/removal of organic contaminants such as PAHs, however, can be costly.		X
		Thermal Desorption	Volatilization and extraction of organic contaminants at temperatures between 300 and 1150 degrees F.	Effective in treatment of PAH contaminated material, however, can be costly.		X
	Biological Treatment	Biodegradation	Treatment of sediments by enhancing growth of microbes that biodegrade contaminants.	Not effective for quickly responding to PAH and metals contamination.		X
Filtrate Treatment	Physio-Chemical	Granular Media Filtration followed by Carbon Adsorption	Dewatering liquids are passed through a dual media filter and then through a column of activated carbon	Effective for suspended solids and PAH removal.	X	
Disposal	Landfill	On-site Landfill	Disposal of waste in a on-site covered landfill.	Cost effective means of disposal if available.	X	
		Off-site Landfill	Disposal of waste in an approved off-site landfill.	Effective means of disposal but can be costly	X	

SECTION 5

SECTION 5
IDENTIFICATION AND SCREENING OF REMEDIAL ALTERNATIVES

In this section, the technologies and process options retained from the screening of technologies, presented in Section 4, are combined to form remedial alternatives. The developed alternatives are described and evaluated. In addition to the evaluation, alternatives are compared on the basis of effectiveness, implementability, and cost.

5.1 DESCRIPTION OF REMEDIAL ALTERNATIVES

Based on the response actions, remedial technologies and process options in Table 4.2, and remedial objectives presented in Section 4, four remedial alternatives have been developed, as shown in Table 5.1. These include a No Action alternative, covering/containment alternative, and two removal alternatives. Descriptions of the alternatives developed for river sediments, adjacent to the Site, are provided in the following paragraphs.

5.1.1 Alternative 1 - No Action/Monitoring

No remedial action would take place under this alternative. However, a number of non-intrusive techniques could be conducted to support the No Action Alternative. The No Action alternative could include the following items:

- Attempts would be made to restrict access to the river sediment around the identified area of concern to minimize potential public contact with the Site;
- Additional sediment samples would be collected, as necessary, to conduct risk assessments and to monitor the sediments over time;
- Human health and ecological risk assessments would be conducted, as warranted, to determine the potential risks to human health and the environment associated with the contaminated sediments; and
- A risk assessment report would be prepared presenting the results of the risk assessment and recommended future actions, if any, for the Site.

5.1.2 Alternative 2 - Cover In-Place

Alternative 2 would include the following items:

- Attempts would be made to restrict access to the river sediment around the identified area of concern to minimize potential public contact with the Site;

- Rip-rap would be used to cover the sediments in the area of concern to prevent contact with the contaminated sediments; and
- Sheetpile walls would be installed surrounding the area of concern to prevent the migration of contaminated sediments into the Niagara River.

5.1.3 Alternative 3 - Remove Sediment and Onsite Landfill

Alternative 3 includes the following items:

- Install silt curtains around the area of concern, if warranted;
- Hydraulic and/or mechanical dredging to remove contaminated sediments;
- Gravity and/or mechanical dewatering to remove excess water;
- Solidification or an equivalent step, if necessary, to improve material handling;
- Disposal of excavated sediments in an onsite location;
- Cover excavated sediments with 18 inches of cover soil and six inches of top soil; and
- If necessary, granular filtration followed by activated carbon adsorption to treat filtrate prior to discharge to the Town of Tonawanda POTW.

5.1.4 Alternative 4 - Remove Sediment and Offsite Landfill

Prior to implementing Alternative 4, a bench scale study would be necessary to determine the most effective dewatering and potential filtrate treatment system. Alternative 4 would include the following items:

- Install silt curtains around the area of concern, if warranted;
- Hydraulic/and or mechanical dredging to remove contaminated sediments;
- Gravity and/or mechanical dewatering to remove excess water;
- Solidification or an equivalent step, if necessary, to improve material handling;
- Disposal of excavated sediments at an offsite landfill; and
- If necessary, granular filtration followed by activated carbon adsorption to treat filtrate prior to discharge to the Town of Tonawanda POTW.

5.2 EVALUATION OF REMEDIAL ALTERNATIVES

The results of the evaluation based upon effectiveness, implementability, and cost are presented below and summarized in Table 5.1.

5.2.1 Alternative 1 - No Action

Effectiveness - This alternative would not be considered effective in protecting against adverse impacts, particularly impacts on aquatic biota and wildlife.

Implementability - Because no remedial action would be required, this alternative is implementable.

Cost - Cost estimates have been prepared for this alternative and are presented in Table 5.2. The total estimated cost for this alternative is $75,000.

5.2.2 Alternative 2 - Cover In-Place

Effectiveness - This alternative would be effective at preventing contact and migration of contaminated sediments. However, it does not address the leaching of contaminants into the Niagara River surface water, if such leaching is taking place.

Implementability - The equipment, material, and expertise needed to implement this alternative are readily available. Approvals/permits may be required from some or all of the following agencies: Army Corps of Engineers (ACOE), United States Coast Guard (USCG), Office of General Services (OGS), and New York State Power Authority (NYSPA).

Cost - The estimated cost for this alternative is highly dependent upon the area requiring covering. Three estimates have been prepared relating to three potential remedial volumes (17,000 cubic yards [cy], 24,000 cy, and 41,000 cy). The estimated costs range from $893,000 to $1,640,000. A breakdown of the cost estimates is presented in Table 5.3.

5.2.3 Alternative 3 - Remove Sediment and Onsite Landfill

Effectiveness - This alternative would increase the potential for short-term impacts on local biota due to sediment resuspension during remediation. The objectives of the dredging effort, in addition to removing the impacted sediment, are to control sediment resuspension in the river and to minimize impacts on river biota. Operational controls, such as properly installed silt curtains, could be implemented to reduce resuspension of sediment during dredging activities. Disposal of excavated sediment under an onshore cover would remove sediments from the river and provide onshore containment, thereby reducing potential impacts on human health and the environment.

Implementability - This alternative is implementable. There are a number of vendors that specialize in river dredging. A major concern with this alternative is the impact of sediment resuspension on the water quality at the downstream water intakes for the City of Lockport, City of Tonawanda, and the City of North Tonawanda. Approvals/permits from some or all of the following agencies may be required: Army Corps of Engineers (ACOE), United States Coast Guard (USGC), Office of General Services (OGS), and New York State Power Authority (NYSPA).

Cost - The estimated cost for this alternative is highly dependent upon the volume of sediment requiring excavation. Three estimates have been prepared relating to three potential remedial volumes (17,000 cy, 24,000 cy, and 41,000 cy). Costs for temporary placement of silt curtains have been included. The cost for treating the filtrate has not

been included in this estimate. Filtrate could be disposed directly back to the Niagara River, directly to the Town of Tonawanda POTW, pre-treated in the onsite WTP before discharge to the Town of Tonawanda POTW, or pre-treated with a temporary treatment system prior to discharge. The estimated costs range from $1,450,000 to $3,094,000. A breakdown of the cost estimates is presented in Table 5.4.

5.2.4 Alternative 4 - Remove Sediment and Offsite Landfill

Effectiveness - This alternative would increase the potential for short-term impacts on local biota due to sediment resuspension during remediation. The objectives of the dredging effort, in addition to removing the contaminated sediment, would be to control sediment resuspension in the river and to minimize impacts on river biota. Operational controls, such as properly installed silt curtains, could be implemented in order to reduce resuspension of sediment during dredging activities. Disposal of excavated sediment in a properly designed off-site landfill would contain the sediments and thereby reduce the impacts on human health and the environment.

Implementability - This alternative is implementable. There are a number of vendors that specialize in dredging construction. A major concern with this alternative is the impact of sediment resuspension on the water quality at the downstream water intakes for the City of Lockport, the City of Tonawanda, and the City of North Tonawanda. Approvals/permits may be required from some or all of the following agencies: Army Corps of Engineers (ACOE), United States Coast Guard (USCG), Office of General Services (OGS), and New York State Power Authority (NYSPA).

Cost - The estimated cost for this alternative is highly dependent upon the volume of sediment requiring excavation. Three estimates have been prepared relating to three potential remedial volumes (17,000 cy, 24,000 cy, and 41,000 cy). Costs for temporary placement of silt curtains have been included. The cost for treating the filtrate has not been included in this estimate. Filtrate could be disposed of directly back to the Niagara River, directly to the Town of Tonawanda POTW, pre-treated in the onsite water treatment plant before discharge to the Town of Tonawanda POTW, or pre-treated with a temporary treatment system prior to discharge. The estimated costs for this alternative range from $2,974,000 to $6,946,000. A breakdown of the cost estimates is presented in Table 5.5.

5.3 COMPARISON OF REMEDIAL ALTERNATIVES

Each alternative has been evaluated individually with respect to the three criteria in Section 5.2. A comparative analysis of the remedial alternatives for each of the evaluation criteria is presented in this section.

5.3.1 Effectiveness

The No Action alternative may not be effective at providing a long-term solution to the contaminated sediment. The risk assessments may indicate a potential threat to human health or the environment, in which case, additional work would be necessary.

Alternative 2 would leave sediments containing PAHs and metals above background levels in the river and possibly resulting in leaching of PAHs and some metals into the river water. Alternative 2 would not be considered a permanent remedy, but it offers a significant increase in effectiveness over the No Action alternative. Alternatives 3 and 4 would be an effective means of ensuring long-term protection to both human health and the environment because all of the contaminated sediments would be excavated and landfilled. Long-term monitoring of the river sediment may be needed under Alternatives 1 or 2. Sediment disposal to an offsite landfill would be an adequate option if the Cherry Farm/River Road Site was completely capped at the time of dredging. The dredging operation in Alternatives 3 and 4 would cause significant sediment resuspension; however, silt curtains, if properly installed and maintained, should control sediment mobilization.

5.3.2 Implementability

Alternatives 3 and 4 would require close coordination with the ACOE and the NYSDEC. Additionally, the OGS, NYSPA, and the USCG would need to be notified. The potential impact to downstream water intakes would also need to be investigated. The services and materials required to implement these alternatives are readily available.

Alternative 2 has few engineering and construction elements in comparison with Alternatives 3 and 4. The construction sequence would include placement of permanent sheetpile around the contaminated sediments in the river, and filling in of the contained area with riprap. No temporary silt curtains would be installed, and no dredging would be needed. A permit from the ACOE would be necessary for Alternatives 2, 3, or 4.

5.3.3 Cost

The costs developed for the four sediment alternatives are for comparison purposes only. The costs have been estimated for three potential sediment areas and volumes. A cost sensitivity chart is presented in Figure 5.1. Each alternative has been plotted according to the area or volume of sediment potentially to be addressed.

The least costly alternative is the No Action Alternative. The costs for this alternative do not fluctuate based on the area or volume of sediment. The costs for Alternatives 2, 3 and 4 would vary depending upon the area or volume of sediment. However, the alternative least susceptible to varying area or volume of sediment is Alternative 2, and the alternative most susceptible to varying area or volume of sediment is Alternative 4.

5.4 SELECTED REMEDY

The alternative recommended to control impacted sediment is Alternative 3 - sediment removal and onsite landfill. This recommendation includes dredging contaminated sediment via hydraulic dredging machinery. A pre-design bench-scale study would need to be conducted in order to determine the specific type of hydraulic dredging, dewatering equipment, water treatment, and extent of sediment removal.

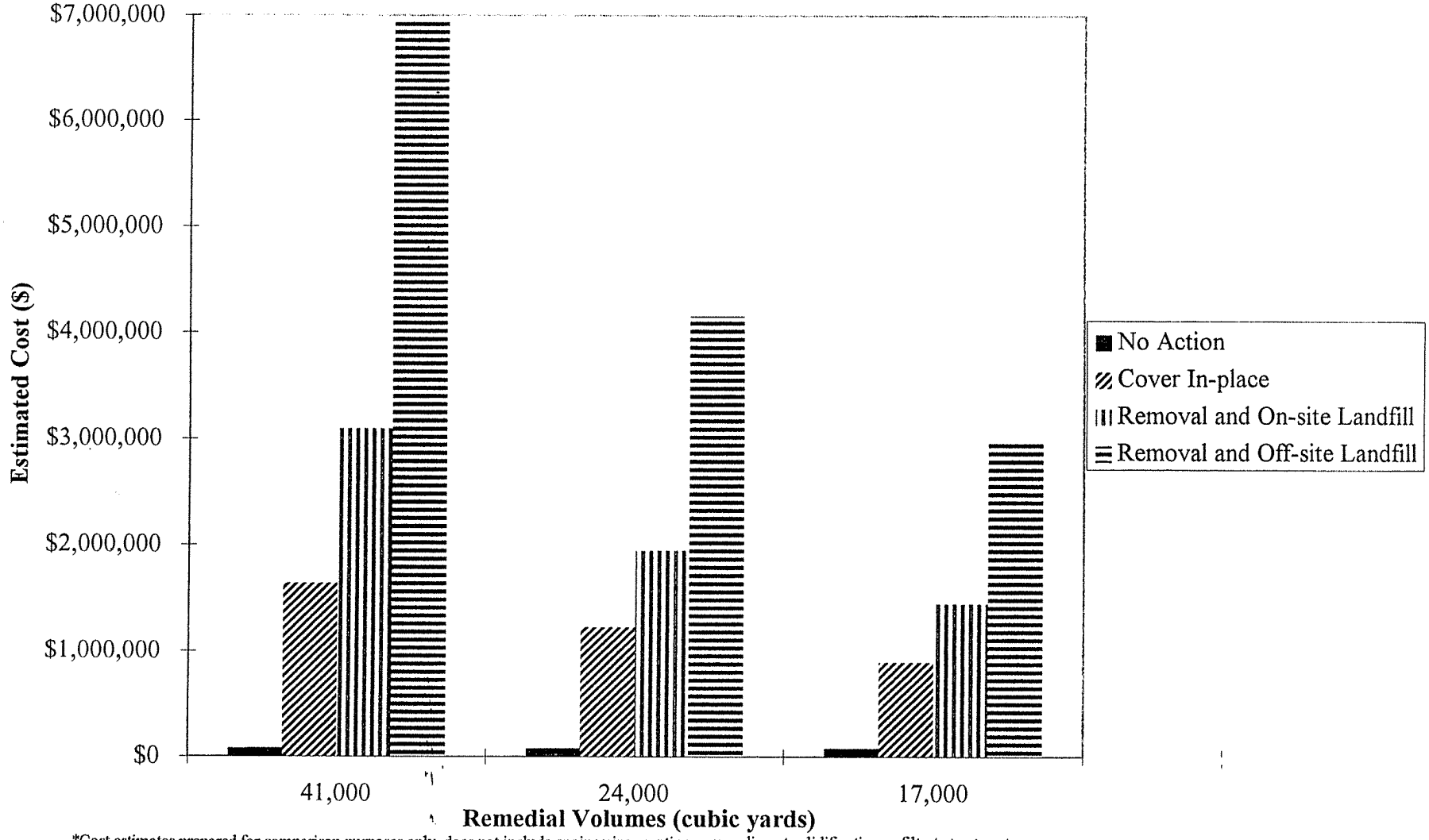
Figure 5.2 portrays a conceptual layout of the dewatering/filtrate treatment equipment and a possible onsite sediment disposal area.

The recommended alternative includes the following elements:

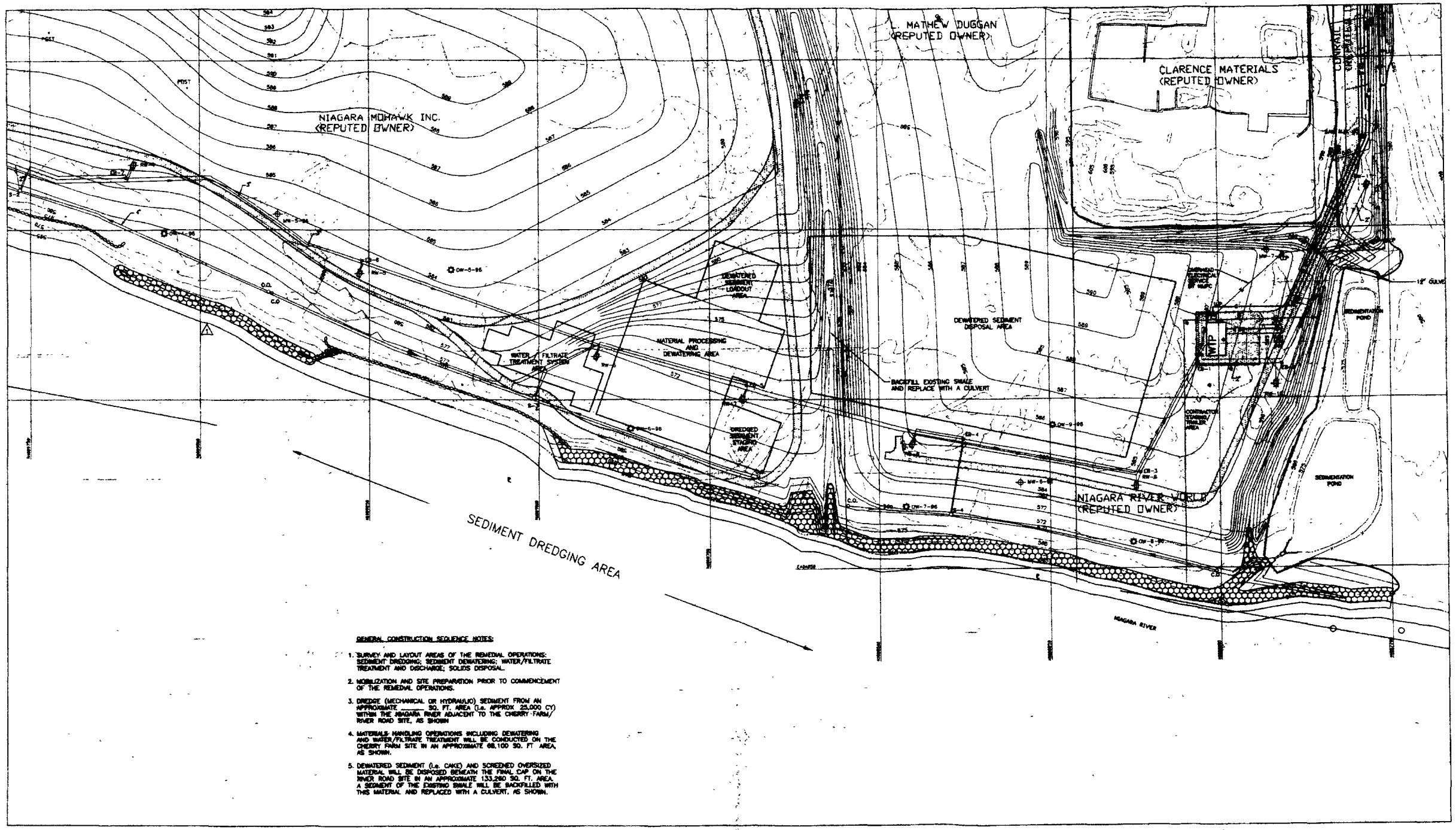
- Install temporary silt curtains around the area of concern, as needed, to control short-term impacts of sediment resuspension;
- Hydraulic and/or mechanical dredging to remove contaminated sediments;
- Gravity and/or mechanical dewatering to remove excess water;
- Solidification or equivalent, if necessary, to improve material handling;
- Disposal of excavated sediments in an onsite location;
- Cover excavated sediments with 18 inches of cover soil and 6 inches of top soil; and
- If necessary, granular filtration followed by activated carbon adsorption to treat filtrate prior to discharge to the Town of Tonawanda POTW.

This alternative should be able to be completed within one construction season. All dredging activities will be coordinated with the active onsite remediation and shoreline improvement activities.

Figure 5.1
Cherry Farm/River Road - Niagara River Sediments
Estimated Cost vs Volume of Sediment Controlled



*Cost estimates prepared for comparison purposes only, does not include engineering, contingency, sediment solidification or filtrate treatment.



GENERAL CONSTRUCTION SEQUENCE NOTES:

1. SURVEY AND LAYOUT AREAS OF THE REMEDIAL OPERATIONS: SEDIMENT DREDGING; SEDIMENT DEWATERING; WATER/FILTRATE TREATMENT AND DISCHARGE; SOLIDS DISPOSAL.
2. MOBILIZATION AND SITE PREPARATION PRIOR TO COMMENCEMENT OF THE REMEDIAL OPERATIONS.
3. DREDGE (MECHANICAL OR HYDRAULIC) SEDIMENT FROM AN APPROXIMATE ___ SQ. FT. AREA (i.e. APPROX 25,000 CY) WITHIN THE NIAGARA RIVER ADJACENT TO THE CHERRY FARM/ RIVER ROAD SITE, AS SHOWN
4. MATERIALS HANDLING OPERATIONS INCLUDING DEWATERING AND WATER/FILTRATE TREATMENT WILL BE CONDUCTED ON THE CHERRY FARM SITE IN AN APPROXIMATE 68,100 SQ. FT. AREA, AS SHOWN.
5. DEWATERED SEDIMENT (i.e. CAKE) AND SCREENED OVERSIZED MATERIAL WILL BE DISPOSED BENEATH THE FINAL CAP ON THE RIVER ROAD SITE IN AN APPROXIMATE 133,280 SQ. FT. AREA. A SEGMENT OF THE EXISTING SWALE WILL BE BACKFILLED WITH THIS MATERIAL AND REPLACED WITH A CULVERT, AS SHOWN.

LEGEND

- MW-1 PROPOSED MONITORING WELL
- RW-1 PROPOSED RECOVERY WELL AND VAULT
- PZ-1 PROPOSED OBSERVATION WELL
- PROPOSED COLLECTION SUMP
- ELECTRICAL PULL BOX
- SHALLOW GROUNDWATER INTERCEPTOR TRENCH
- ELECTRICAL- UNDERGROUND SERVICE
- GROUNDWATER CONVEYANCE PIPING
- PROPOSED FINAL GRADE INDEX CONTOUR
- PROPOSED FINAL GRADE INTERMEDIATE CONTOUR

60 30 0 60 120
SCALE: 1"=60'

Rev	Date	Description	By
A		ISSUED FOR REVIEW	

Job No. 738871
Designed JD
Drawn JTS
Checked
Reviewed
Approved
Reg No
Date

Issue Certification

PARSONS ENGINEERING SCIENCE, INC.
BUFFALO, NEW YORK (716) 633-7074

CHERRY FARM/RIVER ROAD PRP GROUP

PHASE II SEDIMENT INVESTIGATION
CHERRY FARM/RIVER ROAD SITE

CONCEPTUAL SEDIMENT DREDGING, DEWATERING AND DISPOSAL OPERATIONS

FIGURE 5.2 REV A

Table 5.1
Cherry Farm/River Road - Niagara River Sediment
Alternative Comparison

Alternative	Description	Effectiveness	Implementability	Cost ($)
1 - No Action	● Advisory Posting ● Sediment Monitoring ● Human Health Risk Assessment ● Ecological Risk Assessment ● Prepare Final Report	Monitoring and risk assessments could support the no action alternative, however, the risk assessment could indicate a potential threat. Additional remedial measures may be necessary.	Because no actions would be required except for monitoring and risk assessments, this alternative would be implementable.	$75,000
2 - Cover In-Place	● Advisory Posting ● Cover the river area with stone fill. ● Install sheet piling around the AOC	Effective at preventing contact and migration of contaminated sediments, however, does not address leaching of contaminants into the Niagara River.	This alternative is implementable from an administrative and technical feasibility.	$893,000 - $1,640,000
3 - Sediment Removal and On-site Landfill	● Install silt curtain surrounding the remedial area. ● Hydraulic dredging in the remedial area ● Dewater sediments on shore ● Place dewatered sediment appropriate onsite location ● Cover sediments with 18" cover soil and 6" topsoil ● Store decant water in on-site storage ● Treat stored water at on-site treatment facility and disposal to Tonawanda POTW. ● Solidify dewatered sediment (or equivalent) as needed for material handling	Hydraulic dredging could resuspend sediment, however, silt curtains would capture most sediment, if properly installed. May be only able to conduct dredging during certain times of the year. Onsite disposal of sediment can be consistent with plans for onsite remediation depending on timing	Implementable from a technical stand point. Would need to obtain permits and/or approvals from various agencies	$1,450,000- $3,094,000

Table 5.1
Cherry Farm/River Road - Niagara River Sediment
Alternative Comparison

Alternative	Description	Effectiveness	Implementability	Cost ($)
4 - Sediment Removal and Off-site Landfilling	● Install silt curtain surrounding the remedial area. ● Excavate sediment by hydraulic dredging sediment in the remedial area. ● Dewater sediments through high efficiency clarifiers. ● Dispose of dewatered sediment at an appropriate off-site landfill ● Store decant water in on-site storage ● Treat stored water at on-site treatment facility and disposal to Tonawanda POTW. ● Solidify dewatered sediment (or equivalent) as needed for material handling	Hydraulic dredging could resuspend sediment, however, silt curtains would capture most sediment, if properly installed. Sediment may be disposed of as either a hazardous or non hazardous waste depending upon TCLP results.	Implementable from a technical stand point. Would need to obtain permits and/or approvals from various agencies	$2,974,000 - 6,946,000

Note: AOC - Area of Concern, dependent upon clean-up goal.

Table 5.2
Cherry Farm/River Road - Niagara River Sediment Cost Estimate
Alternative 1 - No Action

Description	Unit	Quantity	Unit Cost	Total Cost
• Advisory Posting	Days	1	$1,600	$1,600
• Human Health Risk Assessment	Days	50	$640	$32,000
• Ecological Risk Assessment	Days	64	$640	$40,960
• Risk Assessment Sampling 2 men @ $40/hr/person + Barge Rental	Days	2	$3,800	$7,600
• Sample Analysis and Validation (Vegetation, PAH, Metals, CN and Conventionals) 10 sample locations	Ea	10	$1,000	$10,000
• Administration and Report	Hrs	250	$60	$15,000
Total Costs				$74,560

Notes: Cost estimate sources included:
1996 Construction Bid
Vendors
Parsons ES Experience
Estimates prepared for comparison purposes only, does not include engineering, or contingency.

Table 5.3

Cherry Farm/River Road - Niagara River Sediment Cost Estimate

Alternative 2 - Cover In-Place

Description	Unit	Quantity	Unit Cost	Total Cost
• Advisory Posting	Days	1	$1,600	$1,600
• Equipment Mobilization	LS	1	$25,000	$25,000
• Site Preparation	LS	1	$40,000	$40,000
• Install sheetpile walls around the AOC (assume 15 feet deep)				
Remedial Volume = 41,000 cy	SF	40500	$30	$1,215,000
Remedial Volume = 24,000 cy	SF	31500	$30	$945,000
Remedial Volume = 17,000 cy	SF	22500	$30	$675,000
• Place Rip Rap rocks over the AOC				
Remedial Volume = 41,000 cy	SY	20000	$18	$360,000
Remedial Volume = 24,000 cy	SY	12000	$18	$216,000
Remedial Volume = 17,000 cy	SY	8400	$18	$151,200
Total Cost (Remedial Volume = 41,000 cy)				$1,641,600
Total Cost (Remedial Volume = 24,000 cy)				$1,227,600
Total Cost (Remedial Volume = 17,000 cy)				$892,800

Notes: Cost estimate sources included:

1996 Construction Bid

Vendors

Parsons ES Experience

Estimates prepared for comparison purposes only, does not include engineering or contingency.

Table 5.4
Cherry Farm/River Road - Niagara River Sediment Cost Estimate
Alternative 3 - Sediment Removal and On-site Landfill

Description	Unit	Quantity	Unit Cost	Total Cost
• Equipment Mobilization	LS	1	$35,000	$35,000
• Site Preparation	LS	1	$80,000	$80,000
• Install Silt Curtain Around AOC				
Remedial Volume = 41,000 cy	LF	2700	$70	$189,000
Remedial Volume = 24,000 cy	LF	2100	$70	$147,000
Remedial Volume = 17,000 cy	LF	1500	$70	$105,000
• Remove Sediment via Hydraulic Dredging & Dewatering				
Remedial Volume = 41,000 cy	CY	41000	$60	$2,460,000
Remedial Volume = 24,000 cy	CY	24000	$60	$1,440,000
Remedial Volume = 17,000 cy	CY	17000	$60	$1,020,000
• Fill Swale Between River Road & Cherry Farm				
Remedial Volume = 41,000 cy	CY	41000	$5	$205,000
Remedial Volume = 24,000 cy	CY	24000	$5	$120,000
Remedial Volume = 17,000 cy	CY	17000	$5	$85,000
• Cover Sediments with 18" Cover Soil + 6" Topsoil	Acre	3	$41,730	$125,190
Total Cost (Remedial Volume = 41,000 cy)				$3,094,190
Total Cost (Remedial Volume = 24,000 cy)				$1,947,190
Total Cost (Remedial Volume = 17,000 cy)				$1,450,190

Notes: Cost estimate sources included:
1996 Construction Bid
Vendors
Parsons ES Experience
Estimates prepared for comparison purposes only, does not include engineering, contingency, sediment solidification or filtrate treatment.

Table 5.5
Cherry Farm/River Road - Niagara River Sediment Cost Estimate
Alternative 4 - Sediment Removal and Off-site Landfill

Description	Unit	Quantity	Unit Cost	Total Cost
• Equipment Mobilization	LS	1	$35,000	$35,000
• Site Preparation	LS	1	$80,000	$80,000
• Install Silt Curtain Around Area of Concern				
Remedial Volume = 41,000 cy	LF	2700	$70	$189,000
Remedial Volume = 24,000 cy	LF	2100	$70	$147,000
Remedial Volume = 17,000 cy	LF	1500	$70	$105,000
• Hydraulic Dredging and Bulk Dewatering				
Remedial Volume = 41,000 cy	CY	41000	$60	$2,460,000
Remedial Volume = 24,000 cy	CY	24000	$60	$1,440,000
Remedial Volume = 17,000 cy	CY	17000	$60	$1,020,000
• Dewater Sediment with Belt Filter Press				
Remedial Volume = 41,000 cy	CY	41000	$30	$1,230,000
Remedial Volume = 24,000 cy	CY	24000	$30	$720,000
Remedial Volume = 17,000 cy	CY	17000	$30	$510,000
• Off-site Disposal of Dewatered Sediments (Non-Hazardous)				
Remedial Volume = 41,000 cy	Ton	49200	$60	$2,952,000
Remedial Volume = 24,000 cy	Ton	28800	$60	$1,728,000
Remedial Volume = 17,000 cy	Ton	20400	$60	$1,224,000
Total Cost (Remedial Volume = 41,000 cy)				$6,946,000
Total Cost (Remedial Volume = 24,000 cy)				$4,150,000
Total Cost (Remedial Volume = 17,000 cy)				$2,974,000

Notes: Cost estimate sources included:
1996 Construction Bid
Vendors
Parsons ES Experience
Estimates prepared for comparison purposes only, does not include engineering, contingency, sediment solidification or filtrate treatment.

SECTION 6
REFERENCES

Desmond, 1995. New York State Department of Environmental conservation. Letter to the Cherry Farm/River Road PRP Group, November 2, 1995.

Dvirka and Bartilucci, 1993. Remedial Investigation and Feasibility Study, River Road Site, Town of Tonawanda, New York. Prepared by Dvirka and Bartilucci Consulting Engineers. September 1993.

Environmental Canada, 1994. Reports on the Water Quality Monitoring Program for Hamilton Harbour Contaminated Sediment Removal Demonstration and Toronto Harbour Contaminated Sediment Removal Demonstration.

NYSDEC 1989, 1991, 1993. New York State Department of Environmental Conservation Analytical Services Protocol dated September 1989 (revised December 1991, September 1993).

NYSDEC, 1990. Technical and Administrative Guidance Memorandum (TAGM) #HWR-90-4030, Selection of Remedial Actions at Inactive Hazardous Waste Sites. Revised May 15, 1990.

NYSDEC, 1992. Technical and Administrative Guidance Memorandum (TAGM) #HWR-92-4046, Determination of Soil Cleanup Objectives and Cleanup Levels. Department of Environmental Conservation. Albany, New York. Revised January 24, 1994.

NYSDEC, 1993. Technical Guidance for Screening Contaminated Sediments. New York State Department of Environmental Conservation, Division of Fish and Wildlife. November 1993.

O'Brien & Gere, 1989. Remedial Investigation - Cherry Farm Site, Tonawanda, New York. Prepared by O'Brien & Gere Engineers, Inc. June 1989.

Ontario Hydro, 1993. Cable Arm Environmental Dredging at Pickering Nuclear Generating Station. Paper given to Western Dredging Association, West Coast Chapter in October 1993.

Parsons ES, 1995. Phase I Sediment Data Assessment Report. Prepared by Parsons Engineering Science, Inc., Buffalo, New York. April 1995.

Parsons ES, 1996. Work Plan for Phase II Sediment Investigation and Remedial Alternatives Scoping at the Cherry Farm/River Road Site. Prepared by Parsons Engineering Science, Inc. February 1996.

Remcor, 1994. Sampling and Analysis Plan - Niagara River Sediments. Prepared for Cherry Farm/River Road PRPs, Prepared by Remcor, Inc., Pittsburgh, Pennsylvania. October 1994.

USACE, 1994. Personal Communication between Tony Eberhardt, Buffalo District Water Control Section; and Gene Melnyk, Parsons Engineering Science, Inc. December 12, 1994.

USEPA, 1988a. Laboratory Data Validation: Functional Guidelines for Evaluating Organic Analyses. Prepared for the Hazardous Site Evaluation Division. February 1988.

USEPA, 1988b. Laboratory Data Validation: Functional Guidelines for Evaluating Inorganic Analysis. Prepared for the Hazardous Site Evaluation Division. July 1988.

USEPA, 1991. Remediation of Contaminated Sediments. USEPA Handbook. April 1991.

USEPA, 1992a. Supplemental Guidance to RAGS: Calculating the concentration term. Office of Emergency and Remedial Response. Publication 9285.7-081. May 1992.

USEPA, 1992b. CLP Organics Data Review and Preliminary Review. SOP No. HW-6, Revision #8, USEPA Region II, January 1992.

USEPA, 1992c. Evaluation of Metals Data for the CLP Based on SOW 3/90. SOP No. HW-2, Revision #11, January 1992.

APPENDIX A

APPENDIX A
ENSYS STANDARD OPERATING PROCEDURES

ENSYS INC.
ENVIRONMENTAL PRODUCTS

PAH RISC® SOIL TEST SYSTEM

RAPID IMMUNOASSAY SCREEN

User's Guide

This method correctly identifies 95% of samples that are PAH-free and those containing 1ppm or greater of PAHs. A sample that develops less color than the standard is interpreted as positive. It contains PAHs. A sample that develops more color than the standard is interpreted as negative. It contains less than 1 ppm PAHs.

IMPORTANT NOTICE

This test system should be used only under the supervision of a technically qualified individual who is capable of understanding any potential health and environmental risks of this product as identified in the product literature. The components must only be used for the analysis of soil samples for the presence of PAHs. After use, the kits must be disposed of in accordance with applicable federal and local regulations.

TROUBLE SHOOTER GUIDE

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

Wash Step - Lack of vigorous washing may result in false positives or negatives depending on whether the wash error was committed on standard or sample tubes. *Solution*: Make sure that the operator washes four times vigorously.

Pipette Calibration - An out-of-calibration pipette may result in false positives or negatives depending on whether the amount is greater or less than the specified transfer volume. *Solution*: Check the calibration at least daily and after any extreme mechanical shock (such as dropping). An indication that the pipette is out of calibration is if the gold barrel is loose and will turn. (When set on 30 µl there should be about 1/4 of an inch between the white plunger and the end of the clear pipette tip.)

Air bubbles in the pipette - the presence of air bubbles in the pipette tip when transferring extracts may result in false positives or negatives depending on whether the error was committed on standard or sample tubes. *Solution*: quickly examine the pipette tip each time an aliquot is withdrawn and go back to the source and take another aliquot to displace the bubble if necessary.

Mixing - Lack of thorough mixing, when instructed, can cause inconsistent results. *Solution*: observe the mixing times in the instructions and mix with sufficient force to ensure that the liquid is homogeneous.

Timing - it is important to follow the timing steps in the instructions carefully. The incubation step in the antibody tubes can vary a bit without harm to the test. The color development step timing is critical and should be no less than 2 minutes and no greater than 3 minutes.

Wiping the Tubes - wiping of the tubes should be done before they are read in the spectrophotometer because smudges and fingerprints on the tubes can give potentially false negative readings.

Mixing Lot #'s never mix lots! Each kit's components are QC'd together for optimal performance and may give inaccurate results with components from other kits, that are not of the same lot #. Also, the user must NEVER mix components from different types of kits (ex: Petro kit buffer can't be used with a PAH kit).

Storage and Operating Temperatures - temperature requirements are very important and should be strictly adhered to. This test kit should be stored at less than 80°F/27°C and operated between 40°F/4°C and 90°F/32°C.

Shelf-life - each kit label contains the kit expiration date. To achieve accurate results, kits must be used prior to expiration.

TEST PREPARATION

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

READ BEFORE PROCEEDING

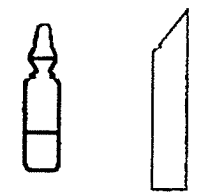
- Follow diagram on page 4 to setup workstation.
- Items that you will need that are not provided in the test kit include:
  a permanent marking pen, laboratory tissue (or paper towels), a liquid waste container, and disposable gloves.
- Operate test at temperatures greater than 4°C/40°F and less than 32°C/90°F.

TEST PREPARATION

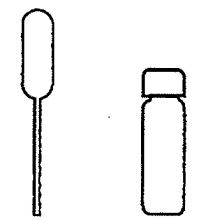
- Label amber vial "PAH standard" and the current date; Standard is usable for up to 2 weeks from this date. Open PAH Standard ampule by slipping ampule cracker over top, and then breaking top at scored neck. Transfer standard to empty amber vial with bulb pipette. Always cap tightly when finished using Standard.

- Label all Eppendorf repeater tips. Tips can be reused for future analyses. Label the first 5mL tip "A", the second 5mL tip "B" and the third 5mL tip "Stop".

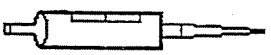
- Label the 12.5mL tip "Buffer".



PAH Standard | Ampule Cracker



Bulb Pipette | Amber Vial



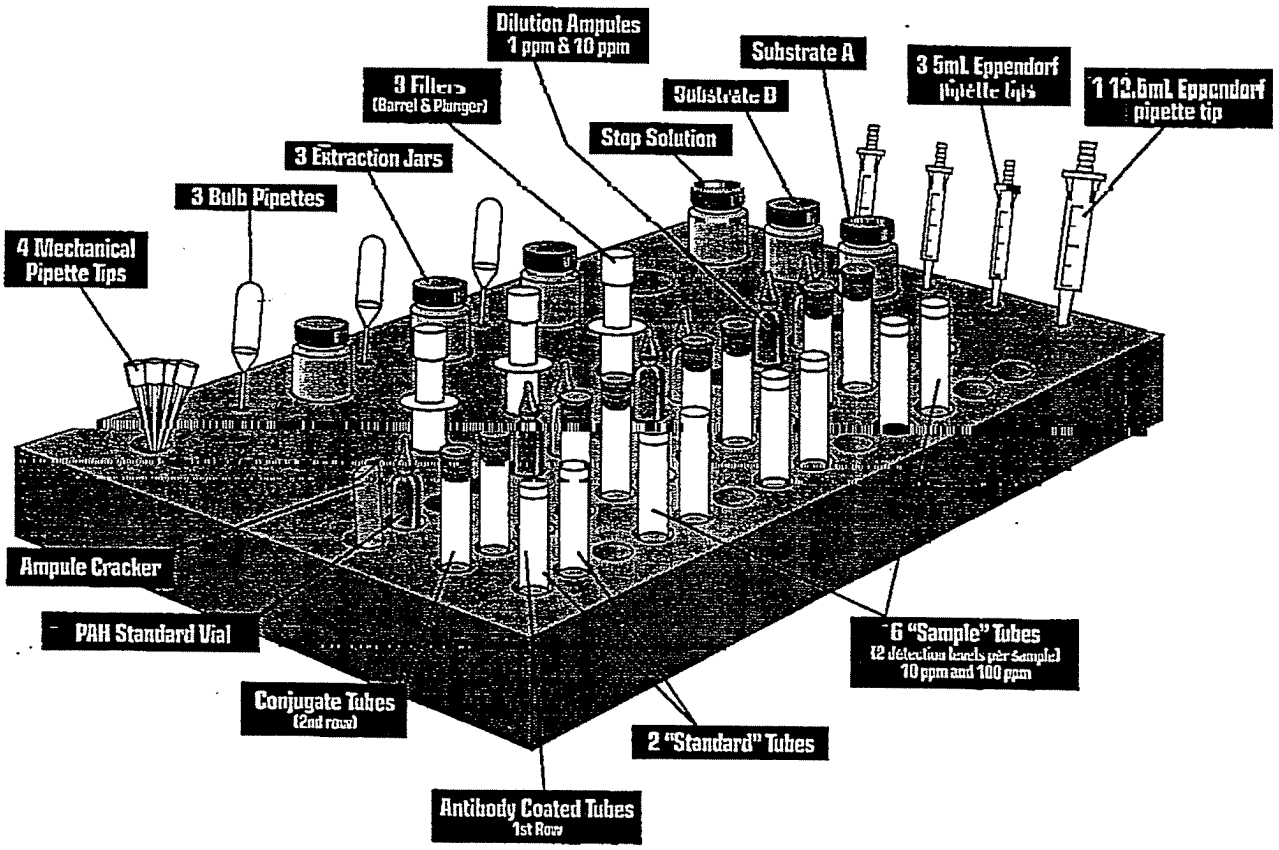
Eppendorf Tip

WORKSTATION SET-UP

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

WORKSTATION SET-UP

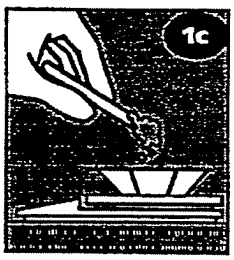
- Mechanical pipette tips
- Filter barrels & plungers
- Ampule cracker
- Substrate A
- Conjugate tubes
- Eppendorf pipette tips
- Bulb pipettes
- PAH standard
- Antibody coated tubes
- Substrate B
- Extraction jars
- 1 & 10 ppm dilution ampules
- Stop Solution



Workstation shows components for 3 samples tested at 2 levels

PHASE 1
EXTRACTION & PREPARATION OF THE SAMPLE
READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

WEIGH SAMPLE



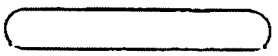
1a Place unused weigh boat on pan balance.

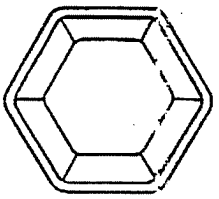
1b Press ON/MEMORY button on pan balance. Balance will beep and display 0.0.

1c Weigh out 10 ± 0.1 grams of soil.

1d If balance turns off prior to completing weighing, use empty weigh boat to retare, then continue.


Pan balance


Wooden spatula


Weigh Boat

EXTRACT PAHS

2a Uncap extraction jar and place on flat surface. Without contacting solvent, puncture foil seal with ampule cracker or sharp object. Peel the remainder of the seal off extraction jar.

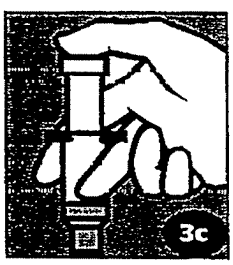
2b Using wooden spatula, transfer 10 grams of soil from weigh boat into extraction jar

2c Recap extraction jar tightly and shake vigorously for one minute.

2d Allow to settle for one minute. Repeat steps 1a -2c for each sample to be tested.


Sample extraction jar

FILTER SAMPLE



3a Remove lid from extraction jar.

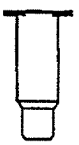
3b Disassemble filtration plunger from filtration barrel.

3c Insert bulb pipette into top (liquid) layer in extraction jar and draw up sample. Transfer at least ½ bulb capacity into filtration barrel. **Do not use more than one full bulb.**

3d Press plunger firmly into barrel until adequate filtered sample is available (place on table and press if necessary).

Sample is now ready to be tested with the immunoassay.


Filtration plunger


Filtration barrel


Bulb pipette

READ TO AVOID COSTLY MISTAKES

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

SAMPLE DILUTION PROGRAM FOR DETECTION LEVELS OTHER THAN 1 & 10PPM

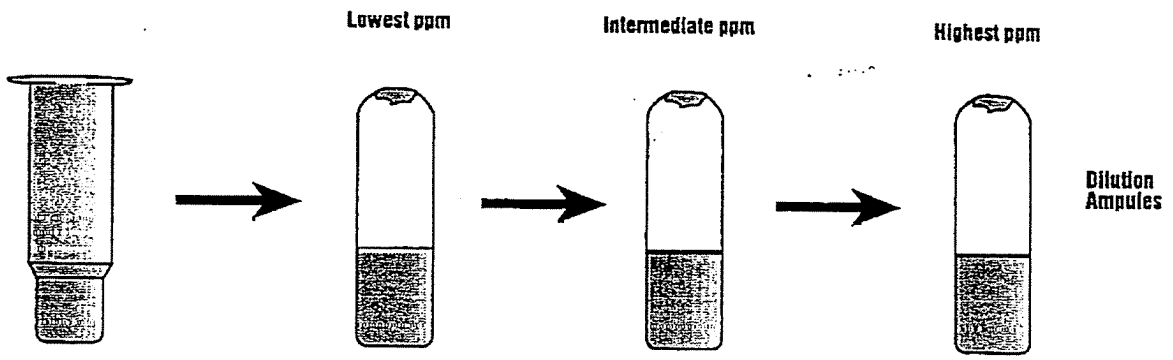
1. The sample dilution procedure on the next page is for standard detection levels. The following diagram represents the sample dilution procedure for all other detection levels.

2. Your kit may include extra dilution ampules to reach high detection levels.

3. **EVERY AMPULE PROVIDED MUST BE USED!**

If there are any questions concerning the dilution procedure please call Technical Services before running the samples to help avoid costly mistakes.
1-800-242-7472 or 919-941-5509.

EXAMPLE:



NOTE: Your order may include additional ampules in order to achieve your test levels. Always transfer filtered sample to the dilution ampule labeled with the lowest PPM level and then transfer from this ampule to the next higher level dilution tube.

PHASE 2
SAMPLE & STANDARD PREPARATION
READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

READ BEFORE PROCEEDING

- Label the glass conjugate and plastic antibody coated tubes with a permanent marking pen.
- When using the mechanical pipette always withdraw and dispense below the liquid level. Instructions for operating the Mechanical Pipette are found on page 14.
- "Shake tubes" means to thoroughly mix the contents with special care not to spill or splash.

DILUTE AND BUFFER SAMPLE FOR 1 PPM AND 10 PPM DETECTION LEVELS

4a Uncap enough conjugate, and antibody coated tubes for **Samples** and **Standards**.

4b Set the Eppendorf Repeater on 4, assemble the "Buffer" tip and fill with buffer.

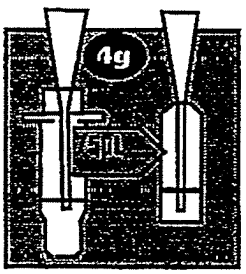
4c Dispense 1.00mL of Buffer into each conjugate tube.

4d Assemble new tip onto mechanical pipette.

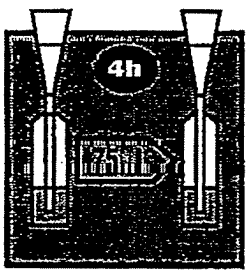
4e Open 1 and 10 ppm dilution ampules by slipping ampule cracker over tip, and then breaking top at scored neck.

PHASE 2
SAMPLE & STANDARD PREPARATION
READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

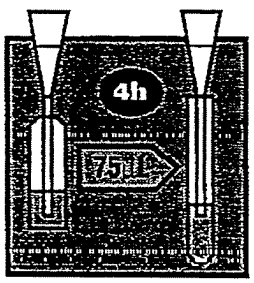
DILUTE AND BUFFER SAMPLE



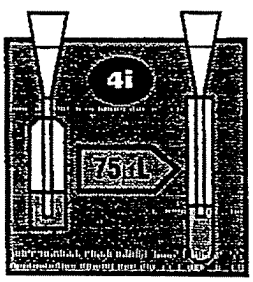
1 ppm



1 ppm 10 ppm



10 ppm 10 ppm



1 ppm 1 ppm

4f Withdraw 75 µL of filtered sample using mechanical pipette and dispense below the liquid level in 1 ppm dilution ampule. Gently shake ampule for 5 seconds.

4g Withdraw 75 µL of diluted sample from the 1 ppm dilution ampule and dispense below the liquid level in the 10 ppm dilution ampule. Gently shake ampule for 5 seconds.

4h Withdraw 75 µL of diluted sample from 10 ppm dilution ampule and dispense below the liquid level in corresponding conjugate tube. Always wipe tip after dispensing into conjugate tube. Withdraw 75µL of 1ppm sample and dispense into corresponding conjugate tube.

4i Assemble new tip onto mechanical pipette and withdraw **75µl** of PAH Standard and dispense below the liquid level in two conjugate tubes. Immediately replace cap on PAH Standard vial.

4j Gently shake conjugate tubes for 5 seconds.


Dilution ampules (1 & 10 ppm)


Plastic Safety Sleeve

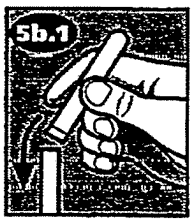

Mechanical pipette

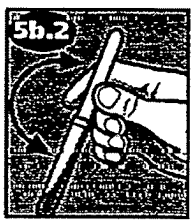

Mechanical pipette tip

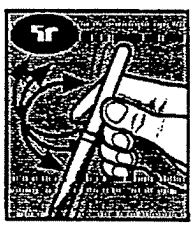
PHASE 3
THE IMMUNOASSAY

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

TRANSFER FROM CONJUGATE TUBE TO ANTIBODY COATED TUBE







5a. Set timer for 10 minutes.

5b. Working left to right in the workstation:

1. Fit all antibody coated tubes firmly on top of all corresponding conjugate tubes.

2. **Start timer and immediately** invert **all** connected tube pairs so that the liquid is poured into the antibody coated tubes. Return the tube pairs to the appropriate workstation row making sure the larger (antibody coated) tube is on the bottom.

5c. Invert all tube pairs several more times making sure the pair is returned to the workstation with the larger (antibody coated) tube on the bottom.

5d. Disconnect and discard the smaller glass conjugate tubes. [It is not important to worry about drops of liquid adhering to lips of tubes].

Antibody coated tubes (contained in resealable "zip-seal" aluminized pouch)

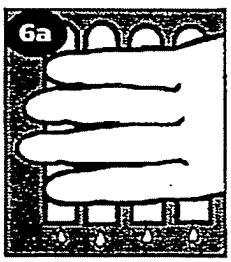
PHASE 3
THE IMMUNOASSAY

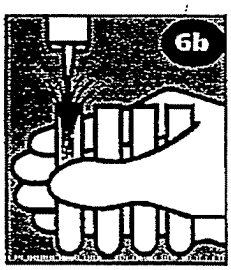
READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

READ BEFORE PROCEEDING

- An accurate test requires a vigorous wash accomplished by directing a strong stream into the antibody coated tubes.
- The wash solution is a harmless, dilute solution of detergent.

WASHING

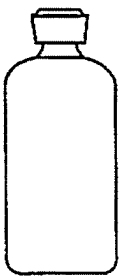




6a After the 10 minute incubation, empty antibody coated tubes into liquid waste container.

6b Wash antibody coated tubes by vigorously filling and emptying a total of 4 times.

6c After final wash, tap antibody coated tubes upside down on a laboratory tissue. Residual foam in the tubes will not interfere with the test results.



Wash bottle

PHASE 3
THE IMMUNOASSAY
READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

COLOR DEVELOPMENT

7a Set the Eppendorf Repeater on 2, assemble the "A" tip and fill with Substrate A (TMB, yellow label).

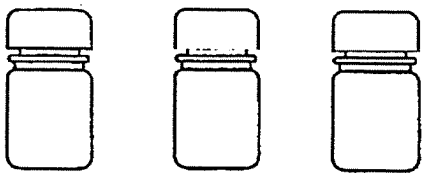
7b Dispense once (200µL) into each antibody coated tube.

7c Set timer for exactly 2 1/2 minutes.

7d Assemble "B" tip, fill with Substrate B, start timer, and dispense once (200µL H_2O_2, green label) into each antibody coated tube.

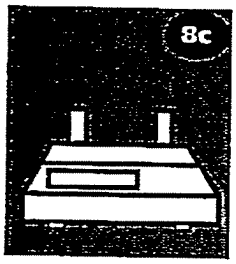
7e Shake all tubes for 5 seconds. Solution will turn blue in some or all antibody coated tubes.

7f Assemble "Stop" tip, fill with Stop Solution (red label) and stop reaction at end of 2 1/2 minutes by dispensing once (200µL) into each antibody coated tube.



PHASE 4
THE INTERPRETATION
READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

SELECT STANDARD



8a Wipe outside of all antibody coated tubes.

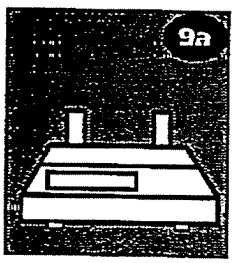
8b Place both **Standard** tubes in photometer.

8c Switch tubes until the photometer reading is negative or zero. Record reading.

If reading is greater than - 0.3 in magnitude , results are outside QC limits. Retest the sample(s).

8d Remove and discard tube in right well. The tube in the left well is the more conservative standard and should be used.

MEASURE SAMPLE



9a Place 1 ppm tube in right well of photometer and record reading shown on display.

If photometer reading is negative or zero, PAHs are present.

If photometer reading is positive, concentration of PAHs are less than 1 ppm.

9b Place 10 ppm tube in right well of photometer and record reading shown on display.

If photometer reading is negative or zero, PAHs are present.

If photometer reading is positive, concentration of PAHs are less than 10 ppm.

QUALITY CONTROL

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

How It Works

Standards, Samples, and color-change reagents are added to test tubes coated with a chemical specific to PAHs. The concentration of PAHs in an unknown Sample is determined by comparing its color intensity with that of a Standard.

Note: PAH concentration is inversely proportional to color intensity; the lighter the color development of the sample, the higher the concentration of PAHs.

Quality Control

Standard precautions for maintaining quality control:

- Do not use reagents or test tubes from one Test System with reagents or test tubes from another Test System.
- Do not use the Test System after its expiration date.
- Each analysis must include 2 Standards, with no more than a total of 12 antibody coated tubes.
- Do not exceed incubation periods prescribed by the specific steps.
- Results may not be valid if photometer reading for Standards exceed 0.3 in magnitude.

Storage and Handling Precautions

- Wear protective gloves and eyewear.
- Store kit at room temperature and out of direct sunlight (less than 80°F).
- Keep aluminized pouch (containing unused antibody coated tubes) sealed when not in use.
- If liquid from the extraction jar, or PAH Standard comes into contact with eyes, wash thoroughly with cold water and seek immediate medical attention.
- Operate test at temperatures greater than 40° F/4 °C and less than 90° F/32° C.
- After use, dispose of kit components in accordance with applicable federal and local regulations.

System Description

Each PAH RISc Soil Test System contains enough material to perform twelve complete tests, each at two detection levels.

The PAH RISc Soil Test is divided into four phases. The instructions and notes should be reviewed before proceeding with each phase.

Hotline Assistance

If you need assistance or are missing necessary Test System materials, call toll free: 1-800-242-RISC (7472).

Validation and Warranty Information

Product claims are based on validation studies carried out under controlled conditions. Data has been collected in accordance with valid statistical methods and the product has undergone quality control tests of each manufactured lot.

PAH-free soil and soil containing 1 ppm and 10 ppm of PAHs were tested with the EnSys PAH RISc analytical method. The method correctly identified 95% of these samples. A sample that has developed less color than the standard is interpreted as positive. It contains PAHs. Either a 1 ppm or a 10 ppm sample that has developed more color than the standard is interpreted as negative. It contains less than the indicated level of PAHs (1 ppm or 10 ppm).

The company does not guarantee that the results with the PAH RISc Soil Test System will always agree with instrument-based analytical laboratory methods. All analytical methods, both field and laboratory, need to be subject to the appropriate quality control procedures.

EnSys, Inc. warrants that this product conforms to the descriptions contained herein. No other warranties, whether expressed or implied, including warranties of merchantability and of fitness for a particular purpose shall apply to this product.

EnSys, Inc. neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than such as is expressly set forth herein.

Under no circumstances shall EnSys, Inc. be liable for incidental or consequential damages resulting from the use or handling of this product.

REPEATER PIPET & MECHANICAL PIPET

READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE TEST

HOW TO OPERATE THE REPEATER PIPET

To Set Or Adjust Volume

To determine the pipetting volume, the dial setting (1-5) is multiplied by the minimum pipetting volume of the tip.

To Assemble Pipette Tip

Slide filling lever down until it stops. Then raise the locking clamp and insert the tip until it clicks into position. Be sure the tip plunger is fully inserted into the barrel before lowering the locking clamp to affix the tip in place.

To Fill Tip

With tip mounted in position on pipette, immerse end of tip into solution. Slide filling lever upward slowly.

To Dispense Sample

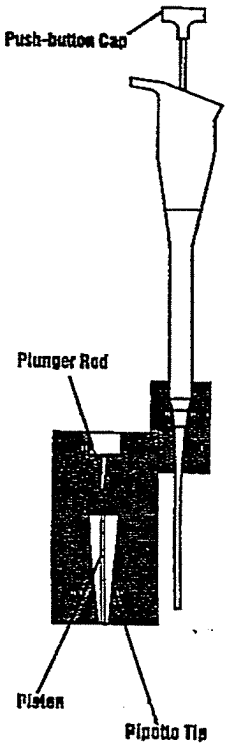
Check the volume selection dial to ensure pipetting volume. Place tip inside test tube so that tip touches the inner wall of tube. Completely depress the pipetting lever.

To Eject Tip

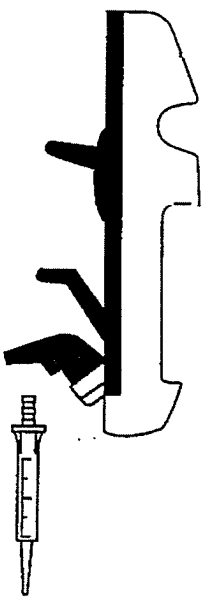
Empty tip of any remaining solution into appropriate container. Raise locking clamp upward, and remove the tip.

For additional information regarding operation and use of repeater, please refer to your Repeater pipet manual.

Mechanical Pipette



Repeater Pipet



HOW TO OPERATE THE MECHANICAL PIPETTE

To Set Or Adjust Volume

Remove push-button cap and use it to loosen volume lock screw. Turn lower part of push-button to adjust volume up or down. Meter should read "075". Tighten volume lock screw and replace push-button cap.

To Assemble Pipette Tip

Slide larger mounting end of pipette tip onto end of pipette. Holding tip in place, press push-button until plunger rod enters pipette tip. **Ensure no gap exists between piston and plunger rod.**

To Withdraw Sample

With tip mounted in position on pipette, press push-button to first stop and hold it.

Place tip at bottom of liquid sample and slowly release push-button to withdraw measured sample. Ensure that no bubbles exist in liquid portion of sample. If bubbles exist, dispense sample and re withdraw sample.

To Dispense Sample

Place tip into dispensing vessel (immersing end of the tip if vessel contains liquid) and slowly press push-button to first stop. (Do not push to second stop or tip will eject).

Remove tip from vessel and release push-button.

To Eject Tip

Press push-button to second stop. Tip is ejected.

For additional information regarding operation and use of pipette, please refer to your pipette manual.

Data for PAH RISC® Soil Test

Operator: _____ Date: _____ Location: _____

Sample ID	ΔOD	OD sample	Interpretation	OD sample	Interpretation	N O T E S
	Standards	_____ ppm		_____ ppm		

ON-SITE QUALITY CONTROL/QUALITY ASSURANCE RECOMMENDATIONS EnSys RISC® TEST SYSTEM

Please read the following before proceeding with field testing.

SAMPLING

The result of your screening test is only as valid as the sample that was analyzed. Samples should be homogenized thoroughly to ensure that the 10 grams you remove for field testing is representative of the sample as a whole. All other applicable sample handling procedures should be followed as well.

PRIOR TO TESTING SAMPLES

Carefully follow the instructions in the User's Guide included with every test kit. This is the key element in obtaining accurate results. In addition, store your unused test kits at room temperature and do not use them past their expiration date (see label on each test kit).

INTERNAL TEST QC

Two standards are analyzed with each sample to provide internal test system quality control. With both standards inserted in the photometer, a valid test is indicated when the magnitude of the displayed number (irrespective of the sign, + or -) is less than the value given in the User's Guide. Test runs resulting in a greater number should be repeated to ensure valid conclusions.

QA/QC

The validity of field test results can be substantially enhanced by employing a modest, but effective QA/QC plan. EnSys recommends that you structure your QA/QC plan with the elements detailed below. These have been developed based on the data quality principles established by the U.S. Environmental Protection Agency.

A. Sample Documentation
   1. Location, depth
   2. Time and date of collection and field analysis

B. **Field analysis documentation** - provide raw data, calibration, any calculations, and final results of field analysis for all samples screened (including QC samples)

C. **Method calibration** - this is an integral part of EnSys RISC® immunoassay tests; a duplicate calibration is performed for each set of samples tested (see the instructions in the User's Guide)

D. **Method blank** - analyze methanol from the extraction jar.

E. **Site-specific matrix background field analysis** - collect and field analyze uncontaminated sample from site matrix to document matrix effect

F. **Duplicate sample field analysis** - field analyze duplicate sample to document method repeatability; at least one of every 20 samples should be analyzed in duplicate

G. **Confirmation of field analysis** - provide confirmation of the quantitation of the analyte via an EPA-approved method different from the field method on at least 10% of the samples; choose at least two representative samples testing above the action level; provide chain of custody and documentation such as gas chromatograms, mass spectra, etc.

H. **Performance evaluation sample field analysis (optional, but strongly recommended)** - field analyze performance evaluation sample daily to document method/operator performance

I. **Matrix spike field analysis (optional)** - field analyze matrix spike to document matrix effect on analyte measurement

FURTHER QUESTIONS?

EnSys technical support personnel are always prepared to discuss your quality needs to help you meet your data quality objectives.

APPENDIX B
DATA VALIDATION REPORT

DATA VALIDATION REPORT

FOR

NIAGARA RIVER
PHASE II SEDIMENT INVESTIGATION AND
REMEDIAL ALTERNATIVES SCOPING REPORT

CHERRY FARM SITE
TONAWANDA, NEW YORK
(NYSDEC SITE NO. 9-15-063)

RIVER ROAD SITE
TONAWANDA, NEW YORK
(NYSDEC SITE NO. 9-15-031)

Prepared by:

PARSONS ENGINEERING SCIENCE
180 LAWRENCE BELL DRIVE, SUITE 100
WILLIAMSVILLE, NEW YORK 14221
PHONE (716) 633-7074
FAX (716) 633-7195

OCTOBER 1996

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SECTION 1

DATA VALIDATION SUMMARY

Sediment samples were collected from the Cherry Farm - River Road Site in Tonawanda, New York from June 24, 1996 through July 2, 1996. Analytical results from these samples were validated and reviewed by Parsons Engineering Science, Inc. (Parsons ES) for usability with respect to the following requirements:

- Quality Assurance Project Plan (QAPjP),
- NYSDEC Analytical Services Protocol (ASP) dated September 1989 with December 1991 and September 1993 revisions, and
- USEPA Region II Standard Operating Procedures (SOP) in "CLP Organics Data Review and Preliminary Review," SOP No. HW-6, Revision #8, January 1992, and "Evaluation of Metals Data for the CLP Based on SOW 3/90," SOP No. HW-2, Revision #11, January 1992.

The analytical laboratory for this project was NYTEST Environmental, Inc. (NEI). This laboratory is certified by the New York State Department of Health under the Environmental Laboratory Approval Program (ELAP) to perform analyses in accordance with the NYSDEC ASP, dated September 1989 with December 1991 and September 1993 revisions.

It was noted that the sediment samples were shipped to NEI in Port Washington, New York after collection. Once received at NEI in New York, these samples were then shipped to NEI-GTEL in Milford, New Hampshire. As a result, the samples which were scheduled for semivolatile analysis (base/neutral and acid fractions) were logged in at NEI-GTEL for base/neutral analysis only using the USEPA SW-846 8270b analytical method rather than the NYSDEC ASP 91-2 analytical method. Therefore, the samples were not spiked with acid surrogates, with the exception of one sample delivery group, and an evaluation of semivolatile sample quality was not able to be completed for the acid compounds. NEI-GTEL was able to quantify detections of acid compounds in samples and re-issue the semivolatile sample data results. Therefore, it is advised that the reviewer use sample results from the first data submission for the base/neutral data and the second data submission for the acid sample data. NEI and NEI-GTEL have implemented corrective action measures to remedy similar situations in the future through the usage of a new communication system.

1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons ES, was 30 days on average for sediment samples.

The data packages received from NEI were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation reports which are summarized by sample delivery group (SDG) in Section 2.

1.2 SAMPLING AND CHAIN-OF-CUSTODY

Sediment samples, composing three SDGs (SDGs CFSED1, CFSED2, and CFSED3), were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received at NEI in Port Washington, New York within one to two days of sampling. However, these samples were then shipped to NEI-GTEL laboratories in Milford, New Hampshire due to capacity problems consequently resulting in samples being received within five to eight days of sampling. All samples were received intact and in good condition at NEI-GTEL.

1.3 LABORATORY ANALYTICAL METHODS

Sediment samples were collected from the Cherry Farm Site and analyzed for semivolatile organic compounds (SVOCs), and inorganics (metals and cyanide). Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.2. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method by SDG in Section 2. The laboratory data were reviewed and qualified with the following validation flags:

"U" - not detected at the value given,

"UJ" - estimated and not detected at the value given,

"J" - estimated at the value given,

"N" - presumptive evidence at the value given, and

"R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Semivolatile Organic Analysis

The sediment samples collected from the Cherry Farm Site were analyzed for TCL SVOCs using the USEPA SW-846 8270b analytical method. All reported results for the TCL SVOC samples were qualified as estimated due to noncompliant sample holding times. The TCL SVOC analyses were 100% complete and all data were considered usable

and valid for the sediment SDGs presented by NEI and PARCC requirements were met overall.

1.3.2 Inorganics

The sediment samples collected from the Cherry Farm Site were analyzed for inorganics using the NYSDEC ASP CLP-M analytical method. Certain reported results for the inorganic samples were qualified as estimated due to noncompliant holding times, calibrations, matrix spike recoveries, laboratory duplicate precision, serial dilution, duplicate injection recoveries, and method of standard additions. The inorganic analyses were 100% complete and all data were considered usable and valid for the sediment SDGs presented by NEI and PARCC requirements were met overall.

SECTION 2

DATA VALIDATION REPORTS BY SDG

2.1 SDG CFSED1

Data review has been completed for SDG CFSED1 data packages generated by NEI containing sediment samples collected from the Cherry Farm site. The specific samples contained in this SDG, the analyses performed, and a usability summary are presented in Table 2.1-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data for this SDG are presented in Attachment A.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs and the NYSDEC ASP for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.1.1 TCL Semivolatiles

The following items were reviewed for compliancy and transcription/calculation accuracy from the raw data in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Matrix spike blank (MSB) recoveries
- Laboratory method blank and field blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Data completeness

TABLE 2.1-1

SUMMARY OF SAMPLE ANALYSES AND USABILITY FOR SDG CFSED1

CHERRY FARM

SAMPLE ID	MATRIX	SAMPLE DATE	TCL SVOC	INORGANICS
23020S	Soil	6/25/96	OK	OK
23060S	Soil	6/25/96	OK	OK
23100S	Soil	6/25/96	OK	OK
26150S	Soil	6/25/96	OK	OK
26150D	Soil	6/25/96	OK	OK
32020S	Soil	6/25/96	OK	OK
32020D	Soil	6/25/96	OK	OK
32060S	Soil	6/25/96	OK	OK
32060D	Soil	6/25/96	OK	OK
32100S	Soil	6/25/96	OK	OK
40150S	Soil	6/25/96	OK	OK
43060S	Soil	6/25/96	OK	OK
43100S	Soil	6/25/96	OK	OK
43150S	Soil	6/25/96	OK	OK
SWALE	Soil	6/25/96	OK	OK
SWALE DUP	Soil	6/25/96	OK	OK
45020S	Soil	6/25/96	OK	OK
45100S	Soil	6/25/96	OK	OK
45150S	Soil	6/24/96	OK	OK
WB-1	Water	6/25/96	OK	OK
TOTAL SAMPLES:			20	20

NOTES: OK - Sample analysis considered valid and usable.

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times; surrogate recoveries; MS/MSD precision and accuracy; and laboratory method blank contamination.

Holding Times

Since project samples were initially received by NEI in New York and then shipped to NEI-GTEL in New Hampshire for analysis where these samples were received five to eight days from sample collection, the NYSDEC advised Parsons ES to evaluate holding times with respect to USEPA holding time criteria (see Telephone Record in Attachment B). As a result, all semivolatile samples exceeded the seven day extraction holding time requirement by four to six days. Therefore, all semivolatile samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Surrogate Recoveries

Recoveries of sample surrogates were compliant and within QC criteria with the exception of the base/neutral (B/N) surrogate 2-fluorobiphenyl recovery in WB-1 (130%; QC limit 30-115%), the acid surrogate phenol-d6 recoveries in 32100S and 45020S (114% and 119%, respectively; QC limit 24-113%), and the 2,4,6-tribromophenol recoveries in 23100S and 45100S (126% and 124%, respectively; QC limit 19-122%). Validation qualification of these samples was not warranted due to these noncompliances since only one B/N or acid surrogate was noncompliant in the affected samples.

MS/MSD Precision and Accuracy

All of the relative percent difference (RPD) and spike recoveries (%R) during MS/MSD analysis were within QC limits with the exception of the MS recoveries for 4-nitrophenol (119%; QC limit 11-114%) and pentachlorophenol (114%; QC limit 17-109%). Validation qualification was not warranted due to these noncompliances.

Laboratory Method Blank Contamination

One laboratory method blank (SBLK02) associated with sample WB-1 contained phenol, 2-chlorophenol, 1,4-dichlorobenzene, N-Nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, 4-chloro-3-methylphenol, acenaphthene, 4-nitrophenol, 2,4-dinitrotoluene, pentachlorophenol, and pyrene at concentrations of 28, 29, 2, 3, 2, 24, 2, 27, 2, 4, and 2 µg/L, respectively. None of these compounds are common laboratory contaminants and were considered by the laboratory as a result of carry-over from the laboratory control sample. Since the sample associated with this laboratory method blank did not contain any of these compounds, sample results were not affected and validation qualification was not warranted.

Usability

All TCL semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The semivolatile data package presented by NEI was 100% complete and all data were considered usable and valid. The validated semivolatile laboratory data are tabulated and presented in Attachment A. This table presents the most representative semivolatile data for a sample location resulting from validation.

For example, sample 32100S was diluted and reanalyzed since the original analysis of this sample yielded naphthalene, fluoranthene, and pyrene above the highest calibration standard. Similarly, sample 45020S was reanalyzed at a dilution due to target compounds (phenanthrene, fluoranthene, and pyrene) exceeding the highest calibration standard. All of the validated results from the diluted samples where instrument calibration ranges were exceeded in the original analysis were considered compliant and representative of these samples. These results were reported for the sample and qualified "D" in the validated laboratory data table presented in Attachment A.

It was noted that sample 32060S contained less than 50% solids (48%). Therefore, all sample results for 32060S were considered estimated with positive results qualified "J" and nondetected results qualified "UJ".

It was also noted that NEI-GTEL reextracted and reanalyzed samples 40150S, 45150S, and SWALE (40150SRE, 45150SRE, and SWALE RE, respectively) one month after the original extraction and analysis for comparative purposes only. Therefore, results from these reextractions and reanalysis should be disregarded due to grossly exceeded holding times resulting in unusable data for 40150SRE, 45150SRE, and SWALE RE.

2.1.2 Inorganics

The following items were reviewed for compliancy and transcription/calculation accuracy from the raw data in the inorganic analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation, and field blank contamination
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample

- ICP serial dilution
- Furnace atomic absorption (AA) analysis
- Method of standard additions
- Sample result verification and identification
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of standard recoveries; laboratory blank contamination; matrix spike recoveries; laboratory duplicate precision; and furnace AA analysis.

Calibrations

All initial and continuing calibration verifications were compliant and considered acceptable. All CRDL standards for AA and ICP were analyzed at the appropriate concentrations and frequency and considered acceptable with the exception of the CRDL standards recovered outside the 80-120% criteria for those analytes summarized in Table 2.1.2-1. Positive results for cadmium were considered estimated, possibly biased high, and qualified "J" in the affected samples since recoveries exceeded QC limits for the CRDL standard. All results for antimony in the affected samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ". Validation qualification was not warranted for selenium and mercury since samples were not affected.

Laboratory Blank Contamination

All laboratory QC blanks (initial and continuing calibration blanks and preparation blanks) associated with samples within this SDG did not contain inorganic contamination with the exception of lead analyzed by ICP detected in continuing calibration blanks ranging from 17.8 µg/L to 22.4 µg/L. Since the concentrations in these blanks were less than two times the instrument detection limit (IDL), validation qualification was not required for the affected sample WB-1 which was the only sample analyzed for lead by ICP.

Matrix Spike Recoveries

The matrix spike (MS) analysis was performed on sample SWALE. All the MS recoveries were within the 75-125% control limits with the exception of antimony (67.2%), vanadium (-65.4%), and zinc (285.8%). The positive results for zinc for the soil samples in this SDG were considered estimated, possibly biased high, and qualified "J". All soil results for antimony and vanadium were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

TABLE 2.1.2-1

INORGANIC CRDL[1] STANDARD RECOVERY OUTLIERS

CHERRY FARM

CRDL STANDARD ANALYTE	PERCENT RECOVERY (%)	AFFECTED SAMPLES
antimony	74.3	None
	67.3	23020S, 23060S, 23100S, 26150S, 26150D, 40150S, 43060S, 43150S, 45150S, 45100S
	77.4	32020S, 32020D, 32060S, 32060D, 32100S, 43100S, SWALE DUP, 45020S, WB-1
	66.5	None
	59.1	SWALE
	68.9	None
cadmium	120.1	23020S, 23060S, 23100S, 26150S, 26150D, 40150S, 43060S, 43150S, 45150S, 45100S
	122.7	None
mercury	125.0	None
selenium	75.2	None

NOTES: [1] - Contract Required Detection Limit.

Laboratory Duplicate Precision

The laboratory duplicate analysis was performed on sample SWALE. The precision of all of the analytes were compliant with the exception of the RPDs for aluminum (63.7%), chromium (120.7%), copper (28.4%), vanadium (70.9%), calcium (75.7%), magnesium (115.8%), and manganese (76.3%) which exceeded the RPD criteria. Validation qualification was only warranted for soil samples in this SDG for chromium, magnesium, and vanadium. Therefore, all results for these analytes were considered estimated with positive results qualified "J" and nondetected results qualified "UJ".

Furnace AA Analysis

The furnace AA analysis was performed on furnace metals arsenic, lead, selenium, and thallium. All duplicate injections agreed within 20% RSD or Coefficient of Variation (CV) for concentrations greater than the CRDL and analytical spike recoveries were within the 85-115% control limits with the exception of those spike recoveries for AA metals summarized in Table 2.1.2-2. Those AA metals with analytical spike recoveries greater than 115% were considered estimated and qualified "J" in the affected samples. For those AA metals with analytical spike recoveries less than 85%, sample results were considered estimated with positive results qualified "J" and non-detected results qualified "UJ".

Usability

All inorganic sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The inorganic data package presented by NEI was 100% complete and all data were considered valid and usable. The validated inorganic laboratory data are tabulated and presented in Attachment A.

It was noted that sample 32060S contained less than 50% solids (48%). Therefore, all sample results for 32060S were considered estimated with positive results qualified "J" and nondetected results qualified "UJ".

It was also noted that sample WB-1 was not analyzed for cyanide due to incorrect sample preservation in the field. This sample was a field equipment blank.

TABLE 2.1.2-2

INORGANIC AA ANALYTICAL SPIKE RECOVERY OUTLIERS

CHERRY FARM

AA ANALYTE	SPIKE RECOVERY (%)	AFFECTED SAMPLES
selenium	116.6	23020S
	123.6	26150S
	70.6	43150S
	58.8	45020S
	69.9	45100S
	81.4	45150S
thallium	73.0	23020S
	61.6	23060S
	41.7	23100S
	78.1	26150D
	74.6	32060S
	75.8	32100S
	75.4	40150S
	40.0	43150S
	54.0	SWALE
	76.9	SWALE DUP
	57.9	45020S
	55.9	45100S
	76.4	45150S

2.2 SDG CFSED2

Data review has been completed for SDG CFSED2 data packages generated by NEI containing sediment samples collected from the Cherry Farm site. The specific samples contained in this SDG, the analyses performed, and a usability summary are presented in Table 2.2-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data for this SDG are presented in Attachment A.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs and the NYSDEC ASP for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.2.1 TCL Semivolatiles

The following items were reviewed for compliancy and transcription/calculation accuracy from the raw data in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- MSB recoveries
- Laboratory method blank and field blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times; surrogate recoveries; MS/MSD precision and accuracy; and laboratory method blank contamination.

TABLE 2.2-1

SUMMARY OF SAMPLE ANALYSES AND USABILITY FOR SDG CFSED2

CHERRY FARM

SAMPLE ID	MATRIX	SAMPLE DATE	TCL SVOC	INORGANICS
37060S DUP	Soil	6/26/96	OK	OK
37060S	Soil	6/26/96	OK	OK
37060D	Soil	6/26/96	OK	OK
37020S	Soil	6/26/96	OK	OK
37020D	Soil	6/26/96	OK	OK
37100S	Soil	6/26/96	OK	OK
37100D	Soil	6/26/96	OK	OK
37150S	Soil	6/26/96	OK	OK
50060S	Soil	6/26/96	OK	OK
80060S	Soil	6/26/96	OK	OK
82020S	Soil	6/26/96	OK	OK
82100S	Soil	6/26/96	OK	OK
46150S	Soil	6/24/96	OK	OK
32150S	Soil	6/28/96	OK	OK
20060S	Soil	6/28/96	OK	OK
WB-2	Water	6/27/96	OK	OK
TOTAL SAMPLES:			16	16

NOTES: OK - Sample analysis considered valid and usable.

Holding Times

Since project samples were initially received by NEI in New York and then shipped to NEI-GTEL in New Hampshire for analysis where these samples were received five to eight days from sample collection, the NYSDEC advised Parsons ES to evaluate holding times with respect to USEPA holding time criteria (see Telephone Record in Attachment B). As a result, all semivolatile samples exceeded the seven day extraction holding time requirement by two to four days. Therefore, all semivolatile samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Surrogate Recoveries

Recoveries of sample surrogates were compliant and within QC criteria with the exception of the base/neutral (B/N) 2-fluorobiphenyl and terphenyl-d14 recoveries in 20060S (28%; QC limit 30-115%) and 37060S DUP (143%; QC limit 18-137%), respectively. Validation qualification of these samples was not warranted due to these noncompliances since only one B/N surrogate was noncompliant in the affected sample.

MS/MSD Precision and Accuracy

MS/MSD analyses were performed for location 37060S. All of the relative percent difference (RPD) and spike recoveries (%R) were within QC limits with the exception of the MS recovery for pyrene (167%; QC limit 35-142%) and the RPD for pyrene (63%; QC limit 0-36%). Validation qualification was not warranted in the unspiked sample for pyrene since all surrogate recoveries and internal standards were acceptable and within criteria. Therefore, there were no interferences resulting from matrix effects on sample 37060S.

Laboratory Method Blank Contamination

One laboratory method blank (SBLK02) associated with sample WB-2 contained phenol, 2-chlorophenol, 1,4-dichlorobenzene, N-Nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, 4-chloro-3-methylphenol, acenaphthene, 4-nitrophenol, 2,4-dinitrotoluene, pentachlorophenol, and pyrene at concentrations of 28, 29, 2, 3, 2, 24, 2, 27, 2, 4, and 2 µg/L, respectively. None of these compounds are common laboratory contaminants and were considered by the laboratory as a result of carry-over from the laboratory control sample. Since the sample associated with this laboratory method blank did not contain any of these compounds, sample results were not affected and validation qualification was not warranted.

However, the field equipment blank WB-2 associated with all semivolatile samples within this SDG contained diethylphthalate at a concentration of 1 µg/L = 33.3 µg/kg. Therefore, all sample concentrations less than the validation action concentration for diethylphthalate (333 µg/kg) were considered laboratory artifacts and qualified "U" in the validated laboratory data table.

Usability

All TCL semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The semivolatile data package presented by NEI was 100% complete and all data were considered usable and valid. The validated semivolatile laboratory data are tabulated and presented in Attachment A. This table presents the most representative semivolatile data for a sample location resulting from validation.

For example, samples 37060S DUP, 37060D, and 37100S were diluted and reanalyzed since the original analysis of these samples yielded naphthalene above the highest calibration standard. Similarly, sample 37020S was reanalyzed at a dilution due to target compounds (naphthalene, phenanthrene, fluoranthene, pyrene, and benzo(b)fluoranthene) exceeding the highest calibration standard. All of the validated results from the diluted samples where instrument calibration ranges were exceeded in the original analysis were considered compliant and representative of the sample. These results were reported for the sample and qualified "D" in the validated laboratory data table presented in Attachment A.

2.2.2 Inorganics

The following items were reviewed for compliancy and transcription/calculation accuracy from the raw data in the inorganic analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation, and field blank contamination
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample
- ICP serial dilution
- Furnace atomic absorption (AA) analysis
- Method of standard additions
- Sample result verification and identification

- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times; standard recoveries; laboratory blank contamination; matrix spike recoveries; and furnace AA analysis.

Holding Times

Since project samples were initially received by NEI in New York and then shipped to NEI-GTEL in New Hampshire for analysis where these samples were received five to eight days from sample collection, the NYSDEC advised Parsons ES to evaluate holding times with respect to USEPA holding time criteria (see Telephone Record in Attachment B). As a result, the cyanide sample 37060S exceeded the 14 day analytical holding time requirement by 11 days. Therefore, the positive cyanide result reported for 37060S was considered estimated and qualified "J".

Calibrations

All initial and continuing calibration verifications were compliant and considered acceptable. All CRDL standards for AA and ICP were analyzed at the appropriate concentrations and frequency and considered acceptable with the exception of the CRDL standards recovered outside the 80-120% criteria for those analytes summarized in Table 2.2.2-1. Positive results for cadmium and mercury were considered estimated, possibly biased high, and qualified "J" in the affected samples since recoveries exceeded QC limits for the CRDL standards. All results for antimony in the affected samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Laboratory Blank Contamination

All laboratory QC blanks (initial and continuing calibration blanks and preparation blanks) associated with samples within this SDG did not contain inorganic contamination with the exception of lead analyzed by ICP detected in continuing calibration blanks ranging from 17.8 µg/L to 22.4 µg/L. Since the concentrations in these blanks were less than two times the instrument detection limit (IDL), validation qualification was not required for the affected sample WB-2 which was the only sample analyzed for lead by ICP.

Matrix Spike Recoveries

The matrix spike (MS) analysis was performed on sample 37060S. All the MS recoveries were within the 75-125% control limits with the exception of selenium (56.5%), thallium (51.4%), and cyanide (40%). All results for selenium, thallium, and cyanide for the soil samples in this SDG were considered estimated with positive results qualified "J" and nondetected results qualified "UJ".

TABLE 2.2.2-1

INORGANIC CRDL[1] STANDARD RECOVERY OUTLIERS

CHERRY FARM

CRDL STANDARD ANALYTE	PERCENT RECOVERY (%)	AFFECTED SAMPLES
antimony	74.3	None
	67.3	37150S, 50060S, 80060S, 82020S, 82100S, 46150S, 32150S, 20060S
	59.1	None
	68.9	37060S
	77.4	37060S DUP, 37060D, 37020S, 37020D, 37100S, 37100D, WB-2
cadmium	122.7	None
	120.1	37150S, 50060S, 80060S, 82020S, 82100S, 46150S, 32150S, 20060S
mercury	140.0	82020S

NOTES: [1] - Contract Required Detection Limit.

Furnace AA Analysis

The furnace AA analysis was performed on furnace metals arsenic, lead, selenium, and thallium. All duplicate injections agreed within 20% RSD or Coefficient of Variation (CV) for concentrations greater than the CRDL and analytical spike recoveries were within the 85-115% control limits with the exception of those spike recoveries for AA metals summarized in Table 2.2.2-2. Those AA metals with analytical spike recoveries greater than 115% were considered estimated and qualified "J" in the affected samples. For those AA metals with analytical spike recoveries less than 85%, sample results were considered estimated with positive results qualified "J" and non-detected results qualified "UJ".

Usability

All inorganic sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The inorganic data package presented by NEI was 100% complete and all data were considered valid and usable. The validated inorganic laboratory data are tabulated and presented in Attachment A.

It was noted that sample WB-2 was not analyzed for cyanide due to incorrect sample preservation in the field. This sample was a field equipment blank.

2.3 SDG CFSED3

Data review has been completed for SDG CFSED3 data packages generated by NEI containing sediment samples collected from the Cherry Farm site. The specific samples contained in this SDG, the analyses performed, and a usability summary are presented in Table 2.3-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data for this SDG are presented in Attachment A.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs and the NYSDEC ASP for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.3.1 TCL Semivolatiles

The following items were reviewed for compliancy and transcription/calculation accuracy from the raw data in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries

TABLE 2.2.2-2

INORGANIC AA ANALYTICAL SPIKE RECOVERY OUTLIERS

CHERRY FARM

AA ANALYTE	SPIKE RECOVERY (%)	AFFECTED SAMPLES
selenium	52.3	37060S DUP
	57.2	37060S
	69.7	37060D
	68.8	37020D
	60.2	37100S
	70.3	37100D
	72.4	37150S
	79.6	80060S
	77.2	82100S
	75.8	82020D
thallium	44.2	37060S DUP
	52.2	37060S
	51.2	37060D
	46.5	37020S
	56.8	37020D
	52.5	37100S
	42.6	37100D
	48.0	32150S
	69.4	20060S

TABLE 2.3-1

SUMMARY OF SAMPLE ANALYSES AND USABILITY FOR SDG CFSED3

CHERRY FARM

SAMPLE ID	MATRIX	SAMPLE DATE	TCL SVOC	INORGANICS
32100D	Soil	7/2/96	OK	OK
32100D DUP	Soil	7/2/96	OK	OK
37200S	Soil	7/2/96	OK	OK
37060D	Soil	7/2/96	OK	OK
37100D	Soil	7/2/96	OK	OK
43060D	Soil	7/2/96	OK	OK
43100D	Soil	7/2/96	OK	OK
45020D	Soil	7/1/96	OK	OK
45100D	Soil	7/1/96	OK	OK
50060D	Soil	7/2/96	OK	OK
78100S	Soil	7/2/96	OK	OK
40150D	Soil	7/2/96	OK	OK
37060DD	Soil	7/2/96	OK	OK
WB-3	Water	6/28/96		OK
TOTAL SAMPLES:			13	14

NOTES: OK - Sample analysis considered valid and usable.

- MS/MSD precision and accuracy
- MSB recoveries
- Laboratory method blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times and surrogate recoveries.

Holding Times

Since project samples were initially received by NEI in New York and then shipped to NEI-GTEL in New Hampshire for analysis where these samples were received five to eight days from sample collection, the NYSDEC advised Parsons ES to evaluate holding times with respect to USEPA holding time criteria (see Telephone Record in Attachment B). As a result, all semivolatile samples exceeded the seven day extraction holding time requirement by one to two days. Therefore, all semivolatile samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Surrogate Recoveries

Recoveries of sample surrogates were compliant and within QC criteria with the exception of the base/neutral (B/N) surrogate 2-fluorobiphenyl recovery for sample 45020D (118%; QC limit 30-115%). Validation qualification of this sample was not warranted due to this noncompliance since only one B/N surrogate was noncompliant.

Usability

All TCL semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The semivolatile data package presented by NEI was 100% complete and all data were considered usable and valid. The validated semivolatile laboratory data are tabulated and presented in Attachment A. This table presents the most representative semivolatile data for a sample location resulting from validation.

For example, samples 50060D and 40150D were diluted and reanalyzed since the original analysis of these samples yielded phenanthrene, fluoranthene, and pyrene above the highest calibration standard. Similarly, sample 37060D was reanalyzed at a dilution due to target compounds (naphthalene, phenanthrene, fluoranthene, pyrene, and benzo(b)fluoranthene) exceeding the highest calibration standard. Sample 43100D was diluted and reanalyzed because phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and benzo(a)pyrene exceeded calibration ranges. Sample 45020D was diluted and reanalyzed because naphthalene, 2-methylnaphthalene, acenaphthylene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, and benzo(b)fluoranthene exceeded calibration ranges. Sample 45100D was diluted and reanalyzed because phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and benzo(k)fluoranthene exceeded calibration ranges. All of the validated results from the diluted samples where instrument calibration ranges were exceeded in the original analysis were considered compliant and representative of the sample. These results were reported for the sample and qualified "D" in the validated laboratory data table presented in Attachment A.

2.3.2 Inorganics

The following items were reviewed for compliancy and transcription/calculation accuracy from the raw data in the inorganic analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation, and field blank contamination
- Inductively coupled plasma (ICP) interference check sample
- Matrix spike recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample
- ICP serial dilution
- Furnace atomic absorption (AA) analysis
- Method of standard additions
- Sample result verification and identification
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of standard recoveries; matrix spike recoveries;

laboratory duplicate precision; ICP serial dilution; furnace AA analysis; and method of standard additions.

Calibrations

All initial and continuing calibration verifications were compliant and considered acceptable. All CRDL standards for AA and ICP were analyzed at the appropriate concentrations and frequency and considered acceptable with the exception of the CRDL standards recovered outside the 80-120% criteria for those analytes summarized in Table 2.3.2-1. Positive results for mercury were considered estimated, possibly biased high, and qualified "J" in all samples since recoveries exceeded QC limits for the CRDL standard associated with the samples in this SDG. All results for antimony in the affected samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Matrix Spike Recoveries

The matrix spike (MS) analysis was performed on sample 37200S. All the MS recoveries were within the 75-125% control limits with the exception of thallium (52.2%). All results for thallium for the soil samples in this SDG were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Laboratory Duplicate Precision

The laboratory duplicate analysis was performed on sample 37200S. The precision of all of the analytes were compliant with the exception of the RPD for zinc (30.7%) which exceeded criteria. Validation qualification was not warranted for samples in this SDG since the RPD was < 100%.

ICP Serial Dilution

The ICP serial dilution for this SDG was performed on sample 37200S. QC results for target analytes were compliant except for zinc which exceeded the %D > 10% criteria with %D = 24.7%. Positive sample results $\geq$ 10 X the IDL for zinc in all soil samples in this SDG were considered estimated with positive results qualified "J".

TABLE 2.3.2-1

INORGANIC CRDL[1] STANDARD RECOVERY OUTLIERS

CHERRY FARM

CRDL STANDARD ANALYTE	PERCENT RECOVERY (%)	AFFECTED SAMPLES
antimony	77.4	None
	66.5	WB-3, 37200S
	75.5	None
	59.1	None
	68.9	78100S, 40150D, 37060DD
mercury	125.0	WB-3
	140.0	All (except WB-3)

NOTES: [1] - Contract Required Detection Limit.

Furnace AA Analysis

The furnace AA analysis was performed on furnace metals arsenic, lead, selenium, and thallium. All duplicate injections agreed within 20% RSD or Coefficient of Variation (CV) for concentrations greater than the CRDL and analytical spike recoveries were within the 85-115% control limits with the exception of those spike recoveries for AA metals summarized in Table 2.3.2-2. Those AA metals with analytical spike recoveries greater than 115% were considered estimated and qualified "J" in the affected samples. For those AA metals with analytical spike recoveries less than 85%, sample results were considered estimated with positive results qualified "J" and non-detected results qualified "UJ".

Method of Standard Additions

Method of standard additions (MSA) were performed by the laboratory when warranted. All MSA correlation coefficients were greater than the QC criteria of 0.995 with the exception of selenium in 45020D (0.9941). The positive selenium result in 45020D was considered estimated and qualified "J".

Usability

All inorganic sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The inorganic data package presented by NEI was 100% complete and all data were considered valid and usable. The validated inorganic laboratory data are tabulated and presented in Attachment A.

It was noted that sample WB-3 was not analyzed for cyanide due to incorrect sample preservation in the field. This sample was a field equipment blank.

TABLE 2.3.2-2

INORGANIC AA ANALYTICAL SPIKE RECOVERY OUTLIERS

CHERRY FARM

AA ANALYTE	SPIKE RECOVERY (%)	AFFECTED SAMPLES
arsenic	127.2	37100D
selenium	127.3	37200S
	124.7	37100D
	81.0	43060D
	79.1	40150D
	68.7	37060DD
thallium	72.2	32100D
	83.2	32100D DUP
	57.6	37200S
	75.8	50060D
	58.0	78100S
	75.0	37100D

ATTACHMENT A

VALIDATED LABORATORY DATA

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	20060S 0-0.75' 070040-22 NYTEST CFSED2 SEDIMENT 6/28/96 9/26/96	23020S 0-0.75' 070032-01 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	23060S 0-0.75' 070032-02 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	23100S 0-0.75' 070032-03 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	26150S 0-0.75' 070032-04 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-57-8	2-Chlorophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-48-7	2-Methylphenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
106-44-5	4-Methylphenol	UG/KG	270 J	450 UJ	420 UJ	470 UJ	500 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
67-72-1	Hexachloroethane	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
98-95-3	Nitrobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
78-59-1	Isophorone	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
88-75-5	2-Nitrophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
91-20-3	Naphthalene	UG/KG	120 J	60 J	420 UJ	470 UJ	500 UJ
106-47-8	4-Chloroaniline	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
87-68-3	Hexachlorobutadiene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
91-57-6	2-Methylnaphthalene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
91-58-7	2-Chloronaphthalene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
88-74-4	2-Nitroaniline	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
131-11-3	Dimethylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
208-96-8	Acenaphthylene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
99-09-2	3-Nitroaniline	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
83-32-9	Acenaphthene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
100-02-7	4-Nitrophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
132-64-9	Dibenzofuran	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
84-66-2	Diethylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
86-73-7	Fluorene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
100-01-6	4-Nitroaniline	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
118-74-1	Hexachlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
87-86-5	Pentachlorophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
85-01-8	Phenanthrene	UG/KG	82 J	450 UJ	420 UJ	470 UJ	180 J
120-12-7	Anthracene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	60 J
84-74-2	Di-n-butylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
206-44-0	Fluoranthene	UG/KG	200 J	95 J	420 UJ	470 UJ	340 J
129-00-0	Pyrene	UG/KG	180 J	87 J	420 UJ	470 UJ	330 J
85-68-7	Butylbenzylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
56-55-3	Benzo(a)anthracene	UG/KG	150 J	66 J	420 UJ	470 UJ	260 J
219-01-9	Chrysene	UG/KG	190 J	88 J	420 UJ	470 UJ	350 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	120 J	450 UJ	420 UJ	470 UJ	500 UJ
117-84-0	Di-n-octylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	210 J	84 J	420 UJ	470 UJ	220 J
207-08-9	Benzo(k)fluoranthene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
50-32-8	Benzo(a)pyrene	UG/KG	170 J	60 J	420 UJ	470 UJ	210 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	100 J	450 UJ	420 UJ	470 UJ	100 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	51 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	110 J	450 UJ	420 UJ	470 UJ	140 J
86-74-8	Carbazole	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	4750	5440	5980	8990	12700
7440-36-0	Antimony	MG/KG	2.5 UJ	2.3 UJ	2.2 UJ	2.3 UJ	2.6 UJ
7440-38-2	Arsenic	MG/KG	9.1	5.3	3.3	5.1	5.5
7440-39-3	Barium	MG/KG	39	43.2	23 J	44.5	62.6
7440-41-7	Beryllium	MG/KG	0.35 J	0.32 J	0.25 J	0.41 J	0.56 J
7440-43-9	Cadmium	MG/KG	1.1 J	0.61 J	0.31 J	0.43 J	0.78 J
7440-70-2	Calcium	MG/KG	11300	18800	10800	31600	16700
7440-47-3	Chromium	MG/KG	21.5	36.3 J	9.5 J	13.4 J	21.3 J
7440-48-4	Cobalt	MG/KG	5.9 J	6.1 J	6.5 J	9.1	9
7440-50-8	Copper	MG/KG	25.5	15.9	12.3	20.2	34.6
7439-89-6	Iron	MG/KG	41100	18100	12000	19900	27300
7439-92-1	Lead	MG/KG	41.5	19.8	8	11.1	57.1
7439-95-4	Magnesium	MG/KG	4100	5480 J	6640 J	9150 J	9100 J
7439-96-5	Manganese	MG/KG	556	561	148	293	328
7439-97-6	Mercury	MG/KG	0.13 J	0.02 U	0.02 U	0.03 U	0.18
7440-02-0	Nickel	MG/KG	20.8	18.2	17.2	25.5	27.6
7440-09-7	Potassium	MG/KG	878	809	1190	1500	2550
7782-49-2	Selenium	MG/KG	0.25 J	0.31 U	0.29 U	0.36 U	0.36 U
7440-22-4	Silver	MG/KG	0.38 U	0.37 U	0.34 U	0.36 U	0.41 U
7440-23-5	Sodium	MG/KG	97.5 J	126 J	104 J	136 J	138 J
7440-28-0	Thallium	MG/KG	0.23 UJ	0.22 UJ	0.2 UJ	0.25 UJ	0.25 U
7440-62-2	Vanadium	MG/KG	15.4	14.1 J	14.1 J	17 J	26.2 J
7440-66-6	Zinc	MG/KG	191	109 J	48.4 J	69.7 J	139 J
57-12-5	Cyanide	MG/KG	0.81 J	2.1	0.31 U	0.36 J	0.72 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	26150D 0.75-1.5' 070032-05 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32020S 0-0.75' 070032-06 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32020D 0.75-1.5' 070032-07 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32060D 0.75-1.5' 070032-09 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32060S 0-0.75' 070032-08 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-57-8	2-Chlorophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-48-7	2-Methylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
106-44-5	4-Methylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
67-72-1	Hexachloroethane	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
98-95-3	Nitrobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
78-59-1	Isophorone	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
88-75-5	2-Nitrophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
91-20-3	Naphthalene	UG/KG	400 UJ	8100 J	8600 J	16000 J	35000 J
106-47-8	4-Chloroaniline	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
87-68-3	Hexachlorobutadiene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
91-57-6	2-Methylnaphthalene	UG/KG	400 UJ	1300 J	1200 J	2500 J	4300 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
91-58-7	2-Chloronaphthalene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
88-74-4	2-Nitroaniline	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
131-11-3	Dimethylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
208-96-8	Acenaphthylene	UG/KG	400 UJ	650 J	720 J	1300 J	2000 J
606-20-2	2,6-Dinitrotoluene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
99-09-2	3-Nitroaniline	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
83-32-9	Acenaphthene	UG/KG	400 UJ	530 J	430 J	680 J	1100 J
51-28-5	2,4-Dinitrophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
100-02-7	4-Nitrophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
132-64-9	Dibenzofuran	UG/KG	400 UJ	700 J	500 J	740 J	1500 J
121-14-2	2,4-Dinitrotoluene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
84-66-2	Diethylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
86-73-7	Fluorene	UG/KG	400 UJ	1800 J	1600 J	2400 J	3800 J
100-01-6	4-Nitroaniline	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
118-74-1	Hexachlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
87-86-5	Pentachlorophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
85-01-8	Phenanthrene	UG/KG	210 J	7100 J	5800 J	9100 J	14000 J
120-12-7	Anthracene	UG/KG	59 J	2100 J	1800 J	2500 J	3900 J
84-74-2	Di-n-butylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
206-44-0	Fluoranthene	UG/KG	320 J	8900 J	9600 J	10000 J	23000 J
129-00-0	Pyrene	UG/KG	250 J	7100 J	7900 J	10000 J	20000 J
85-68-7	Butylbenzylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
56-55-3	Benzo(a)anthracene	UG/KG	210 J	4900 J	5400 J	6300 J	11000 J
219-01-9	Chrysene	UG/KG	210 J	4900 J	5400 J	7100 J	13000 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	400 UJ	970 UJ	960 UJ	290 J	6800 UJ
117-84-0	Di-n-octylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	170 J	4700 J	5200 J	5800 J	10000 J
207-08-9	Benzo(k)fluoranthene	UG/KG	400 UJ	1600 J	1800 J	1900 J	4200 J
50-32-8	Benzo(a)pyrene	UG/KG	150 J	3700 J	4200 J	4800 J	9200 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	81 J	1700 J	1800 J	1800 J	5000 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	400 UJ	510 J	410 J	380 J	6800 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	79 J	1500 J	1600 J	1500 J	5000 J
86-74-8	Carbazole	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	11100	1970	2020	2450	3030 J
7440-36-0	Antimony	MG/KG	2 UJ	2.4 J	3.8 J	6.3 J	3.4 UJ
7440-38-2	Arsenic	MG/KG	4.4	1.6	23.2	30.4	37.4 J
7440-39-3	Barium	MG/KG	51.9	33.7	27.9 J	25.8 J	32.3 J
7440-41-7	Beryllium	MG/KG	0.47 J	0.29 J	0.27 J	0.27 J	0.36 J
7440-43-9	Cadmium	MG/KG	0.31 J	0.7	0.57 J	1.5	1.4 J
7440-70-2	Calcium	MG/KG	11400	6710	5940	6700	7960 J
7440-47-3	Chromium	MG/KG	16.7 J	22.1 J	19.1 J	21.4 J	25.3 J
7440-48-4	Cobalt	MG/KG	8.3	3.3 J	3 J	3.9 J	4 J
7440-50-8	Copper	MG/KG	28.6	26.7	25.5	35.4	35.4 J
7439-89-6	Iron	MG/KG	19000	55200	49300	49200	54400 J
7439-92-1	Lead	MG/KG	42.3	57.1	51.4	145	199 J
7439-95-4	Magnesium	MG/KG	7180 J	1010 J	963 J	1150 J	1500 J
7439-96-5	Manganese	MG/KG	255	682	642	726	867 J
7439-97-6	Mercury	MG/KG	0.13	0.32	0.3	0.54	0.76 J
7440-02-0	Nickel	MG/KG	24.3	14.4	12.5	14	15 J
7440-09-7	Potassium	MG/KG	2020	182 J	195 J	237 J	434 J
7782-49-2	Selenium	MG/KG	0.38 J	0.33 U	0.4 J	0.92	0.81 J
7440-22-4	Silver	MG/KG	0.31 U	0.36 U	0.38 U	0.9 J	0.67 J
7440-23-5	Sodium	MG/KG	125 J	35.6 J	37.4 J	64.5 J	69.7 J
7440-28-0	Thallium	MG/KG	0.2 UJ	1.3 J	1.2 U	1.4 U	1.8 J
7440-62-2	Vanadium	MG/KG	21.4 J	13.7 J	11.8 J	11.1 J	12.8 J
7440-66-6	Zinc	MG/KG	93.3 J	247 J	205 J	702 J	699 J
57-12-5	Cyanide	MG/KG	0.34 J	88.5	35.3	53.5	39.8 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	32100S 0-0.75' 070032-10 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32100D 4-6' 070071-01 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	32100D-DUP 2-4' 070071-02 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	32150S 0-0.75' 070040-21 NYTEST CFSED2 SEDIMENT 6/28/96 9/26/96	37020S 0-0.75' 070040-04 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	180 J	400 UJ	410 UJ	420 UJ	77 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
95-57-8	2-Chlorophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	150 J	400 UJ	410 UJ	420 UJ	500 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
95-48-7	2-Methylphenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
106-44-5	4-Methylphenol	UG/KG	290 J	400 UJ	410 UJ	420 UJ	300 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
67-72-1	Hexachloroethane	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
98-95-3	Nitrobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
78-59-1	Isophorone	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
88-75-5	2-Nitrophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	98 J	400 UJ	410 UJ	420 UJ	500 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
91-20-3	Naphthalene	UG/KG	33000 JD	350 J	300 J	82 J	55000 JD
106-47-8	4-Chloroaniline	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
87-68-3	Hexachlorobutadiene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
91-57-6	2-Methylnaphthalene	UG/KG	2700 J	400 UJ	410 UJ	420 UJ	3000 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
91-58-7	2-Chloronaphthalene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
88-74-4	2-Nitroaniline	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
131-11-3	Dimethylphthalate	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
208-96-8	Acenaphthylene	UG/KG	1200 J	400 UJ	410 UJ	420 UJ	1300 J
606-20-2	2,6-Dinitrotoluene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
99-09-2	3-Nitroaniline	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
83-32-9	Acenaphthene	UG/KG	530 J	400 UJ	410 UJ	420 UJ	1900 J
51-28-5	2,4-Dinitrophenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
100-02-7	4-Nitrophenol	UG/KG	2000 UJ	170 J	180 J	1000 UJ	1200 UJ
132-64-9	Dibenzofuran	UG/KG	1000 J	400 UJ	410 UJ	420 UJ	1400 J
121-14-2	2,4-Dinitrotoluene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
84-66-2	Diethylphthalate	UG/KG	840 UJ	48 J	410 UJ	420 UJ	500 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
86-73-7	Fluorene	UG/KG	2000 J	400 UJ	410 UJ	420 UJ	2700 J
100-01-6	4-Nitroaniline	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
118-74-1	Hexachlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
87-86-5	Pentachlorophenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
85-01-8	Phenanthrene	UG/KG	8300 J	150 J	140 J	160 J	10000 JD
120-12-7	Anthracene	UG/KG	2400 J	56 J	55 J	53 J	3400 J
84-74-2	Di-n-butylphthalate	UG/KG	320 J	400 UJ	410 UJ	90 J	500 UJ
206-44-0	Fluoranthene	UG/KG	14000 JD	540 J	510 J	240 J	17000 JD
129-00-0	Pyrene	UG/KG	12000 JD	450 J	410 J	220 J	13000 JD
85-68-7	Butylbenzylphthalate	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
56-55-3	Benzo(a)anthracene	UG/KG	9400 J	280 J	280 J	140 J	8000 J
219-01-9	Chrysene	UG/KG	8900 J	300 J	270 J	160 J	7200 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	1400 J	400 UJ	410 UJ	94 J	500 UJ
117-84-0	Di-n-octylphthalate	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	9100 J	270 J	260 J	150 J	9400 JD
207-08-9	Benzo(k)fluoranthene	UG/KG	3700 J	140 J	73 J	420 UJ	4000 J
50-32-8	Benzo(a)pyrene	UG/KG	7400 J	230 J	310 J	140 J	6700 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1700 J	120 J	120 J	83 J	1100 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	390 J	400 UJ	410 UJ	420 UJ	370 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	1300 J	120 J	120 J	75 J	790 J
86-74-8	Carbazole	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	2230	5040	4460	4090	1920
7440-36-0	Antimony	MG/KG	4 UJ	2.9 J	3.5 J	4.1 J	2.7 J
7440-38-2	Arsenic	MG/KG	19.5	4.6	4.5	11.1	17.1
7440-39-3	Barium	MG/KG	28.7 J	31.5	38.7	33.7	39.1
7440-41-7	Beryllium	MG/KG	0.3 J	0.34 J	0.36 J	0.37 J	0.18 J
7440-43-9	Cadmium	MG/KG	0.52 J	0.48 J	0.46 J	0.16 U	0.85
7440-70-2	Calcium	MG/KG	7220	16000	17000	118000	7000
7440-47-3	Chromium	MG/KG	12.9 J	15.5	18.8	17.5	18.7
7440-48-4	Cobalt	MG/KG	3.1 J	5.5 J	5.5 J	5.1 J	2.4 J
7440-50-8	Copper	MG/KG	19.5	17.9	24.6	18.8	23.9
7439-89-6	Iron	MG/KG	51300	32400	44700	47800	35600
7439-92-1	Lead	MG/KG	32.8	22.3	33.9	24.4	41.9
7439-95-4	Magnesium	MG/KG	1310 J	5260	4830	13300	1320
7439-96-5	Manganese	MG/KG	969	534	748	1860	860
7439-97-6	Mercury	MG/KG	0.29	0.09 J	0.09 J	0.02 U	1.4
7440-02-0	Nickel	MG/KG	6.8 J	14	14.4	16.7	7.8
7440-09-7	Potassium	MG/KG	201 J	1050	833	370 J	257 J
7782-49-2	Selenium	MG/KG	0.4 U	0.19 J	0.18 U	0.3 J	0.23 UJ
7440-22-4	Silver	MG/KG	0.64 J	0.32 U	0.33 U	0.31 U	0.44 J
7440-23-5	Sodium	MG/KG	39.1 J	139 J	153 J	126 J	24.9 J
7440-28-0	Thallium	MG/KG	1.7 J	0.62 UJ	0.61 UJ	0.18 UJ	1.1 J
7440-62-2	Vanadium	MG/KG	10.1 J	14.7	14.6	12.2	7.5 J
7440-66-6	Zinc	MG/KG	129 J	99.2 J	133 J	133	139
57-12-5	Cyanide	MG/KG	28.6	2.8	2.9	5.3 J	18.8 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37020D 0.75-1.5' 070040-05 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37060D 0.75-1.5' 070040-03 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37060D 4.5-7.5' 070071-04 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37060DD 10.5-14' 070071-14 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37060S 0-0.75' 070040-02 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	4800 UJ	630 J	470 UJ	430 UJ	470 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-57-8	2-Chlorophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-48-7	2-Methylphenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
106-44-5	4-Methylphenol	UG/KG	4800 UJ	1200 J	93 J	430 UJ	730 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
67-72-1	Hexachloroethane	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
98-95-3	Nitrobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
78-59-1	Isophorone	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
88-75-5	2-Nitrophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
91-20-3	Naphthalene	UG/KG	48000 J	43000 JD	21000 JD	1000 J	41000 J
106-47-8	4-Chloroaniline	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
87-68-3	Hexachlorobutadiene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
91-57-6	2-Methylnaphthalene	UG/KG	6600 J	1500 J	3000 J	250 J	2500 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
91-58-7	2-Chloronaphthalene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
88-74-4	2-Nitroaniline	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
131-11-3	Dimethylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
208-96-8	Acenaphthylene	UG/KG	2800 J	1100 J	1300 J	370 J	1800 J
606-20-2	2,6-Dinitrotoluene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
99-09-2	3-Nitroaniline	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
83-32-9	Acenaphthene	UG/KG	5400 J	380 J	2800 J	710 J	520 J
51-28-5	2,4-Dinitrophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
100-02-7	4-Nitrophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
132-64-9	Dibenzofuran	UG/KG	3400 J	600 J	1900 J	500 J	1100 J
121-14-2	2,4-Dinitrotoluene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
84-66-2	Diethylphthalate	UG/KG	4800 UJ	570 UJ	66 J	430 UJ	4700 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
86-73-7	Fluorene	UG/KG	7200 J	1400 J	3600 J	1000 J	2400 J
100-01-6	4-Nitroaniline	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
118-74-1	Hexachlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
87-86-5	Pentachlorophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
85-01-8	Phenanthrene	UG/KG	28000 J	5200 J	15000 JD	3100 J	10000 J
120-12-7	Anthracene	UG/KG	11000 J	1800 J	5100 J	1000 J	3400 J
84-74-2	Di-n-butylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
206-44-0	Fluoranthene	UG/KG	39000 J	9000 J	17000 JD	3500 J	18000 J
129-00-0	Pyrene	UG/KG	27000 J	6600 J	12000 JD	2400 J	13000 J
85-68-7	Butylbenzylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
56-55-3	Benzo(a)anthracene	UG/KG	19000 J	5000 J	7000 J	1300 J	9300 J
219-01-9	Chrysene	UG/KG	18000 J	4800 J	6200 J	1300 J	9300 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	4800 UJ	91 J	470 UJ	430 UJ	4700 UJ
117-84-0	Di-n-octylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	20000 J	6200 J	7300 JD	1400 J	8700 J
207-08-9	Benzo(k)fluoranthene	UG/KG	7400 J	2200 J	3000 J	510 J	5000 J
50-32-8	Benzo(a)pyrene	UG/KG	15000 J	4000 J	5400 J	1100 J	7800 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	5300 J	910 J	1100 J	610 J	4200 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	1600 J	260 J	330 J	150 J	1000 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	3900 J	690 J	820 J	570 J	4000 J
86-74-8	Carbazole	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	1550	1860	7160	4640	8610
7440-36-0	Antimony	MG/KG	3.4 J	2.8 UJ	11.2 U	3.4 J	12 UJ
7440-38-2	Arsenic	MG/KG	20.1	19.3	15.3	9.2	14.1
7440-39-3	Barium	MG/KG	16.8 J	56.8	90.9 J	51.8	395
7440-41-7	Beryllium	MG/KG	0.13 J	0.2 J	0.71 J	0.47 J	1.2 J
7440-43-9	Cadmium	MG/KG	0.5 J	0.71 J	2.4 J	0.52 J	1.7 J
7440-70-2	Calcium	MG/KG	8600	6730	38900	19100	34400
7440-47-3	Chromium	MG/KG	14	13.3	66.4	14.1	58.6
7440-48-4	Cobalt	MG/KG	2.1 J	2 J	8.9 J	5.6 J	12.5 J
7440-50-8	Copper	MG/KG	56.7	17.8	213	47.4	59.5
7439-89-6	Iron	MG/KG	20100	35300	103000	56700	210000
7439-92-1	Lead	MG/KG	55.9	37.8	214	48.7	192
7439-95-4	Magnesium	MG/KG	1720	1190	8940	4830	4750
7439-96-5	Manganese	MG/KG	233	1210	1430	1410	4830
7439-97-6	Mercury	MG/KG	2.3	0.85	1.3 J	0.46 J	1.4
7440-02-0	Nickel	MG/KG	7.9	6.8	35.5	12.9	21.2 J
7440-09-7	Potassium	MG/KG	320 J	214 J	1470 J	885	835 J
7782-49-2	Selenium	MG/KG	0.47 J	0.35 J	0.28 J	0.27 J	0.4 J
7440-22-4	Silver	MG/KG	0.38 U	0.54 J	2.4 J	0.35 U	1.9 U
7440-23-5	Sodium	MG/KG	36.2 J	33.3 J	162 J	136 J	135 J
7440-28-0	Thallium	MG/KG	0.42 J	1.3 J	0.71 UJ	0.68 UJ	0.79 J
7440-62-2	Vanadium	MG/KG	5.3 J	7.6 J	25.2 J	23.8	45.1
7440-66-6	Zinc	MG/KG	129	114	520 J	275 J	506
57-12-5	Cyanide	MG/KG	28.9 J	12.3 J	21.8	30.3	48.3 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37060S-DUP 0-0.5' 070040-01 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37100S 0-0.75' 070040-06 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37100D 4-6' 070071-05 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37100D 0.75-1.5' 070040-07 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37150S 0-0.75' 070040-08 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	290 J	160 J	370 UJ	28000 UJ	140 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-57-8	2-Chlorophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-48-7	2-Methylphenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
106-44-5	4-Methylphenol	UG/KG	610 J	65 J	370 UJ	28000 UJ	2600 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
67-72-1	Hexachloroethane	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
98-95-3	Nitrobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
78-59-1	Isophorone	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
88-75-5	2-Nitrophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
91-20-3	Naphthalene	UG/KG	24000 JD	59000 JD	140 J	320000 J	450 J
106-47-8	4-Chloroaniline	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
87-68-3	Hexachlorobutadiene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
91-57-6	2-Methylnaphthalene	UG/KG	900 J	5000 J	76 J	36000 J	150 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
91-58-7	2-Chloronaphthalene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
88-74-4	2-Nitroaniline	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
131-11-3	Dimethylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
208-96-8	Acenaphthylene	UG/KG	730 J	1800 J	76 J	26000 J	340 J
606-20-2	2,6-Dinitrotoluene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
99-09-2	3-Nitroaniline	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
83-32-9	Acenaphthene	UG/KG	220 J	600 J	1100 J	28000 UJ	130 J
51-28-5	2,4-Dinitrophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
100-02-7	4-Nitrophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
132-64-9	Dibenzofuran	UG/KG	450 J	560 J	190 J	5700 J	130 J
121-14-2	2,4-Dinitrotoluene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
84-66-2	Diethylphthalate	UG/KG	460 UJ	560 UJ	130 J	28000 UJ	460 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
86-73-7	Fluorene	UG/KG	1000 J	1900 J	970 J	7900 J	350 J
100-01-6	4-Nitroaniline	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
118-74-1	Hexachlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
87-86-5	Pentachlorophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
85-01-8	Phenanthrene	UG/KG	4200 J	7700 J	260 J	17000 J	2100 J
120-12-7	Anthracene	UG/KG	1600 J	2400 J	88 J	3800 J	610 J
84-74-2	Di-n-butylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
206-44-0	Fluoranthene	UG/KG	7000 J	7300 J	340 J	11000 J	2200 J
129-00-0	Pyrene	UG/KG	5000 J	6400 J	270 J	9000 J	1900 J
85-68-7	Butylbenzylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
56-55-3	Benzo(a)anthracene	UG/KG	3600 J	3200 J	120 J	3700 J	1000 J
219-01-9	Chrysene	UG/KG	3500 J	3800 J	120 J	4000 J	1100 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	460 UJ	130 J	370 UJ	28000 UJ	170 J
117-84-0	Di-n-octylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	3600 J	3700 J	100 J	3000 J	1100 J
207-08-9	Benzo(k)fluoranthene	UG/KG	1800 J	1200 J	49 J	28000 UJ	430 J
50-32-8	Benzo(a)pyrene	UG/KG	2900 J	1600 J	86 J	28000 UJ	980 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	790 J	550 J	42 J	28000 UJ	440 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	200 J	130 J	370 UJ	28000 UJ	150 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	220 J	460 J	45 J	28000 UJ	420 J
86-74-8	Carbazole	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	1810	1910	2240	1160	2140
7440-36-0	Antimony	MG/KG	2.5 J	4.4 J	1.9 U	2.4 UJ	2.7 UJ
7440-38-2	Arsenic	MG/KG	15.4	26.2	0.43 J	18.2	5.1
7440-39-3	Barium	MG/KG	53.4	26.5 J	14.8 J	20.3 J	22 J
7440-41-7	Beryllium	MG/KG	0.22 J	0.26 J	0.18 J	0.18 J	0.17 J
7440-43-9	Cadmium	MG/KG	0.38 J	0.37 J	0.2 J	0.38 J	0.6 J
7440-70-2	Calcium	MG/KG	6440	5500	9320	3280	48900
7440-47-3	Chromium	MG/KG	13.4	19.5	6.2	13.9	5.7
7440-48-4	Cobalt	MG/KG	2.2 J	3.6 J	2.4 J	2.3 J	1.9 J
7440-50-8	Copper	MG/KG	15.4	31.9	6.5	31	10.6
7439-89-6	Iron	MG/KG	42100	59800	17600	45200	8940
7439-92-1	Lead	MG/KG	34.2	46.1	9.3	65.4	9
7439-95-4	Magnesium	MG/KG	1150	1100	2870	567 J	1760
7439-96-5	Manganese	MG/KG	1100	982	318	765	161
7439-97-6	Mercury	MG/KG	0.92	0.73	0.1 J	1	0.03 J
7440-02-0	Nickel	MG/KG	7.5	14.4	5.8	11.1	9.2
7440-09-7	Potassium	MG/KG	125 J	115 J	443 J	105 J	367 J
7782-49-2	Selenium	MG/KG	0.45 J	0.35 J	0.17 U	0.27 J	0.23 J
7440-22-4	Silver	MG/KG	0.39 U	0.45 U	0.3 U	0.38 U	0.42 U
7440-23-5	Sodium	MG/KG	22.1 J	26.9 J	99 J	19.3 J	236 J
7440-28-0	Thallium	MG/KG	0.97 J	0.74 J	0.11 UJ	0.51 J	0.22 UJ
7440-62-2	Vanadium	MG/KG	8.9	9.4	12.6	7.7	5.1 J
7440-66-6	Zinc	MG/KG	102	113	55.9 J	316	41.5
57-12-5	Cyanide	MG/KG	24 J	29.7 J	1.9	20.5 J	2.3 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37200S 0-0.75' 070071-03 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	40150S 0-0.75' 070032-11 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	40150D 2.5-3.5' 070071-12 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	43060S 0-0.5' 070032-12 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	43060D 1-2' 070071-06 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	400 UJ	120 J	390 UJ	3300 UJ	440 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-57-8	2-Chlorophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-48-7	2-Methylphenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
106-44-5	4-Methylphenol	UG/KG	400 UJ	3300 J	390 UJ	3300 UJ	440 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
67-72-1	Hexachloroethane	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
98-95-3	Nitrobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
78-59-1	Isophorone	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
88-75-5	2-Nitrophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
91-20-3	Naphthalene	UG/KG	400 UJ	500 J	740 J	3300 J	1800 J
106-47-8	4-Chloroaniline	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
87-68-3	Hexachlorobutadiene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
91-57-6	2-Methylnaphthalene	UG/KG	400 UJ	810 UJ	120 J	6300 J	4100 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
91-58-7	2-Chloronaphthalene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
88-74-4	2-Nitroaniline	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
131-11-3	Dimethylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
208-96-8	Acenaphthylene	UG/KG	400 UJ	810 UJ	1500 J	4700 J	1600 J
606-20-2	2,6-Dinitrotoluene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
99-09-2	3-Nitroaniline	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
83-32-9	Acenaphthene	UG/KG	400 UJ	810 UJ	2800 J	1600 J	480 J
51-28-5	2,4-Dinitrophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
100-02-7	4-Nitrophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
132-64-9	Dibenzofuran	UG/KG	400 UJ	810 UJ	770 J	2100 J	390 J
121-14-2	2,4-Dinitrotoluene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
84-66-2	Diethylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
86-73-7	Fluorene	UG/KG	400 UJ	810 UJ	3400 J	7400 J	2000 J
100-01-6	4-Nitroaniline	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
118-74-1	Hexachlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
87-86-5	Pentachlorophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
85-01-8	Phenanthrene	UG/KG	400 UJ	560 J	8300 JD	40000 J	6400 J
120-12-7	Anthracene	UG/KG	400 UJ	810 UJ	2900 J	12000 J	47 J
84-74-2	Di-n-butylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
206-44-0	Fluoranthene	UG/KG	400 UJ	680 J	12000 JD	29000 J	2100 J
129-00-0	Pyrene	UG/KG	400 UJ	560 J	9800 JD	32000 J	2700 J
85-68-7	Butylbenzylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
56-55-3	Benzo(a)anthracene	UG/KG	400 UJ	270 J	4400 J	17000 J	1200 J
219-01-9	Chrysene	UG/KG	400 UJ	330 J	4200 J	20000 J	50 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	400 UJ	460 J	390 UJ	3300 UJ	440 UJ
117-84-0	Di-n-octylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	400 UJ	370 J	4500 J	15000 J	810 J
207-08-9	Benzo(k)fluoranthene	UG/KG	400 UJ	810 UJ	1500 J	4800 J	290 J
50-32-8	Benzo(a)pyrene	UG/KG	400 UJ	280 J	3600 J	14000 J	910 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	400 UJ	190 J	1100 J	6600 J	310 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	400 UJ	810 UJ	290 J	2000 J	110 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	400 UJ	180 J	850 J	6200 J	360 J
86-74-8	Carbazole	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	1530	5430	4700	3330	6240
7440-36-0	Antimony	MG/KG	2 UJ	3.8 J	10.2 UJ	4.4 J	17.3 J
7440-38-2	Arsenic	MG/KG	2.4	3.5	15.2	16.7	19.4
7440-39-3	Barium	MG/KG	5.8 J	59.9	54.4 J	94.1	116 J
7440-41-7	Beryllium	MG/KG	0.11 J	0.41 J	0.88 J	0.38 J	1.4 J
7440-43-9	Cadmium	MG/KG	0.2 J	0.75 J	0.98 J	0.18 U	1.3 J
7440-70-2	Calcium	MG/KG	7810	48600	25900	91600	13800
7440-47-3	Chromium	MG/KG	2.9	12 J	41.8	58.7 J	58.3
7440-48-4	Cobalt	MG/KG	2 J	6.3 J	8.2 J	4.9 J	13.3 J
7440-50-8	Copper	MG/KG	2.3 J	33	50.1	34.1	84.4
7439-89-6	Iron	MG/KG	4350	41000	151000	64500	300000
7439-92-1	Lead	MG/KG	3.8	20.2	54.9	35.4	85.2
7439-95-4	Magnesium	MG/KG	2640	3390 J	5220	4650 J	2210 J
7439-96-5	Manganese	MG/KG	72.7	402	2510	3140	5470
7439-97-6	Mercury	MG/KG	0.07 J	0.02 U	0.24 J	0.18	0.38 J
7440-02-0	Nickel	MG/KG	4.4 J	20.3	30.5	19	39.4
7440-09-7	Potassium	MG/KG	314 J	900	497 J	341 J	238 U
7782-49-2	Selenium	MG/KG	0.19 U	0.47 J	0.36 J	0.32 U	0.43 J
7440-22-4	Silver	MG/KG	0.32 U	0.41 U	1.6 U	0.36 U	1.7 U
7440-23-5	Sodium	MG/KG	76.3 J	430 J	126 J	339 J	28.1 J
7440-28-0	Thallium	MG/KG	0.13 UJ	0.32 J	0.56 UJ	1.1 U	0.69 UJ
7440-62-2	Vanadium	MG/KG	4.1 J	13.8 J	28.9 J	40.5 J	43.2
7440-66-6	Zinc	MG/KG	22.4 J	133 J	250 J	198 J	463 J
57-12-5	Cyanide	MG/KG	0.31 U	1.6	22	15.8	24.9

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	43100S 0-0.5' 070032-13 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	43100D 1-2' 070071-07 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	43150S 0-0.5' 070032-14 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45020S 0-0.75' 070032-17 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45020D 1-2' 070071-08 NYTEST CFSED3 SEDIMENT 7/01/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	65 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-57-8	2-Chlorophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-48-7	2-Methylphenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
106-44-5	4-Methylphenol	UG/KG	150 J	440 UJ	920 J	600 UJ	490 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
67-72-1	Hexachloroethane	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
98-95-3	Nitrobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
78-59-1	Isophorone	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
88-75-5	2-Nitrophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
91-20-3	Naphthalene	UG/KG	360 J	2100 J	1700 J	1300 J	30000 JD
106-47-8	4-Chloroaniline	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
87-68-3	Hexachlorobutadiene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
91-57-6	2-Methylnaphthalene	UG/KG	300 J	320 J	790 J	530 J	9500 JD
77-47-4	Hexachlorocyclopentadiene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
91-58-7	2-Chloronaphthalene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
88-74-4	2-Nitroaniline	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
131-11-3	Dimethylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
208-96-8	Acenaphthylene	UG/KG	320 J	2700 J	1600 J	2800 J	12000 JD
606-20-2	2,6-Dinitrotoluene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
99-09-2	3-Nitroaniline	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
83-32-9	Acenaphthene	UG/KG	120 J	1400 J	6900 J	570 J	980 J
51-28-5	2,4-Dinitrophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
100-02-7	4-Nitrophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
132-64-9	Dibenzofuran	UG/KG	200 J	1700 J	3700 J	1600 J	4200 J
121-14-2	2,4-Dinitrotoluene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
84-66-2	Diethylphthalate	UG/KG	670 UJ	69 J	3600 UJ	600 UJ	490 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
86-73-7	Fluorene	UG/KG	480 J	5300 J	6100 J	3400 J	10000 JD
100-01-6	4-Nitroaniline	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
118-74-1	Hexachlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
87-86-5	Pentachlorophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
85-01-8	Phenanthrene	UG/KG	2200 J	27000 JD	32000 J	22000 JD	39000 JD
120-12-7	Anthracene	UG/KG	520 J	7700 JD	9900 J	6400 J	11000 JD
84-74-2	Di-n-butylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	59 J
206-44-0	Fluoranthene	UG/KG	1500 J	30000 JD	24000 J	25000 JD	25000 JD
129-00-0	Pyrene	UG/KG	1600 J	24000 JD	20000 J	18000 JD	24000 JD
85-68-7	Butylbenzylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
56-55-3	Benzo(a)anthracene	UG/KG	880 J	13000 JD	7500 J	7900 J	11000 JD
219-01-9	Chrysene	UG/KG	920 J	12000 JD	7900 J	7600 J	11000 JD
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
117-84-0	Di-n-octylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	880 J	12000 JD	7300 J	8200 J	9100 JD
207-08-9	Benzo(k)fluoranthene	UG/KG	670 UJ	5000 J	3500 J	2900 J	4000 J
50-32-8	Benzo(a)pyrene	UG/KG	860 J	10000 JD	7200 J	7400 J	5000 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	450 J	1900 J	4000 J	4000 J	1600 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	670 UJ	500 J	810 J	900 J	460 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	500 J	1300 J	4200 J	3800 J	1200 J
86-74-8	Carbazole	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	990	5430	3360	3090	6040
7440-36-0	Antimony	MG/KG	2.4 UJ	12.9 J	2.4 UJ	3.9 J	12.8 U
7440-38-2	Arsenic	MG/KG	14.5	15	5.7	0.24 J	19
7440-39-3	Barium	MG/KG	22 J	154	49.6	41.8	126 J
7440-41-7	Beryllium	MG/KG	0.14 J	1.3 J	0.25 J	0.14 J	0.94 J
7440-43-9	Cadmium	MG/KG	0.44 J	1.9 J	0.36 J	0.44 J	2.5 J
7440-70-2	Calcium	MG/KG	8700	16000	87100	43500	83500
7440-47-3	Chromium	MG/KG	62.1 J	52.6	16 J	204 J	165
7440-48-4	Cobalt	MG/KG	2.3 J	9.9 J	3.6 J	0.68 J	8.6 J
7440-50-8	Copper	MG/KG	12.5	54.5	21.6	7	77.9
7439-89-6	Iron	MG/KG	37900	257000	35300	18000	162000
7439-92-1	Lead	MG/KG	13.1	62.8	15.7	9	114
7439-95-4	Magnesium	MG/KG	2460 J	2340 J	3810 J	5640 J	6470
7439-96-5	Manganese	MG/KG	1410	7730	843	5760	6070
7439-97-6	Mercury	MG/KG	0.05 J	0.96 J	0.03 J	0.05 J	0.67 J
7440-02-0	Nickel	MG/KG	10	11.9 J	11.4	2.9 J	40.6
7440-09-7	Potassium	MG/KG	108 J	379 J	663 J	63.5 J	285 U
7782-49-2	Selenium	MG/KG	0.36 J	0.2 U	0.33 UJ	0.29 UJ	0.98 J
7440-22-4	Silver	MG/KG	0.37 U	2.4 J	0.38 U	0.31 U	2 U
7440-23-5	Sodium	MG/KG	31.8 J	47.8 J	471 J	47.5 J	130 J
7440-28-0	Thallium	MG/KG	1 U	0.68 UJ	0.23 UJ	0.21 J	0.75 UJ
7440-62-2	Vanadium	MG/KG	10 J	43.8	13.9 J	49.3 J	54.9
7440-66-6	Zinc	MG/KG	86.4 J	279 J	82.6 J	37.5 J	664 J
57-12-5	Cyanide	MG/KG	20.1	23.4	6	15.2	18

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	45100S 0-0.75' 070032-18 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45100D 1-2' 070071-09 NYTEST CFSED3 SEDIMENT 7/01/96 9/26/96	45150S 0-0.75' 070032-19 NYTEST CFSED1 SEDIMENT 6/24/96 9/25/96	46150S 0-0.75' 070040-14 NYTEST CFSED2 SEDIMENT 6/24/96 9/26/96	50060S 0-0.75' 070040-09 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	640 UJ	420 UJ	610 UJ	93 J	64 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-57-8	2-Chlorophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-48-7	2-Methylphenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
106-44-5	4-Methylphenol	UG/KG	450 J	420 UJ	610 UJ	1200 J	1800 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
67-72-1	Hexachloroethane	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
98-95-3	Nitrobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
78-59-1	Isophorone	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
88-75-5	2-Nitrophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
91-20-3	Naphthalene	UG/KG	220 J	700 J	610 UJ	150 J	410 UJ
106-47-8	4-Chloroaniline	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
87-68-3	Hexachlorobutadiene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
91-57-6	2-Methylnaphthalene	UG/KG	190 J	240 J	610 UJ	440 UJ	410 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
91-58-7	2-Chloronaphthalene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
88-74-4	2-Nitroaniline	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
131-11-3	Dimethylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
208-96-8	Acenaphthylene	UG/KG	640 UJ	2300 J	610 UJ	100 J	410 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
99-09-2	3-Nitroaniline	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
83-32-9	Acenaphthene	UG/KG	580 J	2900 J	610 UJ	48 J	410 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
100-02-7	4-Nitrophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
132-64-9	Dibenzofuran	UG/KG	480 J	3900 J	610 UJ	71 J	410 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
84-66-2	Diethylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
86-73-7	Fluorene	UG/KG	710 J	6500 J	610 UJ	130 J	410 UJ
100-01-6	4-Nitroaniline	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
118-74-1	Hexachlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
87-86-5	Pentachlorophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
85-01-8	Phenanthrene	UG/KG	4800 J	26000 JD	610 UJ	740 J	150 J
120-12-7	Anthracene	UG/KG	1100 J	6700 J	610 UJ	190 J	410 UJ
84-74-2	Di-n-butylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
206-44-0	Fluoranthene	UG/KG	4400 J	20000 JD	610 UJ	990 J	270 J
129-00-0	Pyrene	UG/KG	3500 J	17000 JD	610 UJ	680 J	220 J
85-68-7	Butylbenzylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
56-55-3	Benzo(a)anthracene	UG/KG	1800 J	8100 JD	610 UJ	390 J	120 J
219-01-9	Chrysene	UG/KG	1800 J	7600 JD	610 UJ	430 J	160 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	640 UJ	420 UJ	610 UJ	240 J	120 J
117-84-0	Di-n-octylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	1800 J	7200 JD	610 UJ	440 J	180 J
207-08-9	Benzo(k)fluoranthene	UG/KG	690 J	2900 JD	610 UJ	190 J	72 J
50-32-8	Benzo(a)pyrene	UG/KG	1500 J	6700 J	610 UJ	340 J	130 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	830 J	1400 J	610 UJ	130 J	59 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	210 J	400 J	610 UJ	440 UJ	410 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	760 J	1000 J	610 UJ	110 J	47 J
86-74-8	Carbazole	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	2500	2750	2590	2210	2880
7440-36-0	Antimony	MG/KG	2.8 J	2.3 J	2 UJ	2.5 UJ	2 UJ
7440-38-2	Arsenic	MG/KG	5.9	10.2	0.16 U	4.7	3.1
7440-39-3	Barium	MG/KG	33.8	19.1 J	13.4 J	36.6	25.6
7440-41-7	Beryllium	MG/KG	0.17 J	0.31 J	0.1 J	0.11 J	0.17 J
7440-43-9	Cadmium	MG/KG	0.68 J	0.64	0.52 J	0.34 J	0.29 J
7440-70-2	Calcium	MG/KG	79800	18500	21500	129000	61000
7440-47-3	Chromium	MG/KG	33.8 J	17.9	4.9 J	6.3	6.5
7440-48-4	Cobalt	MG/KG	3.8 J	3.3 J	3.1 J	1.9 J	2.4 J
7440-50-8	Copper	MG/KG	27.2	18.2	8.1	9.8	7.6
7439-89-6	Iron	MG/KG	32100	36800	8940	5570	6980
7439-92-1	Lead	MG/KG	20	26.6	7.4	5.4	22.2
7439-95-4	Magnesium	MG/KG	31200 J	4120	7550 J	3890	4130
7439-96-5	Manganese	MG/KG	745	986	203	158	201
7439-97-6	Mercury	MG/KG	0.04 J	0.15 J	0.02 U	0.02 U	0.02 U
7440-02-0	Nickel	MG/KG	30	11.9	10.2	7	9
7440-09-7	Potassium	MG/KG	497 J	414 J	449 J	457 J	546 J
7782-49-2	Selenium	MG/KG	0.31 UJ	0.67	0.29 UJ	0.48 J	0.19 UJ
7440-22-4	Silver	MG/KG	0.36 U	0.32 U	0.32 U	0.38 U	0.31 U
7440-23-5	Sodium	MG/KG	197 J	69.7 J	90.8 J	571 J	276 J
7440-28-0	Thallium	MG/KG	0.22 UJ	0.6 UJ	0.2 UJ	0.22 UJ	0.21 UJ
7440-62-2	Vanadium	MG/KG	12.3 J	10.8	9 J	5.4 J	7.4
7440-66-6	Zinc	MG/KG	67.2 J	110 J	46.5 J	37.2	40.8
57-12-5	Cyanide	MG/KG	3	10	0.29 U	0.33 UJ	0.31 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	50060D 0.75-1.5' 070071-10 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	78100S 0-2' 070071-11 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	80060S 0-0.75' 070040-10 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	82020S 0-0.75' 070040-11 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	82100S 0-0.75' 070040-12 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-57-8	2-Chlorophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-48-7	2-Methylphenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
106-44-5	4-Methylphenol	UG/KG	75 J	390 UJ	4200 UJ	440 UJ	440 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
67-72-1	Hexachloroethane	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
98-95-3	Nitrobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
78-59-1	Isophorone	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
88-75-5	2-Nitrophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
91-20-3	Naphthalene	UG/KG	500 J	390 UJ	730 J	440 UJ	51 J
106-47-8	4-Chloroaniline	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
87-68-3	Hexachlorobutadiene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
91-57-6	2-Methylnaphthalene	UG/KG	340 J	390 UJ	520 J	440 UJ	440 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
91-58-7	2-Chloronaphthalene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
88-74-4	2-Nitroaniline	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
131-11-3	Dimethylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
208-96-8	Acenaphthylene	UG/KG	1400 J	390 UJ	3600 J	440 UJ	440 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
99-09-2	3-Nitroaniline	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
83-32-9	Acenaphthene	UG/KG	610 J	390 UJ	4100 J	440 UJ	440 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
100-02-7	4-Nitrophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
132-64-9	Dibenzofuran	UG/KG	1000 J	390 UJ	4000 J	440 UJ	440 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
84-66-2	Diethylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
86-73-7	Fluorene	UG/KG	2500 J	390 UJ	7900 J	440 UJ	440 UJ
100-01-6	4-Nitroaniline	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
118-74-1	Hexachlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
87-86-5	Pentachlorophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
85-01-8	Phenanthrene	UG/KG	14000 JD	390 UJ	37000 J	440 UJ	440 UJ
120-12-7	Anthracene	UG/KG	3900 J	390 UJ	9000 J	440 UJ	440 UJ
84-74-2	Di-n-butylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
206-44-0	Fluoranthene	UG/KG	14000 JD	390 UJ	33000 J	440 UJ	53 J
129-00-0	Pyrene	UG/KG	11000 JD	390 UJ	24000 J	440 UJ	440 UJ
85-68-7	Butylbenzylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
56-55-3	Benzo(a)anthracene	UG/KG	5300 J	390 UJ	12000 J	440 UJ	440 UJ
219-01-9	Chrysene	UG/KG	180 J	390 UJ	10000 J	440 UJ	440 UJ
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
117-84-0	Di-n-octylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	5400 J	390 UJ	12000 J	440 UJ	440 UJ
207-08-9	Benzo(k)fluoranthene	UG/KG	2200 J	390 UJ	4200 J	440 UJ	440 UJ
50-32-8	Benzo(a)pyrene	UG/KG	4600 J	390 UJ	9900 J	80 J	440 UJ
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1800 J	390 UJ	4900 J	440 UJ	440 UJ
53-70-3	Dibenz(a,h)anthracene	UG/KG	490 J	390 UJ	1100 J	440 UJ	440 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	1600 J	390 UJ	4700 J	440 UJ	440 UJ
86-74-8	Carbazole	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	5490	5800	3900	3520	3610
7440-36-0	Antimony	MG/KG	2.6 J	1.9 UJ	2.1 UJ	2.2 UJ	2.3 UJ
7440-38-2	Arsenic	MG/KG	4.6	3.5	3.9	3.4	2.3
7440-39-3	Barium	MG/KG	41.3	14.1 J	24.4 J	12.4 J	17.7 J
7440-41-7	Beryllium	MG/KG	0.61 J	0.28 J	0.23 J	0.16 J	0.18 J
7440-43-9	Cadmium	MG/KG	0.42 J	0.24 J	0.49 J	0.18 U	0.49 J
7440-70-2	Calcium	MG/KG	21200	37700	13100	5600	5760
7440-47-3	Chromium	MG/KG	14.9	10.2	12	6.7	6.6
7440-48-4	Cobalt	MG/KG	3.6 J	5.2 J	4 J	4.2 J	4.2 J
7440-50-8	Copper	MG/KG	26.3	14.2	10.9	4.8	9.6
7439-89-6	Iron	MG/KG	13700	11800	8590	9320	7960
7439-92-1	Lead	MG/KG	15.4	10.7	15.2	6.3	7.2
7439-95-4	Magnesium	MG/KG	4290	15300	2600	3510	3360
7439-96-5	Manganese	MG/KG	180	216	119	85.7	87.4
7439-97-6	Mercury	MG/KG	0.09 J	0.1 J	0.04 J	0.06 J	0.02 U
7440-02-0	Nickel	MG/KG	12.6	16.4	13.5	9.3	11.4
7440-09-7	Potassium	MG/KG	847	1410	653	671	742
7782-49-2	Selenium	MG/KG	0.27 J	0.19 J	0.17 UJ	0.2 UJ	0.19 UJ
7440-22-4	Silver	MG/KG	0.36 J	0.3 U	6.6	0.34 U	0.36 U
7440-23-5	Sodium	MG/KG	159 J	122 J	119 J	87.7 J	135 J
7440-28-0	Thallium	MG/KG	0.65 UJ	0.58 UJ	0.18 UJ	0.22 UJ	0.2 UJ
7440-62-2	Vanadium	MG/KG	11.9	12.6	14.2	13.3	8.8
7440-66-6	Zinc	MG/KG	65.7 J	36.9 J	78.6	32	44.8
57-12-5	Cyanide	MG/KG	0.33 U	0.29 U	0.31 UJ	0.33 UJ	0.33 UJ

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	SWALE 0-0.75' 070032-15 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	SWALE-DUP 0-0.75' 070032-16 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	WB1 070032-20 NYTEST CFSED1 WATER 6/25/96 9/25/96	WB02 070040-13 NYTEST CFSED2 WATER 6/27/96 9/26/96	WB03 070071-13 NYTEST CFSED3 WATER 6/28/96 9/26/96
CAS NO.	COMPOUND	UNITS:			UG/L	UG/L	UG/L
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-57-8	2-Chlorophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-48-7	2-Methylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
106-44-5	4-Methylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
67-72-1	Hexachloroethane	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
98-95-3	Nitrobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
78-59-1	Isophorone	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
88-75-5	2-Nitrophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
91-20-3	Naphthalene	UG/KG	3400 J	4200 J	10 UJ	11 UJ	10 UJ
106-47-8	4-Chloroaniline	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
87-68-3	Hexachlorobutadiene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
91-57-6	2-Methylnaphthalene	UG/KG	180 J	210 J	10 UJ	11 UJ	10 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
91-58-7	2-Chloronaphthalene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
88-74-4	2-Nitroaniline	UG/KG	1500 UJ	1500 UJ	25 UJ	25 UJ	25 UJ
131-11-3	Dimethylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
208-96-8	Acenaphthylene	UG/KG	450 J	560 J	10 UJ	11 UJ	10 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
99-09-2	3-Nitroaniline	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
83-32-9	Acenaphthene	UG/KG	310 J	390 J	10 UJ	11 UJ	10 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
100-02-7	4-Nitrophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
132-64-9	Dibenzofuran	UG/KG	420 J	520 J	10 UJ	11 UJ	10 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
84-66-2	Diethylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	1 J	10 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
86-73-7	Fluorene	UG/KG	500 J	630 J	10 UJ	11 UJ	10 UJ
100-01-6	4-Nitroaniline	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
118-74-1	Hexachlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
87-86-5	Pentachlorophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
85-01-8	Phenanthrene	UG/KG	2100 J	2500 J	10 UJ	11 UJ	10 UJ
120-12-7	Anthracene	UG/KG	660 J	1100 J	10 UJ	11 UJ	10 UJ
84-74-2	Di-n-butylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
206-44-0	Fluoranthene	UG/KG	3800 J	4800 J	10 UJ	11 UJ	10 UJ
129-00-0	Pyrene	UG/KG	3200 J	4400 J	10 UJ	11 UJ	10 UJ
85-68-7	Butylbenzylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
56-55-3	Benzo(a)anthracene	UG/KG	2200 J	3000 J	10 UJ	11 UJ	10 UJ
219-01-9	Chrysene	UG/KG	2500 J	3300 J	10 UJ	11 UJ	10 UJ
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	600 UJ	130 J	10 UJ	11 UJ	10 UJ
117-84-0	Di-n-octylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	3200 J	3900 J	10 UJ	11 UJ	10 UJ
207-08-9	Benzo(k)fluoranthene	UG/KG	1200 J	1600 J	10 UJ	11 UJ	10 UJ
50-32-8	Benzo(a)pyrene	UG/KG	2600 J	2300 J	10 UJ	11 UJ	10 UJ
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1800 J	2200 J	10 UJ	11 UJ	10 UJ
53-70-3	Dibenz(a,h)anthracene	UG/KG	440 J	570 J	10 UJ	11 UJ	10 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	1700 J	2200 J	10 UJ	11 UJ	10 UJ
86-74-8	Carbazole	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	11900	1900	14.6 U	57.3 J	12.9 U
7440-36-0	Antimony	MG/KG	10.2 UJ	2.1 UJ	18.9 UJ	18.9 UJ	16.7 UJ
7440-38-2	Arsenic	MG/KG	28.3	35.3	1.4 U	1.4 U	1.4 U
7440-39-3	Barium	MG/KG	218	38.1	1.4 U	1.4 U	1.3 U
7440-41-7	Beryllium	MG/KG	1.4 J	0.15 J	0.46 U	0.46 U	0.4 U
7440-43-9	Cadmium	MG/KG	0.86 J	0.37 J	1.5 U	1.5 U	1.3 U
7440-70-2	Calcium	MG/KG	79200	19300	15.5 J	80.1 J	72.2 J
7440-47-3	Chromium	MG/KG	870 J	174 J	2.8 U	2.8 U	2.5 U
7440-48-4	Cobalt	MG/KG	7.4 J	2.1 J	2.9 U	2.9 U	2.6 U
7440-50-8	Copper	MG/KG	79.3	29.7	8.6 U	8.6 U	7.6 U
7439-89-6	Iron	MG/KG	116000	39300	36.9 U	36.9 U	32.6 U
7439-92-1	Lead	MG/KG	45.4	10.9	0.77 J	0.91 J	0.7 U
7439-95-4	Magnesium	MG/KG	17700 J	3120 J	31.7 J	33 J	36 J
7439-96-5	Manganese	MG/KG	16400	3890	1.1 U	1.1 U	1.8 J
7439-97-6	Mercury	MG/KG	0.13	0.21	0.04 U	0.04 U	0.05 J
7440-02-0	Nickel	MG/KG	26.3	10.2	18.2 U	18.2 U	16.1 U
7440-09-7	Potassium	MG/KG	447 J	81.2 J	423 U	423 U	373 U
7782-49-2	Selenium	MG/KG	0.65	1.4	2.5 U	1.6 U	1.6 U
7440-22-4	Silver	MG/KG	1.6 U	0.34 U	3 U	3 U	2.6 U
7440-23-5	Sodium	MG/KG	193 J	33.5 J	20.2 U	20.2 U	17.8 J
7440-28-0	Thallium	MG/KG	0.94 UJ	0.98 UJ	1.8 U	1.8 U	1.1 U
7440-62-2	Vanadium	MG/KG	120 J	79.2 J	2.6 U	2.6 U	2.3 U
7440-66-6	Zinc	MG/KG	205 J	50 J	4.7 J	2.7 J	2.1 J
57-12-5	Cyanide	MG/KG	17	21.2			

ATTACHMENT B

TELEPHONE RECORD

TELEPHONE RECORD

PROJECT: Cherry Farm

DATE: August 12, 1996 **TIME:** 11:00 am

CALL TO: Christine McGrath **COMPANY:** NYSDEC
PHONE #: (518) 457-3252

CALL FROM: Maryanne Kosciewicz **COMPANY:** Parsons ES
PHONE #: (315) 498-4456

COMMENTS:

I spoke with Christine about a project for which I am validating the sample data. I gave her the following scenario:

> A laboratory received the sample shipment within one to two days of sampling. This laboratory then ships the data to another office, but still the same laboratory. However, this office does not receive or log in the samples for five to eight days from the sampling date. Since holding times for NYSDEC validation are from VTSR (verified time of sample receipt at the laboratory), how should I calculate holding times? From initial laboratory receipt or from receipt by the second laboratory?

Christine advised me to evaluate holding times in this case according to EPA holding time requirements, i.e., calculate holding times from the day of sample collection rather than sample receipt. She also advised me to reference this issue in the data validation report. "Unfortunately, the laboratory operated poorly in this case, and hopefully, it will not cause the data to be unusable or cause resampling."

APPENDIX C
NYTEST LABORATORY ANALYTICAL DATA

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	026010 0-0.5' 2276022 NYTEST CF2 SOIL 12/14/94 3/08/95	026020 0-0.5' 2276021 NYTEST CF2 SOIL 12/14/94 3/08/95	026100 0-0.5' 2276020 NYTEST CF2 SOIL 12/14/94 3/08/95	037010 0-0.5' 2276019 NYTEST CF2 SOIL 12/14/94 3/08/95	037020 0-0.5' 2275911 NYTEST CF1 SOIL 12/14/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
95-57-8	2-Chlorophenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
95-48-7	2-Methylphenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
106-44-5	4-Methylphenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
67-72-1	Hexachloroethane	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
98-95-3	Nitrobenzene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
78-59-1	Isophorone	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
88-75-5	2-Nitrophenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
91-20-3	Naphthalene	UG/KG	1900	720	650 J	1000	4800 J
106-47-8	4-Chloroaniline	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
87-68-3	Hexachlorobutadiene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
59-50-7	4-Chloro-3-Methylphenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
91-57-6	2-Methylnaphthalene	UG/KG	200 J	87 J	910 U	69 J	1900 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	890 UJ	460 UJ	910 UJ	510 UJ	1900 R
88-06-2	2,4,6-Trichlorophenol	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	4400 U	2300 U	4600 U	2600 U	9700 UJ
91-58-7	2-Chloronaphthalene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
88-74-4	2-Nitroaniline	UG/KG	4400 U	2300 U	4600 U	2600 U	9700 UJ
131-11-3	Dimethylphthalate	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
208-96-8	Acenaphthylene	UG/KG	180 J	110 J	380 J	63 J	1900 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
99-09-2	3-Nitroaniline	UG/KG	4400 U	2300 U	4600 U	2600 U	9700 UJ
83-32-9	Acenaphthene	UG/KG	94 J	460 U	910 U	93 J	1900 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	4400 UJ	2300 UJ	4600 UJ	2600 UJ	9700 UJ
100-02-7	4-Nitrophenol	UG/KG	4400 U	2300 U	4600 U	2600 U	9700 UJ
132-64-9	Dibenzofuran	UG/KG	140 J	72 J	910 U	95 J	1900 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
84-66-2	Diethylphthalate	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
86-73-7	Fluorene	UG/KG	240 J	100 J	180 J	130 J	1900 UJ
100-01-6	4-Nitroaniline	UG/KG	4400 U	2300 U	4600 U	2600 U	9700 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	4400 UJ	2300 UJ	4600 UJ	2600 UJ	9700 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
118-74-1	Hexachlorobenzene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
87-86-5	Pentachlorophenol	UG/KG	4400 U	2300 U	4600 U	2600 U	9700 UJ
85-01-8	Phenanthrene	UG/KG	830 J	530	1200	490 J	1000 J
120-12-7	Anthracene	UG/KG	300 J	420 J	630 J	170 J	380 J
86-74-8	Carbazole	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
84-74-2	Di-n-butylphthalate	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
206-44-0	Fluoranthene	UG/KG	2000	1600	3300	900	2600 J
129-00-0	Pyrene	UG/KG	1700	1400	2600	760	1800 J
85-68-7	Butylbenzylphthalate	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	1800 UJ	910 UJ	1800 UJ	1000 UJ	3900 UJ
56-55-3	Benzo(a)anthracene	UG/KG	1200	920	2100	450 J	1300 J
219-01-9	Chrysene	UG/KG	1200	1000	2300	500 J	1400 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	890 U	460 U	910 U	510 U	1900 U
117-84-0	Di-n-octylphthalate	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	560 J	450 J	970	270 J	1300 J
207-08-9	Benzo(k)fluoranthene	UG/KG	600 J	490	1100	230 J	840 J
50-32-8	Benzo(a)pyrene	UG/KG	660 J	570	1300	260 J	1100 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	260 J	240 J	580 J	130 J	540 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	890 U	460 U	910 U	510 U	1900 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	260 J	240 J	550 J	130 J	560 J
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	110 U	110 U	110 U	120 U	120 U
11004-28-2	Aroclor-1221	UG/KG	110 U	110 U	110 U	120 U	120 U
11141-16-5	Aroclor-1232	UG/KG	110 U	110 U	110 U	120 U	120 U
53469-21-9	Aroclor-1242	UG/KG	110 U	110 U	110 U	120 U	120 U
12672-29-6	Aroclor-1248	UG/KG	340 J	260 J	150 J	340 J	130 J
11097-69-1	Aroclor-1254	UG/KG	110 U	110 U	110 U	120 U	120 U
11096-82-5	Aroclor-1260	UG/KG	110 U	110 U	110 U	120 U	120 U
	INORGANICS						
7429-90-5	Aluminum	MG/KG	4120	4780	4320	7420	6230
7440-36-0	Antimony	MG/KG	10 UJ	12 J	12.3 J	16.4 J	19 J
7440-38-2	Arsenic	MG/KG	10.9	14	9.4	9.1	18.7
7440-39-3	Barium	MG/KG	58.6	73.6	42.3 J	85.7	97.8
7440-41-7	Beryllium	MG/KG	0.26 U	0.85 J	0.24 U	0.94 J	0.86 J
7440-43-9	Cadmium	MG/KG	2.4 J	3.8 J	3.4 J	2.7 J	2.1
7440-70-2	Calcium	MG/KG	19900 J	17100 J	14600 J	36200 J	22100
7440-47-3	Chromium	MG/KG	55.4 J	51.3 J	28.4 J	72 J	42.4
7440-48-4	Cobalt	MG/KG	11.5 J	15.3	10.2 J	10.8 J	13.9
7440-50-8	Copper	MG/KG	39.4 J	44.7 J	29.3 J	27.3 J	41.9
7439-89-6	Iron	MG/KG	82400 J	126000 J	65400 J	54400 J	118000
7439-92-1	Lead	MG/KG	73.1	103	60.7	71.3	109 J
7439-95-4	Magnesium	MG/KG	3780	3610	4900	5290	4840
7439-96-5	Manganese	MG/KG	1430	1640	889	2090	2590
7439-97-6	Mercury	MG/KG	0.2 J	0.15 J	0.19 J	0.17 J	0.4
7440-02-0	Nickel	MG/KG	23.6	32.8	25.8	29.5	29
7440-09-7	Potassium	MG/KG	600 J	475 J	583 J	1120 J	672 J
7782-49-2	Selenium	MG/KG	1.1 UJ	1.2 U	1.3 U	1.5 UJ	1.2 U
7440-22-4	Silver	MG/KG	1.6 UJ	1.6 UJ	1.4 UJ	1.7 UJ	1.5 UJ
7440-23-5	Sodium	MG/KG	107 U	177 U	83.9 U	210 U	95.2 U
7440-28-0	Thallium	MG/KG	1.1 U	1.2 U	1.3 U	1.5 U	1.4 U
7440-62-2	Vanadium	MG/KG	37.5	52.3	31	34.8	50.3
7440-66-6	Zinc	MG/KG	279 J	470 J	246 J	208 J	311 J
57-12-5	Cyanide	MG/KG	0.63 R	0.63 R	0.54 R	0.68 R	0.63 UJ
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG	41786 J	31580 J	35862 J	23167 J	59264

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	037020-DUP 0-0.5' 2275912 NYTEST CF1 SOIL 12/14/94 3/08/95	037100 0-0.5' 2275910 NYTEST CF1 SOIL 12/14/94 3/08/95	040010 0-0.5' 2275909 NYTEST CF1 SOIL 12/14/94 3/08/95	040020 0-0.5' 2275908 NYTEST CF1 SOIL 12/14/94 3/08/95	040100 0-0.5' 2275907 NYTEST CF1 SOIL 12/14/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
95-57-8	2-Chlorophenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
541-73-1	1,3-Dichlorobenzene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
106-46-7	1,4-Dichlorobenzene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
95-50-1	1,2-Dichlorobenzene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
95-48-7	2-Methylphenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
106-44-5	4-Methylphenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
67-72-1	Hexachloroethane	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
98-95-3	Nitrobenzene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
78-59-1	Isophorone	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
88-75-5	2-Nitrophenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
105-67-9	2,4-Dimethylphenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
120-83-2	2,4-Dichlorophenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
91-20-3	Naphthalene	UG/KG	14000 J	650 J	420 UJ	310 J	3600 J
106-47-8	4-Chloroaniline	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 UJ
87-68-3	Hexachlorobutadiene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
91-57-6	2-Methylnaphthalene	UG/KG	360 J	4800 UJ	420 UJ	850 UJ	1400 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	2000 R	4800 UJ	420 UJ	850 UJ	5100 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
95-95-4	2,4,5-Trichlorophenol	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 U
91-58-7	2-Chloronaphthalene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
88-74-4	2-Nitroaniline	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 U
131-11-3	Dimethylphthalate	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
208-96-8	Acenaphthylene	UG/KG	260 J	1500 J	420 UJ	850 UJ	3100 J
606-20-2	2,6-Dinitrotoluene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
99-09-2	3-Nitroaniline	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 UJ
83-32-9	Acenaphthene	UG/KG	2000 UJ	540 J	420 UJ	850 UJ	1400 J
51-28-5	2,4-Dinitrophenol	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 UJ
100-02-7	4-Nitrophenol	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 U
132-64-9	Dibenzofuran	UG/KG	270 J	870 J	420 UJ	850 UJ	1500 J
121-14-2	2,4-Dinitrotoluene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
84-66-2	Diethylphthalate	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
86-73-7	Fluorene	UG/KG	520 J	2900 J	420 UJ	130 J	5200
100-01-6	4-Nitroaniline	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 U
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 U
86-30-6	N-Nitrosodiphenylamine	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
101-55-3	4-Bromophenyl-phenylether	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
118-74-1	Hexachlorobenzene	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
87-86-5	Pentachlorophenol	UG/KG	9800 UJ	24000 UJ	2100 UJ	4300 UJ	26000 U
85-01-8	Phenanthrene	UG/KG	2600 J	35000 J	82 J	560 J	28000
120-12-7	Anthracene	UG/KG	780 J	14000 J	420 UJ	170 J	10000
86-74-8	Carbazole	UG/KG	2000 UJ	780 J	420 UJ	86 J	570 J
84-74-2	Di-n-butylphthalate	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
206-44-0	Fluoranthene	UG/KG	5500 J	56000 J	130 J	1100 J	29000
129-00-0	Pyrene	UG/KG	4200 J	32000 J	100 J	890 J	28000
85-68-7	Butylbenzylphthalate	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
91-94-1	3,3'-Dichlorobenzidine	UG/KG	3900 UJ	9700 UJ	830 UJ	1700 UJ	10000 U
56-55-3	Benzo(a)anthracene	UG/KG	2600 J	14000 J	48 J	580 J	14000
219-01-9	Chrysene	UG/KG	2600 J	14000 J	68 J	670 J	15000
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	2000 U	4800 U	1400 U	850 U	2400 J
117-84-0	Di-n-octylphthalate	UG/KG	2000 UJ	4800 UJ	420 UJ	850 UJ	5100 U
205-99-2	Benzo(b)fluoranthene	UG/KG	2300 J	11000 J	46 J	360 J	11000
207-08-9	Benzo(k)fluoranthene	UG/KG	1600 J	9300 J	48 J	480 J	6800
50-32-8	Benzo(a)pyrene	UG/KG	2100 J	14000 J	46 J	460 J	12000
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	960 J	7000 J	420 UJ	200 J	5000 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	2000 UJ	540 J	420 UJ	850 UJ	520 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	950 J	7900 J	42 J	220 J	5200
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	120 U	120 U	100 UJ	100 UJ	120 UJ
11004-28-2	Aroclor-1221	UG/KG	120 U	120 U	100 UJ	100 UJ	120 UJ
11141-16-5	Aroclor-1232	UG/KG	120 U	120 U	100 UJ	100 UJ	120 UJ
53469-21-9	Aroclor-1242	UG/KG	120 U	120 U	100 UJ	100 UJ	120 UJ
12672-29-6	Aroclor-1248	UG/KG	90 J	200 J	100 UJ	120 J	320 J
11097-69-1	Aroclor-1254	UG/KG	120 U	120 U	100 UJ	100 UJ	120 UJ
11096-82-5	Aroclor-1260	UG/KG	62 J	120 U	100 UJ	340 J	120 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	5290	5980	8980	4850	5090
7440-36-0	Antimony	MG/KG	12.1 J	27.4 J	11.9 J	11.3 J	11.5 UJ
7440-38-2	Arsenic	MG/KG	15.8	13.4	6 J	11.6	21.2
7440-39-3	Barium	MG/KG	102	68.6	163	54.3	64.4
7440-41-7	Beryllium	MG/KG	0.83 J	1.1 J	1.4	0.78 J	0.3 UJ
7440-43-9	Cadmium	MG/KG	2.8	3.7	2.6	2.4	2.7
7440-70-2	Calcium	MG/KG	40700	24500	130000	30700	45400
7440-47-3	Chromium	MG/KG	36.3	134	717	85.3	43.8
7440-48-4	Cobalt	MG/KG	11.8 J	19.2	12.1	9.5 J	12.2 J
7440-50-8	Copper	MG/KG	40.6	88.7	45.6	54.3	57.5
7439-89-6	Iron	MG/KG	105000	152000	117000	76300	90900
7439-92-1	Lead	MG/KG	113 J	249 J	86.7 J	102 J	109 J
7439-95-4	Magnesium	MG/KG	4640	5680	23500	5040	4300
7439-96-5	Manganese	MG/KG	2410	4810	25200	2670	1550
7439-97-6	Mercury	MG/KG	0.55	0.3	0.12 U	0.13 U	0.38
7440-02-0	Nickel	MG/KG	23.7	37.2	13.7	19.3	23.3
7440-09-7	Potassium	MG/KG	345 J	444 J	644 J	345 J	618 J
7782-49-2	Selenium	MG/KG	1.3 U	1.4 U	1 U	1.2 U	1.4 U
7440-22-4	Silver	MG/KG	1.5 UJ	1.7 UJ	1.2 UJ	1.4 UJ	1.8 UJ
7440-23-5	Sodium	MG/KG	220 U	189 U	241 U	152 U	400 U
7440-28-0	Thallium	MG/KG	1.3 U	1.3 U	1.1 U	1.1 U	1.5 U
7440-62-2	Vanadium	MG/KG	43.9	74.2	190	49.1	39.6
7440-66-6	Zinc	MG/KG	316 J	399 J	164 J	291 J	334 J
57-12-5	Cyanide	MG/KG	0.76 UJ	0.69 UJ	0.5 UJ	0.67 UJ	0.76 UJ
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG	49817	38127	45177	46883	76222

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	043010 0-0.5' 2275903 NYTEST CF1 SOIL 12/13/94 3/08/95	043020 0-0.5' 2275902 NYTEST CF1 SOIL 12/13/94 3/08/95	043100 0-0.5' 2275901 NYTEST CF1 SOIL 12/13/94 3/08/95	045010 0-0.5' 2276018 NYTEST CF2 SOIL 12/13/94 3/08/95	045020 0-0.5' 2276016 NYTEST CF2 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
95-57-8	2-Chlorophenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
541-73-1	1,3-Dichlorobenzene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
106-46-7	1,4-Dichlorobenzene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
95-50-1	1,2-Dichlorobenzene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
95-48-7	2-Methylphenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
106-44-5	4-Methylphenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
67-72-1	Hexachloroethane	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
98-95-3	Nitrobenzene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
78-59-1	Isophorone	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
88-75-5	2-Nitrophenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
105-67-9	2,4-Dimethylphenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
120-83-2	2,4-Dichlorophenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
91-20-3	Naphthalene	UG/KG	180 J	910 J	54000 J	840 J	2600 J
106-47-8	4-Chloroaniline	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
87-68-3	Hexachlorobutadiene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
91-57-6	2-Methylnaphthalene	UG/KG	400 UJ	2200 UJ	55000 J	2200 U	750 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 UJ	3900 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
95-95-4	2,4,5-Trichlorophenol	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 U	19000 U
91-58-7	2-Chloronaphthalene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
88-74-4	2-Nitroaniline	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 U	19000 U
131-11-3	Dimethylphthalate	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
208-96-8	Acenaphthylene	UG/KG	58 J	300 J	52000 J	3500 J	9900
606-20-2	2,6-Dinitrotoluene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
99-09-2	3-Nitroaniline	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 U	19000 U
83-32-9	Acenaphthene	UG/KG	400 UJ	2200 UJ	14000 J	230 J	1400 J
51-28-5	2,4-Dinitrophenol	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 UJ	19000 UJ
100-02-7	4-Nitrophenol	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 U	19000 U
132-64-9	Dibenzofuran	UG/KG	400 UJ	2200 UJ	19000 J	1200 J	6400
121-14-2	2,4-Dinitrotoluene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
84-66-2	Diethylphthalate	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
86-73-7	Fluorene	UG/KG	43 J	350 J	100000 J	4000 J	15000
100-01-6	4-Nitroaniline	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 U	19000 U
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 UJ	19000 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
101-55-3	4-Bromophenyl-phenylether	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
118-74-1	Hexachlorobenzene	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
87-86-5	Pentachlorophenol	UG/KG	2000 UJ	11000 UJ	270000 UJ	11000 UJ	19000 U
85-01-8	Phenanthrene	UG/KG	340 J	2500 J	390000 J	29000 J	83000
120-12-7	Anthracene	UG/KG	110 J	730 J	74000 J	15000 J	37000
86-74-8	Carbazole	UG/KG	49 J	250 J	55000 UJ	240 J	950 J
84-74-2	Di-n-butylphthalate	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
206-44-0	Fluoranthene	UG/KG	950 J	4400 J	150000 J	63000 J	110000
129-00-0	Pyrene	UG/KG	780 J	3400 J	220000 J	49000 J	87000
85-68-7	Butylbenzylphthalate	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
91-94-1	3,3'-Dichlorobenzidine	UG/KG	790 UJ	4500 UJ	110000 UJ	4500 U	7800 UJ
56-55-3	Benzo(a)anthracene	UG/KG	450 J	2000 J	82000 J	25000 J	36000
219-01-9	Chrysene	UG/KG	500 J	1900 J	94000 J	25000 J	37000
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	400 U	2200 U	55000 UJ	2200 U	3900 U
117-84-0	Di-n-octylphthalate	UG/KG	400 UJ	2200 UJ	55000 UJ	2200 U	3900 U
205-99-2	Benzo(b)fluoranthene	UG/KG	370 J	1600 J	34000 J	13000 J	18000
207-08-9	Benzo(k)fluoranthene	UG/KG	430 J	1600 J	40000 J	5100 J	9000
50-32-8	Benzo(a)pyrene	UG/KG	460 J	1900 J	71000 J	14000 J	21000
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	260 J	1000 J	23000 J	7400 J	11000
53-70-3	Dibenz(a,h)anthracene	UG/KG	400 UJ	2200 UJ	55000 UJ	640 J	800 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	290 J	1200 J	29000 J	7900 J	13000
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	95 UJ	110 U	110 UJ	110 U	90 UJ
11004-28-2	Aroclor-1221	UG/KG	95 UJ	110 U	110 UJ	110 U	90 UJ
11141-16-5	Aroclor-1232	UG/KG	95 UJ	110 U	110 UJ	110 U	90 UJ
53469-21-9	Aroclor-1242	UG/KG	95 UJ	110 U	110 UJ	110 U	90 UJ
12672-29-6	Aroclor-1248	UG/KG	95 UJ	240 J	90 J	50 J	210 J
11097-69-1	Aroclor-1254	UG/KG	95 UJ	110 U	110 UJ	110 U	90 UJ
11096-82-5	Aroclor-1260	UG/KG	95 UJ	140	110 UJ	110 UJ	90 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	7150	4410	3800	5430	3960
7440-36-0	Antimony	MG/KG	8.4 UJ	9.4 UJ	10.6 J	11.8 J	15 J
7440-38-2	Arsenic	MG/KG	7.2	7.2	20.7 J	9.2	13
7440-39-3	Barium	MG/KG	141	42.3 J	65.6	167	72.3
7440-41-7	Beryllium	MG/KG	1.1 J	0.7 J	0.8 J	0.8 J	0.83 J
7440-43-9	Cadmium	MG/KG	0.52 J	3.1	5.3	3.1 J	4.4 J
7440-70-2	Calcium	MG/KG	122000	26600	19700	174000 J	35500 J
7440-47-3	Chromium	MG/KG	593	48.7	61.1	535 J	73.6 J
7440-48-4	Cobalt	MG/KG	7.8 J	12.8	20.2	6.5 J	13.4
7440-50-8	Copper	MG/KG	63	60.1	47	20.9 J	43.8 J
7439-89-6	Iron	MG/KG	67500	86700	187000	52800 J	119000 J
7439-92-1	Lead	MG/KG	131 J	114 J	94.7 J	73.3	81
7439-95-4	Magnesium	MG/KG	27100	5030	6980	15900	3500
7439-96-5	Manganese	MG/KG	18100	1480	2890	17400	2990
7439-97-6	Mercury	MG/KG	0.12 U	0.13 U	0.18	0.44 J	0.12 J
7440-02-0	Nickel	MG/KG	19.1	24.9	36.8	14.8	21.1
7440-09-7	Potassium	MG/KG	550 J	530 J	416 J	758 J	264 J
7782-49-2	Selenium	MG/KG	1.1 UJ	1.3 U	1.1 U	1.3 U	1 U
7440-22-4	Silver	MG/KG	1.3 UJ	1.5 UJ	1.3 UJ	1.4 UJ	1.2 UJ
7440-23-5	Sodium	MG/KG	240 U	143 U	110 U	420 U	164 U
7440-28-0	Thallium	MG/KG	1.1 UJ	1.2 U	1.3 U	1.3 UJ	1 U
7440-62-2	Vanadium	MG/KG	158	44.4	67.8	167	51.5
7440-66-6	Zinc	MG/KG	136 J	333 J	312 J	118 J	366 J
57-12-5	Cyanide	MG/KG	0.43 UJ	0.72 UJ	0.59 UJ	0.56 R	0.54 R
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG	40210	55345	34858	20207 J	22597 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	046100 0-0.5' 2276015 NYTEST CF2 SOIL 12/14/94 3/08/95	050002 0-0.5' 2275906 NYTEST CF1 SOIL 12/13/94 3/08/95	050020 0-0.5' 2275905 NYTEST CF1 SOIL 12/13/94 3/08/95	050100 0-0.5' 2275904 NYTEST CF1 SOIL 12/13/94 3/08/95	055002 0-0.5' 2276012 NYTEST CF2 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
95-57-8	2-Chlorophenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
541-73-1	1,3-Dichlorobenzene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
106-46-7	1,4-Dichlorobenzene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
95-50-1	1,2-Dichlorobenzene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
95-48-7	2-Methylphenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
106-44-5	4-Methylphenol	UG/KG	140 J	1000 UJ	920 UJ	430 UJ	940 U
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
67-72-1	Hexachloroethane	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
98-95-3	Nitrobenzene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
78-59-1	Isophorone	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
88-75-5	2-Nitrophenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
105-67-9	2,4-Dimethylphenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
120-83-2	2,4-Dichlorophenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
91-20-3	Naphthalene	UG/KG	1300	1000 UJ	100 J	430 UJ	210 J
106-47-8	4-Chloroaniline	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
87-68-3	Hexachlorobutadiene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
91-57-6	2-Methylnaphthalene	UG/KG	580 J	1000 UJ	920 UJ	430 UJ	97 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	900 UJ	1000 UJ	920 UJ	430 UJ	940 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
95-95-4	2,4,5-Trichlorophenol	UG/KG	4500 U	5000 UJ	4600 UJ	2100 UJ	4700 U
91-58-7	2-Chloronaphthalene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
88-74-4	2-Nitroaniline	UG/KG	4500 U	5000 UJ	4600 UJ	2100 UJ	4700 U
131-11-3	Dimethylphthalate	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
208-96-8	Acenaphthylene	UG/KG	1100	1000 UJ	920 UJ	430 UJ	200 J
606-20-2	2,6-Dinitrotoluene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
99-09-2	3-Nitroaniline	UG/KG	4500 U	5000 UJ	4600 UJ	2100 UJ	4700 U
83-32-9	Acenaphthene	UG/KG	1500	100 J	920 UJ	430 UJ	130 J
51-28-5	2,4-Dinitrophenol	UG/KG	4500 UJ	5000 UJ	4600 UJ	2100 UJ	4700 U
100-02-7	4-Nitrophenol	UG/KG	4500 U	5000 UJ	4600 UJ	2100 UJ	4700 U
132-64-9	Dibenzofuran	UG/KG	1200	130 J	920 UJ	430 UJ	190 J
121-14-2	2,4-Dinitrotoluene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
84-66-2	Diethylphthalate	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
86-73-7	Fluorene	UG/KG	2000	140 J	120 J	430 UJ	420 J
100-01-6	4-Nitroaniline	UG/KG	4500 U	5000 UJ	4600 UJ	2100 UJ	4700 U
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	4500 UJ	5000 UJ	4600 UJ	2100 UJ	4700 U
86-30-6	N-Nitrosodiphenylamine	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
101-55-3	4-Bromophenyl-phenylether	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
118-74-1	Hexachlorobenzene	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
87-86-5	Pentachlorophenol	UG/KG	4500 U	5000 UJ	4600 UJ	2100 UJ	4700 U
85-01-8	Phenanthrene	UG/KG	5800	2500 J	1200 J	380 J	1800
120-12-7	Anthracene	UG/KG	2200	160 J	240 J	87 J	400 J
86-74-8	Carbazole	UG/KG	620 J	230 J	200 J	430 UJ	940 U
84-74-2	Di-n-butylphthalate	UG/KG	900 U	140 J	920 UJ	430 UJ	940 U
206-44-0	Fluoranthene	UG/KG	10000	3300 J	1900 J	810 J	2200
129-00-0	Pyrene	UG/KG	8400	2000 J	1500 J	670 J	1700
85-68-7	Butylbenzylphthalate	UG/KG	900 U	170 J	920 UJ	430 UJ	940 U
91-94-1	3,3'-Dichlorobenzidine	UG/KG	1800 UJ	2000 UJ	1800 UJ	850 UJ	1900 U
56-55-3	Benzo(a)anthracene	UG/KG	6300	500 J	730 J	320 J	840 J
219-01-9	Chrysene	UG/KG	6100	970 J	850 J	350 J	910 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	900 U	2000 U	2100 J	430 U	940 U
117-84-0	Di-n-octylphthalate	UG/KG	900 U	1000 UJ	920 UJ	430 UJ	940 U
205-99-2	Benzo(b)fluoranthene	UG/KG	3400	380 J	650 J	240 J	540 J
207-08-9	Benzo(k)fluoranthene	UG/KG	2300	420 J	550 J	310 J	440 J
50-32-8	Benzo(a)pyrene	UG/KG	3400	250 J	630 J	310 J	540 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1700	130 J	300 J	160 J	240 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	220 J	1000 UJ	920 UJ	430 UJ	940 U
191-24-2	Benzo(g,h,i)perylene	UG/KG	1800	140 J	300 J	170 J	230 J
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	110 U	120 UJ	110 UJ	100 UJ	110 U
11004-28-2	Aroclor-1221	UG/KG	110 U	120 UJ	110 UJ	100 UJ	110 U
11141-16-5	Aroclor-1232	UG/KG	110 U	120 UJ	110 UJ	100 UJ	110 U
53469-21-9	Aroclor-1242	UG/KG	110 U	120 UJ	110 UJ	100 UJ	110 U
12672-29-6	Aroclor-1248	UG/KG	710 J	300 J	440 J	470 J	1100 J
11097-69-1	Aroclor-1254	UG/KG	110 U	120 UJ	110 UJ	100 UJ	110 U
11096-82-5	Aroclor-1260	UG/KG	110 U	120 UJ	2300 J	100 UJ	110 U
	INORGANICS						
7429-90-5	Aluminum	MG/KG	3160	6600	4540	2340	4100
7440-36-0	Antimony	MG/KG	8.8 UJ	9.7 UJ	9.7 UJ	8.1 UJ	9.6 UJ
7440-38-2	Arsenic	MG/KG	3.6	12.2	6.7	4.2	4.8
7440-39-3	Barium	MG/KG	24.1 J	143	43.7 J	21.3 J	30 J
7440-41-7	Beryllium	MG/KG	0.25 J	1 J	0.26 UJ	0.21 UJ	0.27 J
7440-43-9	Cadmium	MG/KG	0.81 J	2.3 J	0.56 J	0.51 J	0.51 UJ
7440-70-2	Calcium	MG/KG	29100 J	40500	15200	44900	16100 J
7440-47-3	Chromium	MG/KG	8 J	64.5	16.6	6.9	42.3 J
7440-48-4	Cobalt	MG/KG	2.6 J	30.2	4.5 J	2.7 J	4.1 J
7440-50-8	Copper	MG/KG	5 J	257	34.5	7.9	21.5 J
7439-89-6	Iron	MG/KG	9000 J	86000	18600	8220	13000 J
7439-92-1	Lead	MG/KG	10.4	70.7 J	28.4 J	8.7 J	22
7439-95-4	Magnesium	MG/KG	4530	5410	5280	5900	5390
7439-96-5	Manganese	MG/KG	260	46300	864	369	287
7439-97-6	Mercury	MG/KG	0.14 UJ	0.15 U	0.14 U	0.13 U	0.14 UJ
7440-02-0	Nickel	MG/KG	11.6	57.7	14.5	12.9	26.9
7440-09-7	Potassium	MG/KG	554 J	739 J	777 J	401 J	586 J
7782-49-2	Selenium	MG/KG	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U
7440-22-4	Silver	MG/KG	2.8 J	1.5 UJ	1.5 UJ	1.3 UJ	1.5 UJ
7440-23-5	Sodium	MG/KG	223 U	302 U	148 U	220 U	88.4 U
7440-28-0	Thallium	MG/KG	1.2 U	1.5 U	1.2 U	1.1 U	1.2 U
7440-62-2	Vanadium	MG/KG	10.3 J	33.7	16.3	11.6	12.2 J
7440-66-6	Zinc	MG/KG	52.8 J	84.2 J	100 J	46.5 J	97.2 J
57-12-5	Cyanide	MG/KG	0.59 R	0.71 UJ	0.69 UJ	0.6 UJ	0.7 R
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG					

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	055020 0-0.5' 2276011 NYTEST CF2 SOIL 12/13/94 3/08/95	055100 0-0.5' 2276010 NYTEST CF2 SOIL 12/13/94 3/08/95	060002 0-0.5' 2276008 NYTEST CF2 SOIL 12/13/94 3/08/95	060002-DUP 0-0.5' 2276009 NYTEST CF2 SOIL 12/13/94 3/08/95	060020 0-0.5' 2276007 NYTEST CF2 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	920 U	880 U	440 U	890 U	440 U
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	920 U	880 U	440 U	890 U	440 U
95-57-8	2-Chlorophenol	UG/KG	920 U	880 U	440 U	890 U	440 U
541-73-1	1,3-Dichlorobenzene	UG/KG	920 U	880 U	440 U	890 U	440 U
106-46-7	1,4-Dichlorobenzene	UG/KG	920 U	880 U	440 U	890 U	440 U
95-50-1	1,2-Dichlorobenzene	UG/KG	920 U	880 U	440 U	890 U	440 U
95-48-7	2-Methylphenol	UG/KG	920 U	880 U	440 U	890 U	440 U
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	920 U	880 U	440 U	890 U	440 U
106-44-5	4-Methylphenol	UG/KG	920 U	880 U	440 U	890 U	440 U
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	920 U	880 U	440 U	890 U	440 U
67-72-1	Hexachloroethane	UG/KG	920 U	880 U	440 U	890 U	440 U
98-95-3	Nitrobenzene	UG/KG	920 U	880 U	440 U	890 U	440 U
78-59-1	Isophorone	UG/KG	920 U	880 U	440 U	890 U	440 U
88-75-5	2-Nitrophenol	UG/KG	920 U	880 U	440 U	890 U	440 U
105-67-9	2,4-Dimethylphenol	UG/KG	920 U	880 U	440 U	890 U	440 U
120-83-2	2,4-Dichlorophenol	UG/KG	920 U	880 U	440 U	890 U	440 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	920 U	880 U	440 U	890 U	440 U
91-20-3	Naphthalene	UG/KG	140 J	880 U	89 J	220 J	95 J
106-47-8	4-Chloroaniline	UG/KG	920 U	880 U	440 U	890 U	440 U
87-68-3	Hexachlorobutadiene	UG/KG	920 U	880 U	440 U	890 U	440 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	920 U	880 U	440 U	890 U	440 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	920 U	880 U	440 U	890 U	440 U
91-57-6	2-Methylnaphthalene	UG/KG	920 U	880 U	440 U	890 U	440 U
77-47-4	Hexachlorocyclopentadiene	UG/KG	920 UJ	880 UJ	440 UJ	890 UJ	440 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	920 U	880 U	440 U	890 U	440 U
95-95-4	2,4,5-Trichlorophenol	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
91-58-7	2-Chloronaphthalene	UG/KG	920 U	880 U	440 U	890 U	440 U
88-74-4	2-Nitroaniline	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
131-11-3	Dimethylphthalate	UG/KG	920 U	880 U	440 U	890 U	440 U
208-96-8	Acenaphthylene	UG/KG	160 J	880 U	440 U	890 U	140 J
606-20-2	2,6-Dinitrotoluene	UG/KG	920 U	880 U	440 U	890 U	440 U
99-09-2	3-Nitroaniline	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
83-32-9	Acenaphthene	UG/KG	160 J	880 U	54 J	150 J	190 J
51-28-5	2,4-Dinitrophenol	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
100-02-7	4-Nitrophenol	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
132-64-9	Dibenzofuran	UG/KG	150 J	880 U	64 J	130 J	110 J
121-14-2	2,4-Dinitrotoluene	UG/KG	920 U	880 U	440 U	890 U	440 U
84-66-2	Diethylphthalate	UG/KG	920 U	880 U	440 U	890 U	440 U
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	920 U	880 U	440 U	890 U	440 U
86-73-7	Fluorene	UG/KG	340 J	880 U	110 J	240 J	280 J
100-01-6	4-Nitroaniline	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
86-30-6	N-Nitrosodiphenylamine	UG/KG	920 U	880 U	440 U	890 U	440 U
101-55-3	4-Bromophenyl-phenylether	UG/KG	920 U	880 U	440 U	890 U	440 U
118-74-1	Hexachlorobenzene	UG/KG	920 U	880 U	440 U	890 U	440 U
87-86-5	Pentachlorophenol	UG/KG	4600 U	4400 U	2200 U	4400 U	2200 U
85-01-8	Phenanthrene	UG/KG	2100	880 U	730	1500	1400
120-12-7	Anthracene	UG/KG	470 J	880 U	180 J	410 J	290 J
86-74-8	Carbazole	UG/KG	920 U	880 U	440 U	120 J	54 J
84-74-2	Di-n-butylphthalate	UG/KG	920 U	880 U	440 U	890 U	440 U
206-44-0	Fluoranthene	UG/KG	2800	97 J	1000 J	1900 J	1600
129-00-0	Pyrene	UG/KG	2100	880 U	800	1500	1300
85-68-7	Butylbenzylphthalate	UG/KG	920 U	880 U	440 U	890 U	440 U
91-94-1	3,3'-Dichlorobenzidine	UG/KG	1800 U	1800 U	880 U	1800 U	880 U
56-55-3	Benzo(a)anthracene	UG/KG	1100	880 U	450	900	700
219-01-9	Chrysene	UG/KG	1100	880 U	490	1000	700
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	920 U	880 U	440 U	890 U	440 U
117-84-0	Di-n-octylphthalate	UG/KG	920 U	880 U	440 U	890 U	440 U
205-99-2	Benzo(b)fluoranthene	UG/KG	700 J	880 U	260 J	550 J	400 J
207-08-9	Benzo(k)fluoranthene	UG/KG	680 J	880 U	260 J	400 J	360 J
50-32-8	Benzo(a)pyrene	UG/KG	740 J	880 U	280 J	510 J	440
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	330 J	880 U	140 J	210 J	220 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	920 U	880 U	440 U	890 U	440 U
191-24-2	Benzo(g,h,i)perylene	UG/KG	320 J	880 U	140 J	190 J	210 J
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	110 UJ	110 UJ	110 UJ	110 U	110 UJ
11004-28-2	Aroclor-1221	UG/KG	110 UJ	110 UJ	110 UJ	110 U	110 UJ
11141-16-5	Aroclor-1232	UG/KG	110 UJ	110 UJ	110 UJ	110 U	110 UJ
53469-21-9	Aroclor-1242	UG/KG	110 UJ	110 UJ	110 UJ	110 U	110 UJ
12672-29-6	Aroclor-1248	UG/KG	1100 J	400 J	750 J	1100 J	840 J
11097-69-1	Aroclor-1254	UG/KG	110 UJ	110 UJ	110 UJ	110 U	110 UJ
11096-82-5	Aroclor-1260	UG/KG	110 UJ	110 UJ	110 UJ	110 U	110 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	3650	3100	2630	2660	2580
7440-36-0	Antimony	MG/KG	9.3 UJ	9 UJ	9.9 UJ	8 UJ	9.2 UJ
7440-38-2	Arsenic	MG/KG	4.7	4.5	4.4	4	3
7440-39-3	Barium	MG/KG	32.7 J	24.1 J	27.5 J	32.5 J	20.1 J
7440-41-7	Beryllium	MG/KG	0.26 J	0.25 J	0.28 J	0.23 J	0.26 J
7440-43-9	Cadmium	MG/KG	0.49 UJ	0.47 UJ	0.72 J	0.6 J	0.48 UJ
7440-70-2	Calcium	MG/KG	16000 J	24000 J	13200 J	21200 J	16800 J
7440-47-3	Chromium	MG/KG	14 J	9.5 J	15.1 J	12.8 J	14.2 J
7440-48-4	Cobalt	MG/KG	4 J	4.1 J	3.6 J	2.9 J	3 J
7440-50-8	Copper	MG/KG	22.6 J	5.1 J	12.5 J	14.4 J	3.8 J
7439-89-6	Iron	MG/KG	11800 J	10300 J	17600 J	11800 J	8140 J
7439-92-1	Lead	MG/KG	21.8	10.6	44.3	53.5	12.9
7439-95-4	Magnesium	MG/KG	5090	6250	3870	3560	4220
7439-96-5	Manganese	MG/KG	333	285	321	252	222
7439-97-6	Mercury	MG/KG	0.14 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
7440-02-0	Nickel	MG/KG	11.5	9.4	10 J	10.2 J	8.1 J
7440-09-7	Potassium	MG/KG	539 J	458 J	198 J	409 J	403 J
7782-49-2	Selenium	MG/KG	1.3 UJ	1.1 U	1.3 UJ	1.2 U	1.3 U
7440-22-4	Silver	MG/KG	1.5 UJ	1.4 UJ	1.6 UJ	1.3 UJ	1.4 UJ
7440-23-5	Sodium	MG/KG	86.6 U	143 U	91 U	132 U	140 U
7440-28-0	Thallium	MG/KG	1.3 U	1.1 UJ	1.3 U	1.2 U	1.3 U
7440-62-2	Vanadium	MG/KG	11.4 J	10.5 J	10.4 J	9.3 J	8.1 J
7440-66-6	Zinc	MG/KG	88.8 J	50.5 J	74.4 J	75 J	52 J
57-12-5	Cyanide	MG/KG	0.59 R	0.65 R	0.66 R	0.61 R	0.65 R
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG		16349 J	12520 J	23540 J	7719 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	060100 0-0.5' 2276006 NYTEST CF2 SOIL 12/13/94 3/08/95	070010 0-0.5' 2276005 NYTEST CF2 SOIL 12/13/94 3/08/95	070020 0-0.5' 2276004 NYTEST CF2 SOIL 12/13/94 3/08/95	070100 0-0.5' 2276003 NYTEST CF2 SOIL 12/13/94 3/08/95	080010 0-0.5' 2276002 NYTEST CF2 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	400 U	920 U	2500 U	440 U	890 U
95-57-8	2-Chlorophenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
541-73-1	1,3-Dichlorobenzene	UG/KG	400 U	920 U	2500 U	440 U	890 U
106-46-7	1,4-Dichlorobenzene	UG/KG	400 U	920 U	2500 U	440 U	890 U
95-50-1	1,2-Dichlorobenzene	UG/KG	400 U	920 U	2500 U	440 U	890 U
95-48-7	2-Methylphenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	400 U	920 U	2500 U	440 U	890 U
106-44-5	4-Methylphenol	UG/KG	400 U	920 U	2500 U	74 J	890 U
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	400 U	920 U	2500 U	440 U	890 U
67-72-1	Hexachloroethane	UG/KG	400 U	920 U	2500 U	440 U	890 U
98-95-3	Nitrobenzene	UG/KG	400 U	920 U	2500 U	440 U	890 U
78-59-1	Isophorone	UG/KG	400 U	920 U	2500 U	440 U	890 U
88-75-5	2-Nitrophenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
105-67-9	2,4-Dimethylphenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
120-83-2	2,4-Dichlorophenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	400 U	920 U	2500 U	440 U	890 U
91-20-3	Naphthalene	UG/KG	400 U	100 J	450 J	58 J	750 J
106-47-8	4-Chloroaniline	UG/KG	400 U	920 U	2500 U	440 U	890 U
87-68-3	Hexachlorobutadiene	UG/KG	400 U	920 U	2500 U	440 U	890 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	400 U	920 U	2500 U	440 U	890 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	400 U	920 U	2500 U	440 U	890 U
91-57-6	2-Methylnaphthalene	UG/KG	400 U	920 U	2500 U	440 U	230 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	400 UJ	920 UJ	2500 UJ	440 UJ	890 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	400 U	920 U	2500 U	440 U	890 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
91-58-7	2-Chloronaphthalene	UG/KG	400 U	920 U	2500 U	440 U	890 U
88-74-4	2-Nitroaniline	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
131-11-3	Dimethylphthalate	UG/KG	400 U	920 U	2500 U	440 U	890 U
208-96-8	Acenaphthylene	UG/KG	400 U	920 U	2500 U	440 U	1600
606-20-2	2,6-Dinitrotoluene	UG/KG	400 U	920 U	2500 U	440 U	890 U
99-09-2	3-Nitroaniline	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
83-32-9	Acenaphthene	UG/KG	400 U	920 U	2500 U	45 J	860 J
51-28-5	2,4-Dinitrophenol	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 UJ
100-02-7	4-Nitrophenol	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
132-64-9	Dibenzofuran	UG/KG	400 U	920 U	2500 U	440 U	1300
121-14-2	2,4-Dinitrotoluene	UG/KG	400 U	920 U	2500 U	440 U	890 U
84-66-2	Diethylphthalate	UG/KG	400 U	920 U	2500 U	440 U	890 U
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	400 U	920 U	2500 U	440 U	890 U
86-73-7	Fluorene	UG/KG	400 U	920 U	360 J	74 J	2800
100-01-6	4-Nitroaniline	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
86-30-6	N-Nitrosodiphenylamine	UG/KG	400 U	920 U	2500 U	440 U	890 U
101-55-3	4-Bromophenyl-phenylether	UG/KG	400 U	920 U	2500 U	440 U	890 U
118-74-1	Hexachlorobenzene	UG/KG	400 U	920 U	2500 U	440 U	890 U
87-86-5	Pentachlorophenol	UG/KG	2000 U	4600 U	12000 U	2200 U	4400 U
85-01-8	Phenanthrene	UG/KG	400 U	530 J	1400 J	400 J	14000
120-12-7	Anthracene	UG/KG	400 U	100 J	400 J	90 J	2700
86-74-8	Carbazole	UG/KG	400 U	920 U	2500 U	440 U	280 J
84-74-2	Di-n-butylphthalate	UG/KG	400 U	920 U	2500 U	440 U	890 U
206-44-0	Fluoranthene	UG/KG	400 U	780 J	2300 J	480	17000
129-00-0	Pyrene	UG/KG	400 U	580 J	1700 J	340 J	12000
85-68-7	Butylbenzylphthalate	UG/KG	400 U	920 U	2500 U	440 U	890 U
91-94-1	3,3'-Dichlorobenzidine	UG/KG	790 U	1800 U	4900 U	880 U	1800 U
56-55-3	Benzo(a)anthracene	UG/KG	400 U	310 J	970 J	180 J	5000
219-01-9	Chrysene	UG/KG	400 U	340 J	1000 J	180 J	5000
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	400 U	920 U	2500 U	440 U	890 U
117-84-0	Di-n-octylphthalate	UG/KG	400 U	920 U	2500 U	440 U	890 U
205-99-2	Benzo(b)fluoranthene	UG/KG	400 U	200 J	610 J	130 J	3200
207-08-9	Benzo(k)fluoranthene	UG/KG	400 U	220 J	580 J	92 J	1800
50-32-8	Benzo(a)pyrene	UG/KG	400 U	200 J	650 J	120 J	3300
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	400 U	130 J	340 J	67 J	1700
53-70-3	Dibenz(a,h)anthracene	UG/KG	400 U	920 U	2500 U	440 U	160 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	400 U	130 J	380 J	72 J	1800
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	100 U	110 U	150 U	110 UJ	110 U
11004-28-2	Aroclor-1221	UG/KG	100 U	110 U	150 U	110 UJ	110 U
11141-16-5	Aroclor-1232	UG/KG	100 U	110 U	150 U	110 UJ	110 U
53469-21-9	Aroclor-1242	UG/KG	100 U	110 U	150 U	110 UJ	110 U
12672-29-6	Aroclor-1248	UG/KG	620 J	120 J	960 J	180 J	150 J
11097-69-1	Aroclor-1254	UG/KG	100 U	110 U	150 U	110 UJ	110 U
11096-82-5	Aroclor-1260	UG/KG	100 UJ	110 U	150 U	110 UJ	110 U
	INORGANICS						
7429-90-5	Aluminum	MG/KG	3710	6600	5750	3630	3140
7440-36-0	Antimony	MG/KG	7.3 UJ	8.6 UJ	12.7 UJ	9.8 UJ	9.9 UJ
7440-38-2	Arsenic	MG/KG	6.6	7	5.6	3.1	5.3
7440-39-3	Barium	MG/KG	25.6 J	135	44.6 J	24 J	22.4 J
7440-41-7	Beryllium	MG/KG	0.2 J	0.95 J	0.35 J	0.28 J	0.27 J
7440-43-9	Cadmium	MG/KG	0.38 UJ	3.3 J	0.67 UJ	0.57 J	0.52 UJ
7440-70-2	Calcium	MG/KG	14200 J	33500 J	15600 J	40200 J	4700 J
7440-47-3	Chromium	MG/KG	7.7 J	239 J	24.6 J	6.9 J	13.1 J
7440-48-4	Cobalt	MG/KG	3.4 J	7.3 J	8.8 J	4.5 J	3.9 J
7440-50-8	Copper	MG/KG	3.2 J	49.9 J	45.2 J	8.7 J	5.7 J
7439-89-6	Iron	MG/KG	9540 J	42400 J	17000 J	12700 J	18700 J
7439-92-1	Lead	MG/KG	16.5	156	71	7.5	12.8
7439-95-4	Magnesium	MG/KG	3750	13200	5270	8380	2320
7439-96-5	Manganese	MG/KG	199	6070	452	230	247
7439-97-6	Mercury	MG/KG	0.12 UJ	0.23 J	0.21 J	0.13 UJ	0.13 UJ
7440-02-0	Nickel	MG/KG	8.9	23.9	21.2	20.6	11.9
7440-09-7	Potassium	MG/KG	436 J	654 J	1050 J	384 J	249 J
7782-49-2	Selenium	MG/KG	0.97 U	1.3 UJ	1.7 U	1.2 U	1.3 UJ
7440-22-4	Silver	MG/KG	1.1 UJ	1.4 UJ	2 UJ	1.6 UJ	1.6 UJ
7440-23-5	Sodium	MG/KG	116 U	168 U	138 U	152 U	92.8 U
7440-28-0	Thallium	MG/KG	0.97 U	1.3 U	1.7 U	1.2 U	1.3 U
7440-62-2	Vanadium	MG/KG	9.6	52.9	17.8	10.1 J	18.4
7440-66-6	Zinc	MG/KG	47 J	213 J	162 J	67.3 J	111 J
57-12-5	Cyanide	MG/KG	0.44 R	0.7 R	0.73 R	0.7 R	0.61 R
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG	15552 J	26517 J	48296 J	6838 J	7188 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	080020 0-0.5' 2276001 NYTEST CF2 SOIL 12/13/94 3/08/95	080100 0-0.5' 2275921 NYTEST CF1 SOIL 12/13/94 3/08/95	090010 0-0.5' 2275920 NYTEST CF1 SOIL 12/13/94 3/08/95	090010-DUP 0-0.5' 2275922 NYTEST CF1 SOIL 12/13/94 3/08/95	090020 0-0.5' 2275917 NYTEST CF1 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
95-57-8	2-Chlorophenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
541-73-1	1,3-Dichlorobenzene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
106-46-7	1,4-Dichlorobenzene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
95-50-1	1,2-Dichlorobenzene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
95-48-7	2-Methylphenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
106-44-5	4-Methylphenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	310 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
67-72-1	Hexachloroethane	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
98-95-3	Nitrobenzene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
78-59-1	Isophorone	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
88-75-5	2-Nitrophenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
105-67-9	2,4-Dimethylphenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
120-83-2	2,4-Dichlorophenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
91-20-3	Naphthalene	UG/KG	770 J	24000 UJ	4800 UJ	2400 UJ	760 U
106-47-8	4-Chloroaniline	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 UJ
87-68-3	Hexachlorobutadiene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
91-57-6	2-Methylnaphthalene	UG/KG	180 J	24000 UJ	4800 UJ	2400 UJ	760 U
77-47-4	Hexachlorocyclopentadiene	UG/KG	900 UJ	24000 R	4800 R	2400 R	760 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	900 UJ	24000 UJ	4800 UJ	2400 UJ	760 U
95-95-4	2,4,5-Trichlorophenol	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 U
91-58-7	2-Chloronaphthalene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
88-74-4	2-Nitroaniline	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 U
131-11-3	Dimethylphthalate	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
208-96-8	Acenaphthylene	UG/KG	1200	2400 J	4800 UJ	2400 UJ	760 U
606-20-2	2,6-Dinitrotoluene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
99-09-2	3-Nitroaniline	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 UJ
83-32-9	Acenaphthene	UG/KG	900 J	24000 UJ	620 J	310 J	760 U
51-28-5	2,4-Dinitrophenol	UG/KG	4500 UJ	120000 UJ	24000 UJ	12000 UJ	3800 UJ
100-02-7	4-Nitrophenol	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 U
132-64-9	Dibenzofuran	UG/KG	1100	24000 UJ	4800 UJ	2400 UJ	760 U
121-14-2	2,4-Dinitrotoluene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
84-66-2	Diethylphthalate	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
86-73-7	Fluorene	UG/KG	2300	4200 J	650 J	330 J	760 U
100-01-6	4-Nitroaniline	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 U
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 U
86-30-6	N-Nitrosodiphenylamine	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
101-55-3	4-Bromophenyl-phenylether	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
118-74-1	Hexachlorobenzene	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
87-86-5	Pentachlorophenol	UG/KG	4500 U	120000 UJ	24000 UJ	12000 UJ	3800 U
85-01-8	Phenanthrene	UG/KG	7200	39000 J	10000 J	5000 J	230 J
120-12-7	Anthracene	UG/KG	2100	7200 J	1600 J	730 J	760 U
86-74-8	Carbazole	UG/KG	220 J	24000 UJ	2000 J	970 J	760 U
84-74-2	Di-n-butylphthalate	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
206-44-0	Fluoranthene	UG/KG	10000	45000 J	15000 J	7600 J	340 J
129-00-0	Pyrene	UG/KG	6500	30000 J	11000 J	5600 J	260 J
85-68-7	Butylbenzylphthalate	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
91-94-1	3,3'-Dichlorobenzidine	UG/KG	1800 U	48000 UJ	9500 UJ	4900 UJ	1500 U
56-55-3	Benzo(a)anthracene	UG/KG	3700	14000 J	4500 J	2400 J	760 U
219-01-9	Chrysene	UG/KG	3600	15000 J	5200 J	2900 J	86 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	900 U	3100 J	4800 UJ	2400 U	6000
117-84-0	Di-n-octylphthalate	UG/KG	900 U	24000 UJ	4800 UJ	2400 UJ	760 U
205-99-2	Benzo(b)fluoranthene	UG/KG	2400	13000 J	3500 J	1900 J	760 U
207-08-9	Benzo(k)fluoranthene	UG/KG	1600	9300 J	3500 J	1900 J	760 U
50-32-8	Benzo(a)pyrene	UG/KG	2600	12000 J	3400 J	1900 J	760 U
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1400	5800 J	1500 J	780 J	760 U
53-70-3	Dibenz(a,h)anthracene	UG/KG	110 J	24000 UJ	4800 UJ	2400 UJ	760 U
191-24-2	Benzo(g,h,i)perylene	UG/KG	1400	6400 J	1500 J	780 J	760 U
	PESTICIDES/PCBs						
12674-11-2	Aroclor-1016	UG/KG	110 UJ	570 U	110 U	120 U	180 U
11004-28-2	Aroclor-1221	UG/KG	110 UJ	570 U	110 U	120 U	180 U
11141-16-5	Aroclor-1232	UG/KG	110 UJ	570 U	110 U	120 U	180 U
53469-21-9	Aroclor-1242	UG/KG	110 UJ	570 U	110 U	120 U	180 U
12672-29-6	Aroclor-1248	UG/KG	140 J	1200 J	170 J	270 J	260 J
11097-69-1	Aroclor-1254	UG/KG	110 UJ	570 U	110 U	120 U	180 U
11096-82-5	Aroclor-1260	UG/KG	110 UJ	570 U	110 U	120 U	180 U
	INORGANICS						
7429-90-5	Aluminum	MG/KG	3250	4220	5370	5460	15700
7440-36-0	Antimony	MG/KG	9.5 UJ	9.9 UJ	10.2 UJ	9.7 UJ	16.4 UJ
7440-38-2	Arsenic	MG/KG	5	5.3 J	5.7	4.3	8.4
7440-39-3	Barium	MG/KG	21.7 J	37.6 J	26.9 J	28.4 J	46.5 J
7440-41-7	Beryllium	MG/KG	0.26 J	0.26 UJ	0.27 UJ	0.25 UJ	0.43 UJ
7440-43-9	Cadmium	MG/KG	0.5 UJ	0.52 UJ	0.53 UJ	2 J	1.4 J
7440-70-2	Calcium	MG/KG	4270 J	8970	10400	16000	12700
7440-47-3	Chromium	MG/KG	12.9 J	14.1	13.7	16.8	27.6
7440-48-4	Cobalt	MG/KG	5.3 J	5.3 J	4.7 J	5.4 J	4.9 J
7440-50-8	Copper	MG/KG	6.3 J	22.2	20.2	23.6	32.1
7439-89-6	Iron	MG/KG	15900 J	11000	10600	13000	15900
7439-92-1	Lead	MG/KG	14.2	22.6 J	11.2 J	18.2 J	16.4 J
7439-95-4	Magnesium	MG/KG	2170	3610	4570	5140	5750
7439-96-5	Manganese	MG/KG	232	157	227	291	370
7439-97-6	Mercury	MG/KG	0.14 UJ	0.14 U	0.31	0.35	0.37
7440-02-0	Nickel	MG/KG	15.4	16.5	13.8	17.6	17.7
7440-09-7	Potassium	MG/KG	426 J	690 J	534 J	681 J	1060 J
7782-49-2	Selenium	MG/KG	1.3 UJ	1.4 U	1.3 U	1.3 U	2 UJ
7440-22-4	Silver	MG/KG	4.2 J	1.6 UJ	1.6 UJ	1.5 UJ	2.6 UJ
7440-23-5	Sodium	MG/KG	116 U	95 U	114 U	98.8 U	212 U
7440-28-0	Thallium	MG/KG	1.3 U	1.2 U	1.3 U	1.4 U	2 U
7440-62-2	Vanadium	MG/KG	16.9	14.1	13 J	16.6	22.8
7440-66-6	Zinc	MG/KG	99.8 J	132 J	84.3 J	120 J	123 J
57-12-5	Cyanide	MG/KG	0.65 R	0.61 UJ	0.7 UJ	0.67 UJ	1.1 UJ
	OTHER						
7440-44-0	Total Organic Carbon	MG/KG	4472 J	43214	35509	34571	83359

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase I		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	090100 0-0.5' 2275916 NYTEST CF1 SOIL 12/13/94 3/08/95	100010 0-0.5' 2275915 NYTEST CF1 SOIL 12/13/94 3/08/95	100020 0-0.5' 2275914 NYTEST CF1 SOIL 12/13/94 3/08/95	100100 0-0.5' 2275913 NYTEST CF1 SOIL 12/13/94 3/08/95
CAS NO.	COMPOUND	UNITS:				
	SEMIVOLATILES					
108-95-2	Phenol	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
95-57-8	2-Chlorophenol	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
95-48-7	2-Methylphenol	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
106-44-5	4-Methylphenol	UG/KG	560 J	3700 UJ	1200 UJ	500 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
67-72-1	Hexachloroethane	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
98-95-3	Nitrobenzene	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
78-59-1	Isophorone	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
88-75-5	2-Nitrophenol	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
105-67-9	2,4-Dimethylphenol	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
120-83-2	2,4-Dichlorophenol	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
120-82-1	1,2,4-Trichlorobenzene	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
91-20-3	Naphthalene	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
106-47-8	4-Chloroaniline	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
87-68-3	Hexachlorobutadiene	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
59-50-7	4-Chloro-3-Methylphenol	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
91-57-6	2-Methylnaphthalene	UG/KG	3300 U	3700 UJ	1200 UJ	1100 U
77-47-4	Hexachlorocyclopentadiene	UG/KG	3300 R	3700 R	1200 R	1100 R
88-06-2	2,4,6-Trichlorophenol	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
91-58-7	2-Chloronaphthalene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
88-74-4	2-Nitroaniline	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
131-11-3	Dimethylphthalate	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
208-96-8	Acenaphthylene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
99-09-2	3-Nitroaniline	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
83-32-9	Acenaphthene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
100-02-7	4-Nitrophenol	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
132-64-9	Dibenzofuran	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
84-66-2	Diethylphthalate	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
86-73-7	Fluorene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
100-01-6	4-Nitroaniline	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
118-74-1	Hexachlorobenzene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
87-86-5	Pentachlorophenol	UG/KG	17000 UJ	18000 UJ	6100 UJ	5600 UJ
85-01-8	Phenanthrene	UG/KG	470 J	1600 J	850 J	1200 J
120-12-7	Anthracene	UG/KG	3300 UJ	3700 UJ	170 J	340 J
86-74-8	Carbazole	UG/KG	400 J	3300 UJ	150 J	120 J
84-74-2	Di-n-butylphthalate	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
206-44-0	Fluoranthene	UG/KG	720 J	3800 J	1500 J	1800 J
129-00-0	Pyrene	UG/KG	540 J	2600 J	1100 J	1300 J
85-68-7	Butylbenzylphthalate	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	6700 UJ	7400 UJ	2400 UJ	2200 UJ
56-55-3	Benzo(a)anthracene	UG/KG	1200 J	3300 UJ	520 J	730 J
219-01-9	Chrysene	UG/KG	1700 J	3300 UJ	690 J	840 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	3300 U	3700 U	1200 U	1100 U
117-84-0	Di-n-octylphthalate	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	3300 UJ	1600 J	580 J	540 J
207-08-9	Benzo(k)fluoranthene	UG/KG	3300 UJ	1300 J	400 J	570 J
50-32-8	Benzo(a)pyrene	UG/KG	3300 UJ	1300 J	430 J	590 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	640 J	3300 UJ	210 J	280 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	3300 UJ	3700 UJ	1200 UJ	1100 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	720 J	3300 UJ	230 J	300 J
	PESTICIDES/PCBs					
12674-11-2	Aroclor-1016	UG/KG	200 U	200 U	150 U	130 U
11004-28-2	Aroclor-1221	UG/KG	200 U	180 U	150 U	130 U
11141-16-5	Aroclor-1232	UG/KG	200 U	180 U	150 U	130 U
53469-21-9	Aroclor-1242	UG/KG	200 U	180 U	150 U	130 U
12672-29-6	Aroclor-1248	UG/KG	850 J	360 J	600 J	2000 J
11097-69-1	Aroclor-1254	UG/KG	200 U	180 U	150 U	130 U
11096-82-5	Aroclor-1260	UG/KG	210	260	150 U	200
	INORGANICS					
7429-90-5	Aluminum	MG/KG	12200	18400	7100	5330
7440-36-0	Antimony	MG/KG	17.9 UJ	16.9 UJ	13 UJ	17.6 J
7440-38-2	Arsenic	MG/KG	9.6	16.1	6.4	7.5
7440-39-3	Barium	MG/KG	79.5 J	166	91.5	71.4
7440-41-7	Beryllium	MG/KG	0.47 UJ	1.8 J	0.34 UJ	0.28 UJ
7440-43-9	Cadmium	MG/KG	3.3 J	0.89 UJ	1.5 J	0.57 UJ
7440-70-2	Calcium	MG/KG	19200	37400	26800	62500
7440-47-3	Chromium	MG/KG	38.5	54.3	23.9	15.3
7440-48-4	Cobalt	MG/KG	11.8 J	11.7 J	8.2 J	4.6 J
7440-50-8	Copper	MG/KG	81.4	61.9	45.6	17.5
7439-89-6	Iron	MG/KG	25400	36800	20500	14600
7439-92-1	Lead	MG/KG	73.8 J	75 J	34.1 J	23.3 J
7439-95-4	Magnesium	MG/KG	8430	6850	6410	3780
7439-96-5	Manganese	MG/KG	578	350	317	225
7439-97-6	Mercury	MG/KG	0.38	0.47	0.25	0.17 U
7440-02-0	Nickel	MG/KG	34.8	27.9	16.2	12.5
7440-09-7	Potassium	MG/KG	1430 J	1840 J	975 J	496 J
7782-49-2	Selenium	MG/KG	2.4 UJ	2.2 U	1.7 U	1.6 U
7440-22-4	Silver	MG/KG	3.8 J	2.7 UJ	2.1 UJ	1.7 UJ
7440-23-5	Sodium	MG/KG	165 U	710 U	235 U	496 U
7440-28-0	Thallium	MG/KG	2.4 U	1.9 U	1.7 U	1.6 U
7440-62-2	Vanadium	MG/KG	24.7	44.5	22.4	14.6
7440-66-6	Zinc	MG/KG	238 J	189 J	138 J	74 J
57-12-5	Cyanide	MG/KG	1.3 UJ	1 UJ	0.91 UJ	0.73 UJ
	OTHER					
7440-44-0	Total Organic Carbon	MG/KG	123933	91433	84238	12472

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	20060S 0-0.75' 070040-22 NYTEST CFSED2 SEDIMENT 6/28/96 9/26/96	23020S 0-0.75' 070032-01 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	23060S 0-0.75' 070032-02 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	23100S 0-0.75' 070032-03 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	26150S 0-0.75' 070032-04 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-57-8	2-Chlorophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-48-7	2-Methylphenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
106-44-5	4-Methylphenol	UG/KG	270 J	450 UJ	420 UJ	470 UJ	500 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
67-72-1	Hexachloroethane	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
98-95-3	Nitrobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
78-59-1	Isophorone	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
88-75-5	2-Nitrophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
91-20-3	Naphthalene	UG/KG	120 J	60 J	420 UJ	470 UJ	500 UJ
106-47-8	4-Chloroaniline	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
87-68-3	Hexachlorobutadiene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
91-57-6	2-Methylnaphthalene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
91-58-7	2-Chloronaphthalene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
88-74-4	2-Nitroaniline	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
131-11-3	Dimethylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
208-96-8	Acenaphthylene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
99-09-2	3-Nitroaniline	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
83-32-9	Acenaphthene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
100-02-7	4-Nitrophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
132-64-9	Dibenzofuran	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
84-66-2	Diethylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
86-73-7	Fluorene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
100-01-6	4-Nitroaniline	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
118-74-1	Hexachlorobenzene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
87-86-5	Pentachlorophenol	UG/KG	1100 UJ	1100 UJ	1000 UJ	1100 UJ	1200 UJ
85-01-8	Phenanthrene	UG/KG	82 J	450 UJ	420 UJ	470 UJ	180 J
120-12-7	Anthracene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	60 J
84-74-2	Di-n-butylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
206-44-0	Fluoranthene	UG/KG	200 J	95 J	420 UJ	470 UJ	340 J
129-00-0	Pyrene	UG/KG	180 J	87 J	420 UJ	470 UJ	330 J
85-68-7	Butylbenzylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
56-55-3	Benzo(a)anthracene	UG/KG	150 J	66 J	420 UJ	470 UJ	260 J
219-01-9	Chrysene	UG/KG	190 J	88 J	420 UJ	470 UJ	350 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	120 J	450 UJ	420 UJ	470 UJ	500 UJ
117-84-0	Di-n-octylphthalate	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	210 J	84 J	420 UJ	470 UJ	220 J
207-08-9	Benzo(k)fluoranthene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
50-32-8	Benzo(a)pyrene	UG/KG	170 J	60 J	420 UJ	470 UJ	210 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	100 J	450 UJ	420 UJ	470 UJ	100 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	51 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	110 J	450 UJ	420 UJ	470 UJ	140 J
86-74-8	Carbazole	UG/KG	470 UJ	450 UJ	420 UJ	470 UJ	500 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	4750	5440	5980	8990	12700
7440-36-0	Antimony	MG/KG	2.5 UJ	2.3 UJ	2.2 UJ	2.3 UJ	2.6 UJ
7440-38-2	Arsenic	MG/KG	9.1	5.3	3.3	5.1	5.5
7440-39-3	Barium	MG/KG	39	43.2	23 J	44.5	62.6
7440-41-7	Beryllium	MG/KG	0.35 J	0.32 J	0.25 J	0.41 J	0.56 J
7440-43-9	Cadmium	MG/KG	1.1 J	0.61 J	0.31 J	0.43 J	0.78 J
7440-70-2	Calcium	MG/KG	11300	18800	10800	31600	16700
7440-47-3	Chromium	MG/KG	21.5	36.3 J	9.5 J	13.4 J	21.3 J
7440-48-4	Cobalt	MG/KG	5.9 J	6.1 J	6.5 J	9.1	9
7440-50-8	Copper	MG/KG	25.5	15.9	12.3	20.2	34.6
7439-89-6	Iron	MG/KG	41100	18100	12000	19900	27300
7439-92-1	Lead	MG/KG	41.5	19.8	8	11.1	57.1
7439-95-4	Magnesium	MG/KG	4100	5480 J	6640 J	9150 J	9100 J
7439-96-5	Manganese	MG/KG	556	561	148	293	328
7439-97-6	Mercury	MG/KG	0.13 J	0.02 U	0.02 U	0.03 U	0.18
7440-02-0	Nickel	MG/KG	20.8	18.2	17.2	25.5	27.6
7440-09-7	Potassium	MG/KG	878	809	1190	1500	2550
7782-49-2	Selenium	MG/KG	0.25 J	0.31 U	0.29 U	0.36 U	0.36 U
7440-22-4	Silver	MG/KG	0.38 U	0.37 U	0.34 U	0.36 U	0.41 U
7440-23-5	Sodium	MG/KG	97.5 J	126 J	104 J	136 J	138 J
7440-28-0	Thallium	MG/KG	0.23 UJ	0.22 UJ	0.2 UJ	0.25 UJ	0.25 U
7440-62-2	Vanadium	MG/KG	15.4	14.1 J	14.1 J	17 J	26.2 J
7440-66-6	Zinc	MG/KG	191	109 J	48.4 J	69.7 J	139 J
57-12-5	Cyanide	MG/KG	0.81 J	2.1	0.31 U	0.36 J	0.72 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	26150D 0.75-1.5' 070032-05 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32020S 0-0.75' 070032-06 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32020D 0.75-1.5' 070032-07 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32060D 0.75-1.5' 070032-09 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32060S 0-0.75' 070032-08 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-57-8	2-Chlorophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-48-7	2-Methylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
106-44-5	4-Methylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
67-72-1	Hexachloroethane	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
98-95-3	Nitrobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
78-59-1	Isophorone	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
88-75-5	2-Nitrophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
91-20-3	Naphthalene	UG/KG	400 UJ	8100 J	8600 J	16000 J	35000 J
106-47-8	4-Chloroaniline	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
87-68-3	Hexachlorobutadiene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
91-57-6	2-Methylnaphthalene	UG/KG	400 UJ	1300 J	1200 J	2500 J	4300 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
91-58-7	2-Chloronaphthalene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
88-74-4	2-Nitroaniline	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
131-11-3	Dimethylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
208-96-8	Acenaphthylene	UG/KG	400 UJ	650 J	720 J	1300 J	2000 J
606-20-2	2,6-Dinitrotoluene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
99-09-2	3-Nitroaniline	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
83-32-9	Acenaphthene	UG/KG	400 UJ	530 J	430 J	680 J	1100 J
51-28-5	2,4-Dinitrophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
100-02-7	4-Nitrophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
132-64-9	Dibenzofuran	UG/KG	400 UJ	700 J	500 J	740 J	1500 J
121-14-2	2,4-Dinitrotoluene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
84-66-2	Diethylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
86-73-7	Fluorene	UG/KG	400 UJ	1800 J	1600 J	2400 J	3800 J
100-01-6	4-Nitroaniline	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
118-74-1	Hexachlorobenzene	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
87-86-5	Pentachlorophenol	UG/KG	980 UJ	2300 UJ	2300 UJ	4100 UJ	16000 UJ
85-01-8	Phenanthrene	UG/KG	210 J	7100 J	5800 J	9100 J	14000 J
120-12-7	Anthracene	UG/KG	59 J	2100 J	1800 J	2500 J	3900 J
84-74-2	Di-n-butylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
206-44-0	Fluoranthene	UG/KG	320 J	8900 J	9600 J	10000 J	23000 J
129-00-0	Pyrene	UG/KG	250 J	7100 J	7900 J	10000 J	20000 J
85-68-7	Butylbenzylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
56-55-3	Benzo(a)anthracene	UG/KG	210 J	4900 J	5400 J	6300 J	11000 J
219-01-9	Chrysene	UG/KG	210 J	4900 J	5400 J	7100 J	13000 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	400 UJ	970 UJ	960 UJ	290 J	6800 UJ
117-84-0	Di-n-octylphthalate	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	170 J	4700 J	5200 J	5800 J	10000 J
207-08-9	Benzo(k)fluoranthene	UG/KG	400 UJ	1600 J	1800 J	1900 J	4200 J
50-32-8	Benzo(a)pyrene	UG/KG	150 J	3700 J	4200 J	4800 J	9200 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	81 J	1700 J	1800 J	1800 J	5000 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	400 UJ	510 J	410 J	380 J	6800 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	79 J	1500 J	1600 J	1500 J	5000 J
86-74-8	Carbazole	UG/KG	400 UJ	970 UJ	960 UJ	1700 UJ	6800 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	11100	1970	2020	2450	3030 J
7440-36-0	Antimony	MG/KG	2 UJ	2.4 J	3.8 J	6.3 J	3.4 UJ
7440-38-2	Arsenic	MG/KG	4.4	1.6	23.2	30.4	37.4 J
7440-39-3	Barium	MG/KG	51.9	33.7	27.9 J	25.8 J	32.3 J
7440-41-7	Beryllium	MG/KG	0.47 J	0.29 J	0.27 J	0.27 J	0.36 J
7440-43-9	Cadmium	MG/KG	0.31 J	0.7	0.57 J	1.5	1.4 J
7440-70-2	Calcium	MG/KG	11400	6710	5940	6700	7960 J
7440-47-3	Chromium	MG/KG	16.7 J	22.1 J	19.1 J	21.4 J	25.3 J
7440-48-4	Cobalt	MG/KG	8.3	3.3 J	3 J	3.9 J	4 J
7440-50-8	Copper	MG/KG	28.6	26.7	25.5	35.4	35.4 J
7439-89-6	Iron	MG/KG	19000	55200	49300	49200	54400 J
7439-92-1	Lead	MG/KG	42.3	57.1	51.4	145	199 J
7439-95-4	Magnesium	MG/KG	7180 J	1010 J	963 J	1150 J	1500 J
7439-96-5	Manganese	MG/KG	255	682	642	726	867 J
7439-97-6	Mercury	MG/KG	0.13	0.32	0.3	0.54	0.76 J
7440-02-0	Nickel	MG/KG	24.3	14.4	12.5	14	15 J
7440-09-7	Potassium	MG/KG	2020	182 J	195 J	237 J	434 J
7782-49-2	Selenium	MG/KG	0.38 J	0.33 U	0.4 J	0.92	0.81 J
7440-22-4	Silver	MG/KG	0.31 U	0.36 U	0.38 U	0.9 J	0.67 J
7440-23-5	Sodium	MG/KG	125 J	35.6 J	37.4 J	64.5 J	69.7 J
7440-28-0	Thallium	MG/KG	0.2 UJ	1.3 J	1.2 U	1.4 U	1.8 J
7440-62-2	Vanadium	MG/KG	21.4 J	13.7 J	11.8 J	11.1 J	12.8 J
7440-66-6	Zinc	MG/KG	93.3 J	247 J	205 J	702 J	699 J
57-12-5	Cyanide	MG/KG	0.34 J	88.5	35.3	53.5	39.8 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	32100S 0-0.75' 070032-10 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	32100D 4-6' 070071-01 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	32100D-DUP 2-4' 070071-02 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	32150S 0-0.75' 070040-21 NYTEST CFSED2 SEDIMENT 6/28/96 9/26/96	37020S 0-0.75' 070040-04 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	180 J	400 UJ	410 UJ	420 UJ	77 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
95-57-8	2-Chlorophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	150 J	400 UJ	410 UJ	420 UJ	500 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
95-48-7	2-Methylphenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
106-44-5	4-Methylphenol	UG/KG	290 J	400 UJ	410 UJ	420 UJ	300 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
67-72-1	Hexachloroethane	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
98-95-3	Nitrobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
78-59-1	Isophorone	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
88-75-5	2-Nitrophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	98 J	400 UJ	410 UJ	420 UJ	500 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
91-20-3	Naphthalene	UG/KG	33000 JD	350 J	300 J	82 J	55000 JD
106-47-8	4-Chloroaniline	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
87-68-3	Hexachlorobutadiene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
91-57-6	2-Methylnaphthalene	UG/KG	2700 J	400 UJ	410 UJ	420 UJ	3000 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
91-58-7	2-Chloronaphthalene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
88-74-4	2-Nitroaniline	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
131-11-3	Dimethylphthalate	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
208-96-8	Acenaphthylene	UG/KG	1200 J	400 UJ	410 UJ	420 UJ	1300 J
606-20-2	2,6-Dinitrotoluene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
99-09-2	3-Nitroaniline	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
83-32-9	Acenaphthene	UG/KG	530 J	400 UJ	410 UJ	420 UJ	1900 J
51-28-5	2,4-Dinitrophenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
100-02-7	4-Nitrophenol	UG/KG	2000 UJ	170 J	180 J	1000 UJ	1200 UJ
132-64-9	Dibenzofuran	UG/KG	1000 J	400 UJ	410 UJ	420 UJ	1400 J
121-14-2	2,4-Dinitrotoluene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
84-66-2	Diethylphthalate	UG/KG	840 UJ	48 J	410 UJ	420 UJ	500 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
86-73-7	Fluorene	UG/KG	2000 J	400 UJ	410 UJ	420 UJ	2700 J
100-01-6	4-Nitroaniline	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
118-74-1	Hexachlorobenzene	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
87-86-5	Pentachlorophenol	UG/KG	2000 UJ	980 UJ	990 UJ	1000 UJ	1200 UJ
85-01-8	Phenanthrene	UG/KG	8300 J	150 J	140 J	160 J	10000 JD
120-12-7	Anthracene	UG/KG	2400 J	56 J	55 J	53 J	3400 J
84-74-2	Di-n-butylphthalate	UG/KG	320 J	400 UJ	410 UJ	90 J	500 UJ
206-44-0	Fluoranthene	UG/KG	14000 JD	540 J	510 J	240 J	17000 JD
129-00-0	Pyrene	UG/KG	12000 JD	450 J	410 J	220 J	13000 JD
85-68-7	Butylbenzylphthalate	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
56-55-3	Benzo(a)anthracene	UG/KG	9400 J	280 J	280 J	140 J	8000 J
219-01-9	Chrysene	UG/KG	8900 J	300 J	270 J	160 J	7200 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	1400 J	400 UJ	410 UJ	94 J	500 UJ
117-84-0	Di-n-octylphthalate	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	9100 J	270 J	260 J	150 J	9400 JD
207-08-9	Benzo(k)fluoranthene	UG/KG	3700 J	140 J	73 J	420 UJ	4000 J
50-32-8	Benzo(a)pyrene	UG/KG	7400 J	230 J	310 J	140 J	6700 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1700 J	120 J	120 J	83 J	1100 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	390 J	400 UJ	410 UJ	420 UJ	370 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	1300 J	120 J	120 J	75 J	790 J
86-74-8	Carbazole	UG/KG	840 UJ	400 UJ	410 UJ	420 UJ	500 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	2230	5040	4460	4090	1920
7440-36-0	Antimony	MG/KG	4 UJ	2.9 J	3.5 J	4.1 J	2.7 J
7440-38-2	Arsenic	MG/KG	19.5	4.6	4.5	11.1	17.1
7440-39-3	Barium	MG/KG	28.7 J	31.5	38.7	33.7	39.1
7440-41-7	Beryllium	MG/KG	0.3 J	0.34 J	0.36 J	0.37 J	0.18 J
7440-43-9	Cadmium	MG/KG	0.52 J	0.48 J	0.46 J	0.16 U	0.85
7440-70-2	Calcium	MG/KG	7220	16000	17000	118000	7000
7440-47-3	Chromium	MG/KG	12.9 J	15.5	18.8	17.5	18.7
7440-48-4	Cobalt	MG/KG	3.1 J	5.5 J	5.5 J	5.1 J	2.4 J
7440-50-8	Copper	MG/KG	19.5	17.9	24.6	18.8	23.9
7439-89-6	Iron	MG/KG	51300	32400	44700	47800	35600
7439-92-1	Lead	MG/KG	32.8	22.3	33.9	24.4	41.9
7439-95-4	Magnesium	MG/KG	1310 J	5260	4830	13300	1320
7439-96-5	Manganese	MG/KG	969	534	748	1860	860
7439-97-6	Mercury	MG/KG	0.29	0.09 J	0.09 J	0.02 U	1.4
7440-02-0	Nickel	MG/KG	6.8 J	14	14.4	16.7	7.8
7440-09-7	Potassium	MG/KG	201 J	1050	833	370 J	257 J
7782-49-2	Selenium	MG/KG	0.4 U	0.19 J	0.18 U	0.3 J	0.23 UJ
7440-22-4	Silver	MG/KG	0.64 J	0.32 U	0.33 U	0.31 U	0.44 J
7440-23-5	Sodium	MG/KG	39.1 J	139 J	153 J	126 J	24.9 J
7440-28-0	Thallium	MG/KG	1.7 J	0.62 UJ	0.61 UJ	0.18 UJ	1.1 J
7440-62-2	Vanadium	MG/KG	10.1 J	14.7	14.6	12.2	7.5 J
7440-66-6	Zinc	MG/KG	129 J	99.2 J	133 J	133	139
57-12-5	Cyanide	MG/KG	28.6	2.8	2.9	5.3 J	18.8 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37020D 0.75-1.5' 070040-05 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37060D 0.75-1.5' 070040-03 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37060D 4.5-7.5' 070071-04 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37060DD 10.5-14' 070071-14 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37060S 0-0.75' 070040-02 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	4800 UJ	630 J	470 UJ	430 UJ	470 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-57-8	2-Chlorophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-48-7	2-Methylphenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
106-44-5	4-Methylphenol	UG/KG	4800 UJ	1200 J	93 J	430 UJ	730 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
67-72-1	Hexachloroethane	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
98-95-3	Nitrobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
78-59-1	Isophorone	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
88-75-5	2-Nitrophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
91-20-3	Naphthalene	UG/KG	48000 J	43000 JD	21000 JD	1000 J	41000 J
106-47-8	4-Chloroaniline	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
87-68-3	Hexachlorobutadiene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
91-57-6	2-Methylnaphthalene	UG/KG	6600 J	1500 J	3000 J	250 J	2500 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
91-58-7	2-Chloronaphthalene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
88-74-4	2-Nitroaniline	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
131-11-3	Dimethylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
208-96-8	Acenaphthylene	UG/KG	2800 J	1100 J	1300 J	370 J	1800 J
606-20-2	2,6-Dinitrotoluene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
99-09-2	3-Nitroaniline	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
83-32-9	Acenaphthene	UG/KG	5400 J	380 J	2800 J	710 J	520 J
51-28-5	2,4-Dinitrophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
100-02-7	4-Nitrophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
132-64-9	Dibenzofuran	UG/KG	3400 J	600 J	1900 J	500 J	1100 J
121-14-2	2,4-Dinitrotoluene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
84-66-2	Diethylphthalate	UG/KG	4800 UJ	570 UJ	66 J	430 UJ	4700 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
86-73-7	Fluorene	UG/KG	7200 J	1400 J	3600 J	1000 J	2400 J
100-01-6	4-Nitroaniline	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
118-74-1	Hexachlorobenzene	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
87-86-5	Pentachlorophenol	UG/KG	12000 UJ	1400 UJ	1100 UJ	1000 UJ	11000 UJ
85-01-8	Phenanthrene	UG/KG	28000 J	5200 J	15000 JD	3100 J	10000 J
120-12-7	Anthracene	UG/KG	11000 J	1800 J	5100 J	1000 J	3400 J
84-74-2	Di-n-butylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
206-44-0	Fluoranthene	UG/KG	39000 J	9000 J	17000 JD	3500 J	18000 J
129-00-0	Pyrene	UG/KG	27000 J	6600 J	12000 JD	2400 J	13000 J
85-68-7	Butylbenzylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
56-55-3	Benzo(a)anthracene	UG/KG	19000 J	5000 J	7000 J	1300 J	9300 J
219-01-9	Chrysene	UG/KG	18000 J	4800 J	6200 J	1300 J	9300 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	4800 UJ	91 J	470 UJ	430 UJ	4700 UJ
117-84-0	Di-n-octylphthalate	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	20000 J	6200 J	7300 JD	1400 J	8700 J
207-08-9	Benzo(k)fluoranthene	UG/KG	7400 J	2200 J	3000 J	510 J	5000 J
50-32-8	Benzo(a)pyrene	UG/KG	15000 J	4000 J	5400 J	1100 J	7800 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	5300 J	910 J	1100 J	610 J	4200 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	1600 J	260 J	330 J	150 J	1000 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	3900 J	690 J	820 J	570 J	4000 J
86-74-8	Carbazole	UG/KG	4800 UJ	570 UJ	470 UJ	430 UJ	4700 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	1550	1860	7160	4640	8610
7440-36-0	Antimony	MG/KG	3.4 J	2.8 UJ	11.2 U	3.4 J	12 UJ
7440-38-2	Arsenic	MG/KG	20.1	19.3	15.3	9.2	14.1
7440-39-3	Barium	MG/KG	16.8 J	56.8	90.9 J	51.8	395
7440-41-7	Beryllium	MG/KG	0.13 J	0.2 J	0.71 J	0.47 J	1.2 J
7440-43-9	Cadmium	MG/KG	0.5 J	0.71 J	2.4 J	0.52 J	1.7 J
7440-70-2	Calcium	MG/KG	8600	6730	38900	19100	34400
7440-47-3	Chromium	MG/KG	14	13.3	66.4	14.1	58.6
7440-48-4	Cobalt	MG/KG	2.1 J	2 J	8.9 J	5.6 J	12.5 J
7440-50-8	Copper	MG/KG	56.7	17.8	213	47.4	59.5
7439-89-6	Iron	MG/KG	20100	35300	103000	56700	210000
7439-92-1	Lead	MG/KG	55.9	37.8	214	48.7	192
7439-95-4	Magnesium	MG/KG	1720	1190	8940	4830	4750
7439-96-5	Manganese	MG/KG	233	1210	1430	1410	4830
7439-97-6	Mercury	MG/KG	2.3	0.85	1.3 J	0.46 J	1.4
7440-02-0	Nickel	MG/KG	7.9	6.8	35.5	12.9	21.2 J
7440-09-7	Potassium	MG/KG	320 J	214 J	1470 J	885	835 J
7782-49-2	Selenium	MG/KG	0.47 J	0.35 J	0.28 J	0.27 J	0.4 J
7440-22-4	Silver	MG/KG	0.38 U	0.54 J	2.4 J	0.35 U	1.9 U
7440-23-5	Sodium	MG/KG	36.2 J	33.3 J	162 J	136 J	135 J
7440-28-0	Thallium	MG/KG	0.42 J	1.3 J	0.71 UJ	0.68 UJ	0.79 J
7440-62-2	Vanadium	MG/KG	5.3 J	7.6 J	25.2 J	23.8	45.1
7440-66-6	Zinc	MG/KG	129	114	520 J	275 J	506
57-12-5	Cyanide	MG/KG	28.9 J	12.3 J	21.8	30.3	48.3 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37060S-DUP 0-0.5' 070040-01 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37100S 0-0.75' 070040-06 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37100D 4-6' 070071-05 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	37100D 0.75-1.5' 070040-07 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	37150S 0-0.75' 070040-08 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	290 J	160 J	370 UJ	28000 UJ	140 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-57-8	2-Chlorophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-48-7	2-Methylphenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
106-44-5	4-Methylphenol	UG/KG	610 J	65 J	370 UJ	28000 UJ	2600 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
67-72-1	Hexachloroethane	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
98-95-3	Nitrobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
78-59-1	Isophorone	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
88-75-5	2-Nitrophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
91-20-3	Naphthalene	UG/KG	24000 JD	59000 JD	140 J	320000 J	450 J
106-47-8	4-Chloroaniline	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
87-68-3	Hexachlorobutadiene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
91-57-6	2-Methylnaphthalene	UG/KG	900 J	5000 J	76 J	36000 J	150 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
91-58-7	2-Chloronaphthalene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
88-74-4	2-Nitroaniline	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
131-11-3	Dimethylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
208-96-8	Acenaphthylene	UG/KG	730 J	1800 J	76 J	26000 J	340 J
606-20-2	2,6-Dinitrotoluene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
99-09-2	3-Nitroaniline	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
83-32-9	Acenaphthene	UG/KG	220 J	600 J	1100 J	28000 UJ	130 J
51-28-5	2,4-Dinitrophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
100-02-7	4-Nitrophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
132-64-9	Dibenzofuran	UG/KG	450 J	560 J	190 J	5700 J	130 J
121-14-2	2,4-Dinitrotoluene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
84-66-2	Diethylphthalate	UG/KG	460 UJ	560 UJ	130 J	28000 UJ	460 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
86-73-7	Fluorene	UG/KG	1000 J	1900 J	970 J	7900 J	350 J
100-01-6	4-Nitroaniline	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
118-74-1	Hexachlorobenzene	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
87-86-5	Pentachlorophenol	UG/KG	1100 UJ	1400 UJ	900 UJ	68000 UJ	1100 UJ
85-01-8	Phenanthrene	UG/KG	4200 J	7700 J	260 J	17000 J	2100 J
120-12-7	Anthracene	UG/KG	1600 J	2400 J	88 J	3800 J	610 J
84-74-2	Di-n-butylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
206-44-0	Fluoranthene	UG/KG	7000 J	7300 J	340 J	11000 J	2200 J
129-00-0	Pyrene	UG/KG	5000 J	6400 J	270 J	9000 J	1900 J
85-68-7	Butylbenzylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
56-55-3	Benzo(a)anthracene	UG/KG	3600 J	3200 J	120 J	3700 J	1000 J
219-01-9	Chrysene	UG/KG	3500 J	3800 J	120 J	4000 J	1100 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	460 UJ	130 J	370 UJ	28000 UJ	170 J
117-84-0	Di-n-octylphthalate	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	3600 J	3700 J	100 J	3000 J	1100 J
207-08-9	Benzo(k)fluoranthene	UG/KG	1800 J	1200 J	49 J	28000 UJ	430 J
50-32-8	Benzo(a)pyrene	UG/KG	2900 J	1600 J	86 J	28000 UJ	980 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	790 J	550 J	42 J	28000 UJ	440 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	200 J	130 J	370 UJ	28000 UJ	150 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	220 J	460 J	45 J	28000 UJ	420 J
86-74-8	Carbazole	UG/KG	460 UJ	560 UJ	370 UJ	28000 UJ	460 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	1810	1910	2240	1160	2140
7440-36-0	Antimony	MG/KG	2.5 J	4.4 J	1.9 U	2.4 UJ	2.7 UJ
7440-38-2	Arsenic	MG/KG	15.4	26.2	0.43 J	18.2	5.1
7440-39-3	Barium	MG/KG	53.4	26.5 J	14.8 J	20.3 J	22 J
7440-41-7	Beryllium	MG/KG	0.22 J	0.26 J	0.18 J	0.18 J	0.17 J
7440-43-9	Cadmium	MG/KG	0.38 J	0.37 J	0.2 J	0.38 J	0.6 J
7440-70-2	Calcium	MG/KG	6440	5500	9320	3280	48900
7440-47-3	Chromium	MG/KG	13.4	19.5	6.2	13.9	5.7
7440-48-4	Cobalt	MG/KG	2.2 J	3.6 J	2.4 J	2.3 J	1.9 J
7440-50-8	Copper	MG/KG	15.4	31.9	6.5	31	10.6
7439-89-6	Iron	MG/KG	42100	59800	17600	45200	8940
7439-92-1	Lead	MG/KG	34.2	46.1	9.3	65.4	9
7439-95-4	Magnesium	MG/KG	1150	1100	2870	567 J	1760
7439-96-5	Manganese	MG/KG	1100	982	318	765	161
7439-97-6	Mercury	MG/KG	0.92	0.73	0.1 J	1	0.03 J
7440-02-0	Nickel	MG/KG	7.5	14.4	5.8	11.1	9.2
7440-09-7	Potassium	MG/KG	125 J	115 J	443 J	105 J	367 J
7782-49-2	Selenium	MG/KG	0.45 J	0.35 J	0.17 U	0.27 J	0.23 J
7440-22-4	Silver	MG/KG	0.39 U	0.45 U	0.3 U	0.38 U	0.42 U
7440-23-5	Sodium	MG/KG	22.1 J	26.9 J	99 J	19.3 J	236 J
7440-28-0	Thallium	MG/KG	0.97 J	0.74 J	0.11 UJ	0.51 J	0.22 UJ
7440-62-2	Vanadium	MG/KG	8.9	9.4	12.6	7.7	5.1 J
7440-66-6	Zinc	MG/KG	102	113	55.9 J	316	41.5
57-12-5	Cyanide	MG/KG	24 J	29.7 J	1.9	20.5 J	2.3 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	37200S 0-0.75' 070071-03 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	40150S 0-0.75' 070032-11 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	40150D 2.5-3.5' 070071-12 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	43060S 0-0.5' 070032-12 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	43060D 1-2' 070071-06 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	400 UJ	120 J	390 UJ	3300 UJ	440 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-57-8	2-Chlorophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-48-7	2-Methylphenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
106-44-5	4-Methylphenol	UG/KG	400 UJ	3300 J	390 UJ	3300 UJ	440 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
67-72-1	Hexachloroethane	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
98-95-3	Nitrobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
78-59-1	Isophorone	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
88-75-5	2-Nitrophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
91-20-3	Naphthalene	UG/KG	400 UJ	500 J	740 J	3300 J	1800 J
106-47-8	4-Chloroaniline	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
87-68-3	Hexachlorobutadiene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
91-57-6	2-Methylnaphthalene	UG/KG	400 UJ	810 UJ	120 J	6300 J	4100 J
77-47-4	Hexachlorocyclopentadiene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
91-58-7	2-Chloronaphthalene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
88-74-4	2-Nitroaniline	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
131-11-3	Dimethylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
208-96-8	Acenaphthylene	UG/KG	400 UJ	810 UJ	1500 J	4700 J	1600 J
606-20-2	2,6-Dinitrotoluene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
99-09-2	3-Nitroaniline	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
83-32-9	Acenaphthene	UG/KG	400 UJ	810 UJ	2800 J	1600 J	480 J
51-28-5	2,4-Dinitrophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
100-02-7	4-Nitrophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
132-64-9	Dibenzofuran	UG/KG	400 UJ	810 UJ	770 J	2100 J	390 J
121-14-2	2,4-Dinitrotoluene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
84-66-2	Diethylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
86-73-7	Fluorene	UG/KG	400 UJ	810 UJ	3400 J	7400 J	2000 J
100-01-6	4-Nitroaniline	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
118-74-1	Hexachlorobenzene	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
87-86-5	Pentachlorophenol	UG/KG	970 UJ	2000 UJ	940 UJ	8100 UJ	1100 UJ
85-01-8	Phenanthrene	UG/KG	400 UJ	560 J	8300 JD	40000 J	6400 J
120-12-7	Anthracene	UG/KG	400 UJ	810 UJ	2900 J	12000 J	47 J
84-74-2	Di-n-butylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
206-44-0	Fluoranthene	UG/KG	400 UJ	680 J	12000 JD	29000 J	2100 J
129-00-0	Pyrene	UG/KG	400 UJ	560 J	9800 JD	32000 J	2700 J
85-68-7	Butylbenzylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
56-55-3	Benzo(a)anthracene	UG/KG	400 UJ	270 J	4400 J	17000 J	1200 J
219-01-9	Chrysene	UG/KG	400 UJ	330 J	4200 J	20000 J	50 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	400 UJ	460 J	390 UJ	3300 UJ	440 UJ
117-84-0	Di-n-octylphthalate	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	400 UJ	370 J	4500 J	15000 J	810 J
207-08-9	Benzo(k)fluoranthene	UG/KG	400 UJ	810 UJ	1500 J	4800 J	290 J
50-32-8	Benzo(a)pyrene	UG/KG	400 UJ	280 J	3600 J	14000 J	910 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	400 UJ	190 J	1100 J	6600 J	310 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	400 UJ	810 UJ	290 J	2000 J	110 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	400 UJ	180 J	850 J	6200 J	360 J
86-74-8	Carbazole	UG/KG	400 UJ	810 UJ	390 UJ	3300 UJ	440 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	1530	5430	4700	3330	6240
7440-36-0	Antimony	MG/KG	2 UJ	3.8 J	10.2 UJ	4.4 J	17.3 J
7440-38-2	Arsenic	MG/KG	2.4	3.5	15.2	16.7	19.4
7440-39-3	Barium	MG/KG	5.8 J	59.9	54.4 J	94.1	116 J
7440-41-7	Beryllium	MG/KG	0.11 J	0.41 J	0.88 J	0.38 J	1.4 J
7440-43-9	Cadmium	MG/KG	0.2 J	0.75 J	0.98 J	0.18 U	1.3 J
7440-70-2	Calcium	MG/KG	7810	48600	25900	91600	13800
7440-47-3	Chromium	MG/KG	2.9	12 J	41.8	58.7 J	58.3
7440-48-4	Cobalt	MG/KG	2 J	6.3 J	8.2 J	4.9 J	13.3 J
7440-50-8	Copper	MG/KG	2.3 J	33	50.1	34.1	84.4
7439-89-6	Iron	MG/KG	4350	41000	151000	64500	300000
7439-92-1	Lead	MG/KG	3.8	20.2	54.9	35.4	85.2
7439-95-4	Magnesium	MG/KG	2640	3390 J	5220	4650 J	2210 J
7439-96-5	Manganese	MG/KG	72.7	402	2510	3140	5470
7439-97-6	Mercury	MG/KG	0.07 J	0.02 U	0.24 J	0.18	0.38 J
7440-02-0	Nickel	MG/KG	4.4 J	20.3	30.5	19	39.4
7440-09-7	Potassium	MG/KG	314 J	900	497 J	341 J	238 U
7782-49-2	Selenium	MG/KG	0.19 U	0.47 J	0.36 J	0.32 U	0.43 J
7440-22-4	Silver	MG/KG	0.32 U	0.41 U	1.6 U	0.36 U	1.7 U
7440-23-5	Sodium	MG/KG	76.3 J	430 J	126 J	339 J	28.1 J
7440-28-0	Thallium	MG/KG	0.13 UJ	0.32 J	0.56 UJ	1.1 U	0.69 UJ
7440-62-2	Vanadium	MG/KG	4.1 J	13.8 J	28.9 J	40.5 J	43.2
7440-66-6	Zinc	MG/KG	22.4 J	133 J	250 J	198 J	463 J
57-12-5	Cyanide	MG/KG	0.31 U	1.6	22	15.8	24.9

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	43100S 0-0.5' 070032-13 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	43100D 1-2' 070071-07 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	43150S 0-0.5' 070032-14 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45020S 0-0.75' 070032-17 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45020D 1-2' 070071-08 NYTEST CFSED3 SEDIMENT 7/01/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	65 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-57-8	2-Chlorophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-48-7	2-Methylphenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
106-44-5	4-Methylphenol	UG/KG	150 J	440 UJ	920 J	600 UJ	490 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
67-72-1	Hexachloroethane	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
98-95-3	Nitrobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
78-59-1	Isophorone	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
88-75-5	2-Nitrophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
91-20-3	Naphthalene	UG/KG	360 J	2100 J	1700 J	1300 J	30000 JD
106-47-8	4-Chloroaniline	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
87-68-3	Hexachlorobutadiene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
91-57-6	2-Methylnaphthalene	UG/KG	300 J	320 J	790 J	530 J	9500 JD
77-47-4	Hexachlorocyclopentadiene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
91-58-7	2-Chloronaphthalene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
88-74-4	2-Nitroaniline	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
131-11-3	Dimethylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
208-96-8	Acenaphthylene	UG/KG	320 J	2700 J	1600 J	2800 J	12000 JD
606-20-2	2,6-Dinitrotoluene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
99-09-2	3-Nitroaniline	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
83-32-9	Acenaphthene	UG/KG	120 J	1400 J	6900 J	570 J	980 J
51-28-5	2,4-Dinitrophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
100-02-7	4-Nitrophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
132-64-9	Dibenzofuran	UG/KG	200 J	1700 J	3700 J	1600 J	4200 J
121-14-2	2,4-Dinitrotoluene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
84-66-2	Diethylphthalate	UG/KG	670 UJ	69 J	3600 UJ	600 UJ	490 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
86-73-7	Fluorene	UG/KG	480 J	5300 J	6100 J	3400 J	10000 JD
100-01-6	4-Nitroaniline	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
118-74-1	Hexachlorobenzene	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
87-86-5	Pentachlorophenol	UG/KG	1600 UJ	1100 UJ	8700 UJ	1400 UJ	1200 UJ
85-01-8	Phenanthrene	UG/KG	2200 J	27000 JD	32000 J	22000 JD	39000 JD
120-12-7	Anthracene	UG/KG	520 J	7700 JD	9900 J	6400 J	11000 JD
84-74-2	Di-n-butylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	59 J
206-44-0	Fluoranthene	UG/KG	1500 J	30000 JD	24000 J	25000 JD	25000 JD
129-00-0	Pyrene	UG/KG	1600 J	24000 JD	20000 J	18000 JD	24000 JD
85-68-7	Butylbenzylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
56-55-3	Benzo(a)anthracene	UG/KG	880 J	13000 JD	7500 J	7900 J	11000 JD
219-01-9	Chrysene	UG/KG	920 J	12000 JD	7900 J	7600 J	11000 JD
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
117-84-0	Di-n-octylphthalate	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	880 J	12000 JD	7300 J	8200 J	9100 JD
207-08-9	Benzo(k)fluoranthene	UG/KG	670 UJ	5000 J	3500 J	2900 J	4000 J
50-32-8	Benzo(a)pyrene	UG/KG	860 J	10000 JD	7200 J	7400 J	5000 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	450 J	1900 J	4000 J	4000 J	1600 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	670 UJ	500 J	810 J	900 J	460 J
191-24-2	Benzo(g,h,i)perylene	UG/KG	500 J	1300 J	4200 J	3800 J	1200 J
86-74-8	Carbazole	UG/KG	670 UJ	440 UJ	3600 UJ	600 UJ	490 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	990	5430	3360	3090	6040
7440-36-0	Antimony	MG/KG	2.4 UJ	12.9 J	2.4 UJ	3.9 J	12.8 U
7440-38-2	Arsenic	MG/KG	14.5	15	5.7	0.24 J	19
7440-39-3	Barium	MG/KG	22 J	154	49.6	41.8	126 J
7440-41-7	Beryllium	MG/KG	0.14 J	1.3 J	0.25 J	0.14 J	0.94 J
7440-43-9	Cadmium	MG/KG	0.44 J	1.9 J	0.36 J	0.44 J	2.5 J
7440-70-2	Calcium	MG/KG	8700	16000	87100	43500	83500
7440-47-3	Chromium	MG/KG	62.1 J	52.6	16 J	204 J	165
7440-48-4	Cobalt	MG/KG	2.3 J	9.9 J	3.6 J	0.68 J	8.6 J
7440-50-8	Copper	MG/KG	12.5	54.5	21.6	7	77.9
7439-89-6	Iron	MG/KG	37900	257000	35300	18000	162000
7439-92-1	Lead	MG/KG	13.1	62.8	15.7	9	114
7439-95-4	Magnesium	MG/KG	2460 J	2340 J	3810 J	5640 J	6470
7439-96-5	Manganese	MG/KG	1410	7730	843	5760	6070
7439-97-6	Mercury	MG/KG	0.05 J	0.96 J	0.03 J	0.05 J	0.67 J
7440-02-0	Nickel	MG/KG	10	11.9 J	11.4	2.9 J	40.6
7440-09-7	Potassium	MG/KG	108 J	379 J	663 J	63.5 J	285 U
7782-49-2	Selenium	MG/KG	0.36 J	0.2 U	0.33 UJ	0.29 UJ	0.98 J
7440-22-4	Silver	MG/KG	0.37 U	2.4 J	0.38 U	0.31 U	2 U
7440-23-5	Sodium	MG/KG	31.8 J	47.8 J	471 J	47.5 J	130 J
7440-28-0	Thallium	MG/KG	1 U	0.68 UJ	0.23 UJ	0.21 J	0.75 UJ
7440-62-2	Vanadium	MG/KG	10 J	43.8	13.9 J	49.3 J	54.9
7440-66-6	Zinc	MG/KG	86.4 J	279 J	82.6 J	37.5 J	664 J
57-12-5	Cyanide	MG/KG	20.1	23.4	6	15.2	18

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	45100S 0-0.75' 070032-18 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	45100D 1-2' 070071-09 NYTEST CFSED3 SEDIMENT 7/01/96 9/26/96	45150S 0-0.75' 070032-19 NYTEST CFSED1 SEDIMENT 6/24/96 9/25/96	46150S 0-0.75' 070040-14 NYTEST CFSED2 SEDIMENT 6/24/96 9/26/96	50060S 0-0.75' 070040-09 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	640 UJ	420 UJ	610 UJ	93 J	64 J
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-57-8	2-Chlorophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-48-7	2-Methylphenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
106-44-5	4-Methylphenol	UG/KG	450 J	420 UJ	610 UJ	1200 J	1800 J
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
67-72-1	Hexachloroethane	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
98-95-3	Nitrobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
78-59-1	Isophorone	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
88-75-5	2-Nitrophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
91-20-3	Naphthalene	UG/KG	220 J	700 J	610 UJ	150 J	410 UJ
106-47-8	4-Chloroaniline	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
87-68-3	Hexachlorobutadiene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
91-57-6	2-Methylnaphthalene	UG/KG	190 J	240 J	610 UJ	440 UJ	410 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
91-58-7	2-Chloronaphthalene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
88-74-4	2-Nitroaniline	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
131-11-3	Dimethylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
208-96-8	Acenaphthylene	UG/KG	640 UJ	2300 J	610 UJ	100 J	410 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
99-09-2	3-Nitroaniline	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
83-32-9	Acenaphthene	UG/KG	580 J	2900 J	610 UJ	48 J	410 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
100-02-7	4-Nitrophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
132-64-9	Dibenzofuran	UG/KG	480 J	3900 J	610 UJ	71 J	410 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
84-66-2	Diethylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
86-73-7	Fluorene	UG/KG	710 J	6500 J	610 UJ	130 J	410 UJ
100-01-6	4-Nitroaniline	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
118-74-1	Hexachlorobenzene	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
87-86-5	Pentachlorophenol	UG/KG	1600 UJ	1000 UJ	1500 UJ	1100 UJ	980 UJ
85-01-8	Phenanthrene	UG/KG	4800 J	26000 JD	610 UJ	740 J	150 J
120-12-7	Anthracene	UG/KG	1100 J	6700 J	610 UJ	190 J	410 UJ
84-74-2	Di-n-butylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
206-44-0	Fluoranthene	UG/KG	4400 J	20000 JD	610 UJ	990 J	270 J
129-00-0	Pyrene	UG/KG	3500 J	17000 JD	610 UJ	680 J	220 J
85-68-7	Butylbenzylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
56-55-3	Benzo(a)anthracene	UG/KG	1800 J	8100 JD	610 UJ	390 J	120 J
219-01-9	Chrysene	UG/KG	1800 J	7600 JD	610 UJ	430 J	160 J
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	640 UJ	420 UJ	610 UJ	240 J	120 J
117-84-0	Di-n-octylphthalate	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	1800 J	7200 JD	610 UJ	440 J	180 J
207-08-9	Benzo(k)fluoranthene	UG/KG	690 J	2900 JD	610 UJ	190 J	72 J
50-32-8	Benzo(a)pyrene	UG/KG	1500 J	6700 J	610 UJ	340 J	130 J
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	830 J	1400 J	610 UJ	130 J	59 J
53-70-3	Dibenz(a,h)anthracene	UG/KG	210 J	400 J	610 UJ	440 UJ	410 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	760 J	1000 J	610 UJ	110 J	47 J
86-74-8	Carbazole	UG/KG	640 UJ	420 UJ	610 UJ	440 UJ	410 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	2500	2750	2590	2210	2880
7440-36-0	Antimony	MG/KG	2.8 J	2.3 J	2 UJ	2.5 UJ	2 UJ
7440-38-2	Arsenic	MG/KG	5.9	10.2	0.16 U	4.7	3.1
7440-39-3	Barium	MG/KG	33.8	19.1 J	13.4 J	36.6	25.6
7440-41-7	Beryllium	MG/KG	0.17 J	0.31 J	0.1 J	0.11 J	0.17 J
7440-43-9	Cadmium	MG/KG	0.68 J	0.64	0.52 J	0.34 J	0.29 J
7440-70-2	Calcium	MG/KG	79800	18500	21500	129000	61000
7440-47-3	Chromium	MG/KG	33.8 J	17.9	4.9 J	6.3	6.5
7440-48-4	Cobalt	MG/KG	3.8 J	3.3 J	3.1 J	1.9 J	2.4 J
7440-50-8	Copper	MG/KG	27.2	18.2	8.1	9.8	7.6
7439-89-6	Iron	MG/KG	32100	36800	8940	5570	6980
7439-92-1	Lead	MG/KG	20	26.6	7.4	5.4	22.2
7439-95-4	Magnesium	MG/KG	31200 J	4120	7550 J	3890	4130
7439-96-5	Manganese	MG/KG	745	986	203	158	201
7439-97-6	Mercury	MG/KG	0.04 J	0.15 J	0.02 U	0.02 U	0.02 U
7440-02-0	Nickel	MG/KG	30	11.9	10.2	7	9
7440-09-7	Potassium	MG/KG	497 J	414 J	449 J	457 J	546 J
7782-49-2	Selenium	MG/KG	0.31 UJ	0.67	0.29 UJ	0.48 J	0.19 UJ
7440-22-4	Silver	MG/KG	0.36 U	0.32 U	0.32 U	0.38 U	0.31 U
7440-23-5	Sodium	MG/KG	197 J	69.7 J	90.8 J	571 J	276 J
7440-28-0	Thallium	MG/KG	0.22 UJ	0.6 UJ	0.2 UJ	0.22 UJ	0.21 UJ
7440-62-2	Vanadium	MG/KG	12.3 J	10.8	9 J	5.4 J	7.4
7440-66-6	Zinc	MG/KG	67.2 J	110 J	46.5 J	37.2	40.8
57-12-5	Cyanide	MG/KG	3	10	0.29 U	0.33 UJ	0.31 J

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	50060D 0.75-1.5' 070071-10 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	78100S 0-2' 070071-11 NYTEST CFSED3 SEDIMENT 7/02/96 9/26/96	80060S 0-0.75' 070040-10 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	82020S 0-0.75' 070040-11 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96	82100S 0-0.75' 070040-12 NYTEST CFSED2 SEDIMENT 6/26/96 9/26/96
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-57-8	2-Chlorophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-48-7	2-Methylphenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
106-44-5	4-Methylphenol	UG/KG	75 J	390 UJ	4200 UJ	440 UJ	440 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
67-72-1	Hexachloroethane	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
98-95-3	Nitrobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
78-59-1	Isophorone	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
88-75-5	2-Nitrophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
91-20-3	Naphthalene	UG/KG	500 J	390 UJ	730 J	440 UJ	51 J
106-47-8	4-Chloroaniline	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
87-68-3	Hexachlorobutadiene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
91-57-6	2-Methylnaphthalene	UG/KG	340 J	390 UJ	520 J	440 UJ	440 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
91-58-7	2-Chloronaphthalene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
88-74-4	2-Nitroaniline	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
131-11-3	Dimethylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
208-96-8	Acenaphthylene	UG/KG	1400 J	390 UJ	3600 J	440 UJ	440 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
99-09-2	3-Nitroaniline	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
83-32-9	Acenaphthene	UG/KG	610 J	390 UJ	4100 J	440 UJ	440 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
100-02-7	4-Nitrophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
132-64-9	Dibenzofuran	UG/KG	1000 J	390 UJ	4000 J	440 UJ	440 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
84-66-2	Diethylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
86-73-7	Fluorene	UG/KG	2500 J	390 UJ	7900 J	440 UJ	440 UJ
100-01-6	4-Nitroaniline	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
118-74-1	Hexachlorobenzene	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
87-86-5	Pentachlorophenol	UG/KG	1100 UJ	940 UJ	10000 UJ	1000 UJ	1100 UJ
85-01-8	Phenanthrene	UG/KG	14000 JD	390 UJ	37000 J	440 UJ	440 UJ
120-12-7	Anthracene	UG/KG	3900 J	390 UJ	9000 J	440 UJ	440 UJ
84-74-2	Di-n-butylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
206-44-0	Fluoranthene	UG/KG	14000 JD	390 UJ	33000 J	440 UJ	53 J
129-00-0	Pyrene	UG/KG	11000 JD	390 UJ	24000 J	440 UJ	440 UJ
85-68-7	Butylbenzylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
56-55-3	Benzo(a)anthracene	UG/KG	5300 J	390 UJ	12000 J	440 UJ	440 UJ
219-01-9	Chrysene	UG/KG	180 J	390 UJ	10000 J	440 UJ	440 UJ
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
117-84-0	Di-n-octylphthalate	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	5400 J	390 UJ	12000 J	440 UJ	440 UJ
207-08-9	Benzo(k)fluoranthene	UG/KG	2200 J	390 UJ	4200 J	440 UJ	440 UJ
50-32-8	Benzo(a)pyrene	UG/KG	4600 J	390 UJ	9900 J	80 J	440 UJ
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1800 J	390 UJ	4900 J	440 UJ	440 UJ
53-70-3	Dibenz(a,h)anthracene	UG/KG	490 J	390 UJ	1100 J	440 UJ	440 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	1600 J	390 UJ	4700 J	440 UJ	440 UJ
86-74-8	Carbazole	UG/KG	440 UJ	390 UJ	4200 UJ	440 UJ	440 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	5490	5800	3900	3520	3610
7440-36-0	Antimony	MG/KG	2.6 J	1.9 UJ	2.1 UJ	2.2 UJ	2.3 UJ
7440-38-2	Arsenic	MG/KG	4.6	3.5	3.9	3.4	2.3
7440-39-3	Barium	MG/KG	41.3	14.1 J	24.4 J	12.4 J	17.7 J
7440-41-7	Beryllium	MG/KG	0.61 J	0.28 J	0.23 J	0.16 J	0.18 J
7440-43-9	Cadmium	MG/KG	0.42 J	0.24 J	0.49 J	0.18 U	0.49 J
7440-70-2	Calcium	MG/KG	21200	37700	13100	5600	5760
7440-47-3	Chromium	MG/KG	14.9	10.2	12	6.7	6.6
7440-48-4	Cobalt	MG/KG	3.6 J	5.2 J	4 J	4.2 J	4.2 J
7440-50-8	Copper	MG/KG	26.3	14.2	10.9	4.8	9.6
7439-89-6	Iron	MG/KG	13700	11800	8590	9320	7960
7439-92-1	Lead	MG/KG	15.4	10.7	15.2	6.3	7.2
7439-95-4	Magnesium	MG/KG	4290	15300	2600	3510	3360
7439-96-5	Manganese	MG/KG	180	216	119	85.7	87.4
7439-97-6	Mercury	MG/KG	0.09 J	0.1 J	0.04 J	0.06 J	0.02 U
7440-02-0	Nickel	MG/KG	12.6	16.4	13.5	9.3	11.4
7440-09-7	Potassium	MG/KG	847	1410	653	671	742
7782-49-2	Selenium	MG/KG	0.27 J	0.19 J	0.17 UJ	0.2 UJ	0.19 UJ
7440-22-4	Silver	MG/KG	0.36 J	0.3 U	6.6	0.34 U	0.36 U
7440-23-5	Sodium	MG/KG	159 J	122 J	119 J	87.7 J	135 J
7440-28-0	Thallium	MG/KG	0.65 UJ	0.58 UJ	0.18 UJ	0.22 UJ	0.2 UJ
7440-62-2	Vanadium	MG/KG	11.9	12.6	14.2	13.3	8.8
7440-66-6	Zinc	MG/KG	65.7 J	36.9 J	78.6	32	44.8
57-12-5	Cyanide	MG/KG	0.33 U	0.29 U	0.31 UJ	0.33 UJ	0.33 UJ

CHERRY FARM/RIVER ROAD SITE Tonawanda, NY Validated Sediment Analytical Data Phase II		SAMPLE ID: DEPTH: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	SWALE 0-0.75' 070032-15 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	SWALE-DUP 0-0.75' 070032-16 NYTEST CFSED1 SEDIMENT 6/25/96 9/25/96	WB1 070032-20 NYTEST CFSED1 WATER 6/25/96 9/25/96	WB02 070040-13 NYTEST CFSED2 WATER 6/27/96 9/26/96	WB03 070071-13 NYTEST CFSED3 WATER 6/28/96 9/26/96
CAS NO.	COMPOUND	UNITS:			UG/L	UG/L	UG/L
	SEMIVOLATILES						
108-95-2	Phenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
111-44-4	bis(2-Chloroethyl)Ether	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-57-8	2-Chlorophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
541-73-1	1,3-Dichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
106-46-7	1,4-Dichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-50-1	1,2-Dichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-48-7	2-Methylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
106-44-5	4-Methylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
621-64-7	N-Nitroso-di-n-propylamine	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
67-72-1	Hexachloroethane	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
98-95-3	Nitrobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
78-59-1	Isophorone	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
88-75-5	2-Nitrophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
105-67-9	2,4-Dimethylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
111-91-1	bis(2-Chloroethoxy)methane	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
120-83-2	2,4-Dichlorophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
120-82-1	1,2,4-Trichlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
91-20-3	Naphthalene	UG/KG	3400 J	4200 J	10 UJ	11 UJ	10 UJ
106-47-8	4-Chloroaniline	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
87-68-3	Hexachlorobutadiene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
59-50-7	4-Chloro-3-methylphenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
91-57-6	2-Methylnaphthalene	UG/KG	180 J	210 J	10 UJ	11 UJ	10 UJ
77-47-4	Hexachlorocyclopentadiene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
88-06-2	2,4,6-Trichlorophenol	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
95-95-4	2,4,5-Trichlorophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
91-58-7	2-Chloronaphthalene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
88-74-4	2-Nitroaniline	UG/KG	1500 UJ	1500 UJ	25 UJ	25 UJ	25 UJ
131-11-3	Dimethylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
208-96-8	Acenaphthylene	UG/KG	450 J	560 J	10 UJ	11 UJ	10 UJ
606-20-2	2,6-Dinitrotoluene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
99-09-2	3-Nitroaniline	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
83-32-9	Acenaphthene	UG/KG	310 J	390 J	10 UJ	11 UJ	10 UJ
51-28-5	2,4-Dinitrophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
100-02-7	4-Nitrophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
132-64-9	Dibenzofuran	UG/KG	420 J	520 J	10 UJ	11 UJ	10 UJ
121-14-2	2,4-Dinitrotoluene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
84-66-2	Diethylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	1 J	10 UJ
7005-72-3	4-Chlorophenyl-phenylether	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
86-73-7	Fluorene	UG/KG	500 J	630 J	10 UJ	11 UJ	10 UJ
100-01-6	4-Nitroaniline	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
534-52-1	4,6-Dinitro-2-methylphenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
86-30-6	N-Nitrosodiphenylamine	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
101-55-3	4-Bromophenyl-phenylether	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
118-74-1	Hexachlorobenzene	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
87-86-5	Pentachlorophenol	UG/KG	1500 UJ	1500 UJ	25 UJ	26 UJ	25 UJ
85-01-8	Phenanthrene	UG/KG	2100 J	2500 J	10 UJ	11 UJ	10 UJ
120-12-7	Anthracene	UG/KG	660 J	1100 J	10 UJ	11 UJ	10 UJ
84-74-2	Di-n-butylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
206-44-0	Fluoranthene	UG/KG	3800 J	4800 J	10 UJ	11 UJ	10 UJ
129-00-0	Pyrene	UG/KG	3200 J	4400 J	10 UJ	11 UJ	10 UJ
85-68-7	Butylbenzylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
91-94-1	3,3'-Dichlorobenzidine	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
56-55-3	Benzo(a)anthracene	UG/KG	2200 J	3000 J	10 UJ	11 UJ	10 UJ
219-01-9	Chrysene	UG/KG	2500 J	3300 J	10 UJ	11 UJ	10 UJ
117-81-7	bis(2-Ethylhexyl)phthalate	UG/KG	600 UJ	130 J	10 UJ	11 UJ	10 UJ
117-84-0	Di-n-octylphthalate	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
205-99-2	Benzo(b)fluoranthene	UG/KG	3200 J	3900 J	10 UJ	11 UJ	10 UJ
207-08-9	Benzo(k)fluoranthene	UG/KG	1200 J	1600 J	10 UJ	11 UJ	10 UJ
50-32-8	Benzo(a)pyrene	UG/KG	2600 J	2300 J	10 UJ	11 UJ	10 UJ
193-39-5	Indeno(1,2,3-cd)pyrene	UG/KG	1800 J	2200 J	10 UJ	11 UJ	10 UJ
53-70-3	Dibenz(a,h)anthracene	UG/KG	440 J	570 J	10 UJ	11 UJ	10 UJ
191-24-2	Benzo(g,h,i)perylene	UG/KG	1700 J	2200 J	10 UJ	11 UJ	10 UJ
86-74-8	Carbazole	UG/KG	600 UJ	630 UJ	10 UJ	11 UJ	10 UJ
	INORGANICS						
7429-90-5	Aluminum	MG/KG	11900	1900	14.6 U	57.3 J	12.9 U
7440-36-0	Antimony	MG/KG	10.2 UJ	2.1 UJ	18.9 UJ	18.9 UJ	16.7 UJ
7440-38-2	Arsenic	MG/KG	28.3	35.3	1.4 U	1.4 U	1.4 U
7440-39-3	Barium	MG/KG	218	38.1	1.4 U	1.4 U	1.3 U
7440-41-7	Beryllium	MG/KG	1.4 J	0.15 J	0.46 U	0.46 U	0.4 U
7440-43-9	Cadmium	MG/KG	0.86 J	0.37 J	1.5 U	1.5 U	1.3 U
7440-70-2	Calcium	MG/KG	79200	19300	15.5 J	80.1 J	72.2 J
7440-47-3	Chromium	MG/KG	870 J	174 J	2.8 U	2.8 U	2.5 U
7440-48-4	Cobalt	MG/KG	7.4 J	2.1 J	2.9 U	2.9 U	2.6 U
7440-50-8	Copper	MG/KG	79.3	29.7	8.6 U	8.6 U	7.6 U
7439-89-6	Iron	MG/KG	116000	39300	36.9 U	36.9 U	32.6 U
7439-92-1	Lead	MG/KG	45.4	10.9	0.77 J	0.91 J	0.7 U
7439-95-4	Magnesium	MG/KG	17700 J	3120 J	31.7 J	33 J	36 J
7439-96-5	Manganese	MG/KG	16400	3890	1.1 U	1.1 U	1.8 J
7439-97-6	Mercury	MG/KG	0.13	0.21	0.04 U	0.04 U	0.05 J
7440-02-0	Nickel	MG/KG	26.3	10.2	18.2 U	18.2 U	16.1 U
7440-09-7	Potassium	MG/KG	447 J	81.2 J	423 U	423 U	373 U
7782-49-2	Selenium	MG/KG	0.65	1.4	2.5 U	1.6 U	1.6 U
7440-22-4	Silver	MG/KG	1.6 U	0.34 U	3 U	3 U	2.6 U
7440-23-5	Sodium	MG/KG	193 J	33.5 J	20.2 U	20.2 U	17.8 J
7440-28-0	Thallium	MG/KG	0.94 UJ	0.98 UJ	1.8 U	1.8 U	1.1 U
7440-62-2	Vanadium	MG/KG	120 J	79.2 J	2.6 U	2.6 U	2.3 U
7440-66-6	Zinc	MG/KG	205 J	50 J	4.7 J	2.7 J	2.1 J
57-12-5	Cyanide	MG/KG	17	21.2			

APPENDIX D
UCL_{95} CALCULATIONS TABLES

TABLE 1
SEDIMENT BACKGROUND – DATA SUMMARY
ALL DETECTED CHEMICALS (1)

Chemical	Range of Sample Quantitation Limits (mg/kg) (2)	Range of Detected Concentrations (mg/kg)	Frequency of Detection	Average Concentration (mg/kg) (3)	Standard Deviation (mg/kg)	95 % UCL (mg/kg) (4)	t–value (5)
Volatiles							
None detected							
Semivolatiles							
Acenaphthene	0.40 – 24	0.045 – 0.90	9 / 21	1.10E+00	2.55E+00	9.00E–01 *	NA
Acenaphthylene	0.40 – 3.7	0.14 – 2.4	6 / 21	7.91E–01	6.92E–01	1.05E+00	1.725
Anthracene	0.40 – 3.7	0.087 – 7.2	16 / 21	9.87E–01	1.61E+00	1.59E+00	1.725
Benzo(a)anthracene	0.40 – 3.3	0.18 – 14	17 / 21	1.79E+00	3.08E+00	2.95E+00	1.725
Benzo(a)pyrene	0.40 – 3.3	0.12 – 12	17 / 21	1.42E+00	2.59E+00	2.39E+00	1.725
Benzo(b)fluoranthene	0.40 – 3.3	0.13 – 13	17 / 21	1.47E+00	2.79E+00	2.52E+00	1.725
Benzo(g,h,i)perylene	0.40 – 3.3	0.072 – 6.4	17 / 21	7.99E–01	1.38E+00	1.32E+00	1.725
Benzo(k)fluoranthene	0.40 – 3.3	0.092 – 9.3	17 / 21	1.16E+00	1.98E+00	1.90E+00	1.725
Bis(2–ethylhexyl)phthalate	0.40 – 3.7	2.1 – 6.0	3 / 21	1.13E+00	1.36E+00	1.65E+00	1.725
Butylbenzylphthalate	0.40 – 24	0.17 – 0.17	1 / 21	1.17E+00	2.54E+00	1.70E–01 *	NA
Carbazole	0.40 – 24	0.054 – 1.5	10 / 21	1.00E+00	2.56E+00	1.49E+00 *	NA
Chrysene	0.40 – 3.3	0.086 – 15	18 / 21	1.92E+00	3.28E+00	3.16E+00	1.725
Di–n–butylphthalate	0.40 – 24	0.14 – 0.14	1 / 21	1.17E+00	2.54E+00	1.40E–01 *	NA
Dibenz(a,h)anthracene	0.40 – 24	0.11 – 0.16	2 / 21	1.16E+00	2.54E+00	1.60E–01 *	NA
Dibenzofuran	0.40 – 24	0.097 – 1.3	7 / 21	1.20E+00	2.54E+00	1.30E+00 *	NA
Fluoranthene	0.40 – 0.40	0.097 – 45	20 / 21	5.21E+00	1.01E+01	9.00E+00	1.725
Fluorene	0.40 – 3.7	0.074 – 4.2	12 / 21	8.59E–01	1.08E+00	1.27E+00	1.725
Indeno(1–2–3–cd)pyrene	0.40 – 3.3	0.067 – 5.8	17 / 21	7.59E–01	1.26E+00	1.23E+00	1.725
2–Methylnaphthalene	0.40 – 24	0.097 – 0.23	3 / 21	1.15E+00	2.55E+00	2.30E–01 *	NA
4–Methylphenol	0.40 – 24	0.074 – 0.56	4 / 21	1.12E+00	2.54E+00	5.60E–01 *	NA
Naphthalene	0.40 – 24	0.058 – 0.77	10 / 21	1.10E+00	2.56E+00	7.70E–01 *	NA
Phenanthrene	0.40 – 0.88	0.23 – 39	19 / 21	4.07E+00	8.67E+00	7.34E+00	1.725
Pyrene	0.40 – 0.88	0.26 – 30	19 / 21	3.63E+00	6.74E+00	6.17E+00	1.725

TABLE 1
SEDIMENT BACKGROUND – DATA SUMMARY
ALL DETECTED CHEMICALS (1)

Chemical	Range of Sample Quantitation Limits (mg/kg) (2)	Range of Detected Concentrations (mg/kg)	Frequency of Detection	Average Concentration (mg/kg) (3)	Standard Deviation (mg/kg)	95 % UCL (mg/kg) (4)	t-value (5)
Pesticides/PCBs							
Aroclor-1248	–	0.12 – 2.0	21 / 21	6.30E-01	4.73E-01	8.08E-01	1.725
Aroclor-1260	0.10 – 0.57	0.11 – 2.3	5 / 21	2.03E-01	4.86E-01	3.86E-01	1.725
Inorganics							
Aluminum	–	2,340 – 18,400	21 / 21	5.90E+03	4.33E+03	7.53E+03	1.725
Antimony	7.3 – 18	18 – 18	1 / 21	5.97E+00	3.04E+00	7.11E+00	1.725
Arsenic	–	3.0 – 16	21 / 21	6.44E+00	3.10E+00	7.60E+00	1.725
Barium	–	20 – 166	21 / 21	5.42E+01	4.42E+01	7.08E+01	1.725
Beryllium	0.21 – 0.47	0.20 – 1.8	13 / 21	3.65E-01	4.05E-01	5.17E-01	1.725
Cadmium	0.38 – 0.89	0.51 – 3.3	10 / 21	9.10E-01	1.00E+00	1.29E+00	1.725
Calcium	–	4,270 – 62,500	21 / 21	2.30E+04	1.49E+04	2.87E+04	1.725
Chromium	–	6.9 – 239	21 / 21	3.22E+01	4.99E+01	5.09E+01	1.725
Cobalt	–	2.7 – 30	21 / 21	6.70E+00	5.98E+00	8.95E+00	1.725
Copper	–	3.2 – 257	21 / 21	3.65E+01	5.48E+01	5.72E+01	1.725
Iron	–	8,140 – 86,000	21 / 21	2.01E+04	1.74E+04	2.67E+04	1.725
Lead	–	7.5 – 156	21 / 21	3.63E+01	3.59E+01	4.98E+01	1.725
Magnesium	–	2,170 – 13,200	21 / 21	5.53E+03	2.41E+03	6.43E+03	1.725
Manganese	–	157 – 46,300	21 / 21	2.79E+03	1.00E+04	6.57E+03	1.725
Mercury	0.12 – 0.17	0.21 – 0.47	7 / 21	1.52E-01	1.32E-01	2.02E-01	1.725
Nickel	–	8.1 – 58	21 / 21	1.88E+01	1.13E+01	2.30E+01	1.725
Potassium	–	249 – 1,840	21 / 21	6.91E+02	3.94E+02	8.39E+02	1.725
Silver	1.1 – 2.7	3.8 – 4.2	2 / 21	1.13E+00	9.76E-01	1.50E+00	1.725
Vanadium	–	8.1 – 53	21 / 21	1.89E+01	1.17E+01	2.33E+01	1.725
Zinc	–	47 – 238	21 / 21	1.09E+02	5.39E+01	1.29E+02	1.725
Total Organic Carbon	–	4,472 – 123,933	16 / 16	3.90E+04	3.71E+04	5.53E+04	1.753

TABLE 1
SEDIMENT BACKGROUND – DATA SUMMARY
ALL DETECTED CHEMICALS (1)

Chemical	Range of Sample Quantitation Limits (mg/kg) (2)	Range of Detected Concentrations (mg/kg)	Frequency of Detection	Average Concentration (mg/kg) (3)	Standard Deviation (mg/kg)	95 % UCL (mg/kg) (4)	t–value (5)

1. The chemicals listed include all those detected in both background and onsite samples. Data are presented for background samples only. All samples collected 12/13/94.
2. For nondetects. If the analyte was detected in all samples, sample quantitation limits (SQLs) are not presented.
3. Arithmetic average concentration of untransformed data, including nondetects at 1/2 SQL.
4. 95 percent upper confidence limit on the mean of the untransformed data. An asterisk ("*") indicates that the maximum detected concentration is presented, as the calculated 95 % UCL exceeded the maximum.
5. NA = not applicable, meaning that the calculated 95 % UCL is not presented.

APPENDIX E

APPENDIX E
VELOCITY MEASUREMENTS

NIAGARA RIVER VELOCITY MEASUREMENTS

6/27/96 STA	DIST (ft)	DEPTH (ft)	DEPTH OF WATER (ft)	VELOCITY (ft/sec)
3200	25	2	2.5	0.47
3200	50	1.5	2.5	0.3
3200	75	1	4.5	0.4
3200	75	3	4.5	0.4
3200	100	1	9	1.05
3200	100	5	9	0.72
3200	100	7	9	0.66
3200	150	1	10	1.79
3200	150	5	10	1.66
3200	150	9	10	1.44

6/27/96 STA	DIST (ft)	DEPTH (ft)	DEPTH OF WATER (ft)	VELOCITY (ft/sec)
4600	25	1	10	1.04
4600	25	5	10	1.04
4600	25	9	10	0.89
4600	50	1	16	1.37
4600	50	5	16	1.56
4600	50	10	16	1.64
4600	50	15	16	1.34
4600	75	1	21	1.78
4600	75	5	21	1.86
4600	75	10	21	1.89
4600	75	15	21	1.9
4600	75	20	21	1.67
4600	100	1	22.5	2.2
4600	100	5	22.5	2.08
4600	100	10	22.5	2.16
4600	100	15	22.5	2.01
4600	100	20	22.5	1.78
4600	100	22	22.5	1.52

6/27/96 STA	DIST (ft)	DEPTH (ft)	DEPTH OF WATER (ft)	VELOCITY (ft/sec)
4000	25	1	6	0.67
4000	25	5	6	0.56
4000	50	1	8	1.71
4000	50	5	8	1.6
4000	50	7	8	1.52
4000	75	1	11	1.49
4000	75	5	11	1.39
4000	75	10	11	1.24
4000	100	1	15	2.12
4000	100	5	15	1.94
4000	100	10	15	2.03
4000	100	14	15	1.54
4000	150	1	21	2.57
4000	150	5	21	2.3
4000	150	10	21	2.57
4000	150	15	21	2.03
4000	150	20	21	1.76

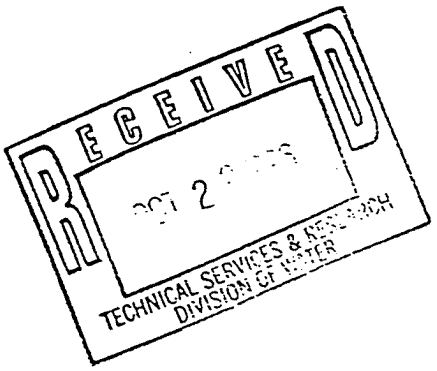
APPENDIX F
RECRA ENVIRONMENTAL, INC.
LABORATORY ANALYTICAL DATA

726671 24g. 7

RECRA
ENVIRONMENTAL
INC.

Chemical and Environmental Analysis Services

October 21, 1996



Mr. John Ryan
NYSDEC
50 Wolf Road, Room 305
Albany, NY 12233

RE: Analytical Results

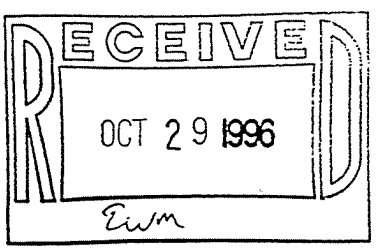
Dear Mr. Ryan:

Please find enclosed results concerning the analyses of the sample recently submitted by your agency. The pertinent information regarding these analyses is listed below:

Case #: SH996
SDG #: 0920
Matrix: Solid
Sample Received: 09/20/96
Sample Date: 09/20/96

If you have any questions concerning these data, please contact Mr. Patrick J. Filey, Program Manager, at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide the New York State Department of Environmental Conservation with Environmental Testing Services. We look forward to serving you in the future.

Sincerely,



RECRA ENVIRONMENTAL, INC.

Patrick J. Filey
Program Manager

Kenneth E. Kasperek
Laboratory Director

PJF/KEK/amk
Enclosure
cc: Mr. Brian Sadowski - Region 9

I.D. #A96-4625
#NY4A5020-9

SAMPLE DATA SUMMARY PACKAGE

RECRA
ENVIRONMENTAL
INC.

SDG NARRATIVE

Laboratory Name: Recra Environmental, Inc.

Laboratory Code: RECNY

Case Number: SH996

SDG Number: 0920

Sample Identifications: SH996 0920 189901

METHODOLOGY

Analyses were performed in accordance with 1991 New York State Analytical Services protocol. (Revised 1993)

COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

Results of the analyses of soil samples have been corrected for moisture content and are reported on a dry weight basis.

SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing QA Formaster software. All compounds determined to be present by the computer-generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Sample 189901 was analyzed at an initial dilution of ten due to the high concentration of several compounds of interest.

Semivolatile Method Blank, SBLK85, exhibits the presence of sixteen Tentatively Identified Compounds (TICS).

PESTICIDE/PCB DATA

The percent relative difference of 4,4-DDT was above the quality control limits in standard ICMINB01 analyzed on column DB5 on 10/16/96 at 11:24. This compound was not detected in the associated sample.

Sample 189901 was analyzed utilizing a dilution factor of two due to matrix interference and the levels of aroclor 1248 and 1254 present. Since both aroclor 1248 and 1254 were present in the sample the concentration was calculated using alternate chromatographic peaks. The CF factor for these peaks is from the middle standard of the initial calibration curve. Those compounds calculated using this method are identified by an "X" qualifier on the form I'S.

The recovery of surrogate Tetrachloro-m-xylene fell outside of the quality control limits in the Method Blank, the recovery of surrogate Decachlorobiphenyl was acceptable.

Due to sample matrix interference the recovery of surrogate Decachlorobiphenyl in sample 189901 on the confirmation column was elevated above the quality control limit.

METALS DATA

The recovery of Antimony and Silver fell outside of the quality control limits in sample 189901 Matrix Spike. The recovery of all elements were acceptable in the Laboratory Control Sample.

" I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

K E Kasperek

Kenneth E. Kasperek
Laboratory Director

10/21/96

Date

INORGANIC DATA COMMENT PAGE

Laboratory Name: Recra Environmental, Inc.

USEPA Defined Inorganic Data Qualifiers:

B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).

E - Indicates a value estimated or not reported due to the presence of interference.

S - Indicates value determined by Method of Standard Addition.

N - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

\+ - Indicates the correlation coefficient for Method of Standard Addition is less than 0.995.

M - Indicates duplicate injection results exceeded control limits.

W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

189901

Lab Name: RECRA ENVIRON Contract: C002989

Lab Code: RECNY Case No.: SH996 SAS No.: _____ SDG No.: 0920

Matrix: (soil/water) SOIL Lab Sample ID: A6462501

Sample wt/vol: 30.3 (g/mL) G Lab File ID: Z27759

Level: (low/med) LOW Date Received: 09/20/96

% Moisture: 62 decanted: (Y/N) N Date Extracted: 09/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	8600	U
111-44-4	bis(2-Chloroethyl)Ether	8600	U
95-57-8	2-Chlorophenol	8600	U
541-73-1	1,3-Dichlorobenzene	8600	U
106-46-7	1,4-Dichlorobenzene	8600	U
95-50-1	1,2-Dichlorobenzene	8600	U
95-48-7	2-Methylphenol	8600	U
108-60-1	2,2'-oxybis(1-Chloropropane)	8600	U
106-44-5	4-Methylphenol	8600	U
621-64-7	N-Nitroso-Di-n-Propylamine	8600	U
67-72-1	Hexachloroethane	8600	U
98-95-3	Nitrobenzene	8600	U
78-59-1	Isophorone	8600	U
88-75-5	2-Nitrophenol	8600	U
105-67-9	2,4-Dimethylphenol	8600	U
111-91-1	bis(2-Chloroethoxy)Methane	8600	U
120-83-2	2,4-Dichlorophenol	8600	U
120-82-1	1,2,4-Trichlorobenzene	8600	U
91-20-3	Naphthalene	7000	J
106-47-8	4-Chloroaniline	8600	U
87-68-3	Hexachlorobutadiene	8600	U
59-50-7	4-Chloro-3-Methylphenol	8600	U
91-57-6	2-Methylnaphthalene	1900	J
77-47-4	Hexachlorocyclopentadiene	8600	U
88-06-2	2,4,6-Trichlorophenol	8600	U
95-95-4	2,4,5-Trichlorophenol	21000	U
91-58-7	2-Chloronaphthalene	8600	U
88-74-4	2-Nitroaniline	21000	U
131-11-3	Dimethyl Phthalate	8600	U
208-96-8	Acenaphthylene	4600	J
606-20-2	2,6-Dinitrotoluene	8600	U
99-09-2	3-Nitroaniline	21000	U
83-32-9	Acenaphthene	410	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

189901 000013

Lab Name: RECRA ENVIRON Contract: C002989

Lab Code: RECNY Case No.: SH996 SAS No.: _____ SDG No.: 0920

Matrix: (soil/water) SOIL Lab Sample ID: A6462501

Sample wt/vol: 30.3 (g/mL) G Lab File ID: Z27759

Level: (low/med) LOW Date Received: 09/20/96

% Moisture: 62 decanted: (Y/N) N Date Extracted: 09/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	21000	U
100-02-7	4-Nitrophenol	21000	U
132-64-9	Dibenzofuran	1900	J
121-14-2	2,4-Dinitrotoluene	8600	U
84-66-2	Diethylphthalate	8600	U
7005-72-3	4-Chlorophenyl-phenylether	8600	U
86-73-7	Fluorene	2000	J
100-01-6	4-Nitroaniline	21000	U
534-52-1	4,6-Dinitro-2-Methylphenol	21000	U
86-30-6	N-Nitrosodiphenylamine (1)	8600	U
101-55-3	4-Bromophenyl-phenylether	8600	U
118-74-1	Hexachlorobenzene	8600	U
87-86-5	Pentachlorophenol	21000	U
85-01-8	Phenanthrene	11000	
120-12-7	Anthracene	3800	J
86-74-8	Carbazole	1400	J
84-74-2	Di-n-Butylphthalate	8600	U
206-44-0	Fluoranthene	25000	
129-00-0	Pyrene	24000	
85-68-7	Butylbenzylphthalate	8600	U
91-94-1	3,3'-Dichlorobenzidine	8600	U
56-55-3	Benzo(a)Anthracene	17000	
218-01-9	Chrysene	21000	
117-81-7	Bis(2-Ethylhexyl)Phthalate	1000	J
117-84-0	Di-n-Octyl Phthalate	8600	U
205-99-2	Benzo(b)Fluoranthene	42000	
207-08-9	Benzo(k)Fluoranthene	6700	J
50-32-8	Benzo(a)Pyrene	26000	
193-39-5	Indeno(1,2,3-cd)Pyrene	18000	
53-70-3	Dibenz(a,h)Anthracene	4500	J
191-24-2	Benzo(g,h,i)Perylene	15000	

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

189901 000014

Lab Name: RECRA ENVIRON Contract: C002989

Lab Code: RECNY Case No.: SH996 SAS No.: _____ SDG No.: 0920

Matrix: (soil/water) SOIL Lab Sample ID: A6462501

Sample wt/vol: 30.3 (g/mL) G Lab File ID: Z27759

Level: (low/med) LOW Date Received: 09/20/96

% Moisture: 62 decanted: (Y/N) N Date Extracted: 09/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.6

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.47	2200	BJ
2.		UNKNOWN	6.32	3800	BJ
3.		LONG CHAIN SAT. HYDROCARBON	17.52	2100	J
4.		PAH DERIVATIVE	19.88	2000	J
5.		UNKNOWN	20.02	2500	J
6.		PAH DERIVATIVE	20.82	1900	J
7.		PAH DERIVATIVE	21.62	2300	J
8.		PAH DERIVATIVE	22.12	2300	J
9.		PAH DERIVATIVE	23.78	2200	J
10.		PAH DERIVATIVE	29.42	6600	J
11.		UNKNOWN	29.73	12000	J
12.		PAH DERIVATIVE	29.85	27000	J
13.		PAH DERIVATIVE	30.18	11000	J
14.		PAH DERIVATIVE	30.67	2000	J
15.		UNKNOWN	31.13	2300	J
16.		UNKNOWN	32.22	1800	J
17.		PAH DERIVATIVE	32.37	3600	J
18.		PAH DERIVATIVE	32.43	3400	J
19.		PAH DERIVATIVE	32.90	2400	J
20.		PAH DERIVATIVE	33.37	4000	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

189901 000015

Lab Name: RECRA ENVIRON Contract: C002989

Lab Code: RECNY Case No.: SH996 SAS No.: _____ SDG No.: 0920

Matrix: (soil/water) SOIL Lab Sample ID: A6462501

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 62 decanted: (Y/N) N Date Received: 09/20/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/25/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/17/96

Injection Volume: 1.00 (uL) Dilution Factor: 2.00

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.9	U
319-85-7	beta-BHC	8.9	U
319-86-8	delta-BHC	8.9	U
58-89-9	gamma-BHC (Lindane)	8.9	U
76-44-8	Heptachlor	8.9	U
309-00-2	Aldrin	8.9	U
1024-57-3	Heptachlor epoxide	8.9	U
959-98-8	Endosulfan I	8.9	U
60-57-1	Dieldrin	17	U
72-55-9	4,4'-DDE	17	U
72-20-8	Endrin	17	U
33213-65-9	Endosulfan II	17	U
72-54-8	4,4'-DDD	17	U
1031-07-8	Endosulfan sulfate	17	U
50-29-3	4,4'-DDT	17	U
72-43-5	Methoxychlor	89	U
53494-70-5	Endrin ketone	17	U
7421-93-4	Endrin aldehyde	17	U
5103-71-9	alpha-Chlordane	8.9	U
5103-74-2	gamma-Chlordane	8.9	U
8001-35-2	Toxaphene	890	U
12674-11-2	Aroclor-1016	170	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	170	U
53469-21-9	Aroclor-1242	170	U
12672-29-6	Aroclor-1248	450	PXD
11097-69-1	Aroclor-1254	620	PXD
11096-82-5	Aroclor-1260	170	U

NYSDEC ASP

1

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

189901

Name: RECRA_ENVIRONMENTAL_INC._ Contract: NY96-173__

Lab Code: RECNY_ Case No.: SH996 SAS No.: _____ SDG No.: 0920__

Matrix (soil/water): SOIL_ Lab Sample ID: 23574

Level (low/med): LOW__ Date Received: 09/20/96

% Solids: _38.5

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11400			P
7440-36-0	Antimony	2.6	U	N	P
7440-38-2	Arsenic	25.6			P
7440-39-3	Barium	138		E	P
7440-41-7	Beryllium	1.3	B		P
7440-43-9	Cadmium	2.1	B		P
7440-70-2	Calcium	34900			P
7440-47-3	Chromium	65.9			P
7440-48-4	Cobalt	12.4	B		P
7440-50-8	Copper	104			P
7439-89-6	Iron	58000			P
7439-92-1	Lead	229			P
7439-95-4	Magnesium	9700			P
7439-96-5	Manganese	1980			P
7439-97-6	Mercury	1.3			CV
7440-02-0	Nickel	46.6			P
7440-09-7	Potassium	2020	B	E	P
7782-49-2	Selenium	8.8			P
7440-22-4	Silver	4.1	B	N	P
7440-23-5	Sodium	1260	B		P
7440-28-0	Thallium	3.6	B		P
7440-62-2	Vanadium	35.7			P
7440-66-6	Zinc	841			P
	Cyanide				NR

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: ___

Comments:

LAB_SAMPLE_ID:__A6462501-SG000010