FINAL ENGINEERING REPORT DOBBS FERRY WATERFRONT PARK
SITE NO. V-00628
VILLAGE OF DOBBS FERRY
WESTCHESTER COUNTY, NEW YORK

Prepared for:
Village of Dobbs Ferry
112 Main Street
Dobbs Ferry, New York 10522

Prepared by:

Potomac-Hudson Environmental, Inc.
PO Box 7 207 S. Stevens Ave.
South Amboy, New Jersey 08879

Project Manager
Ed Phillips

Village of Dobbs Ferry
Dobbs Ferry, NY 10522

James J. Hahn Engineering P.C.
Putnam Business Park
1689 Route 22, Brewster, NY 10509

Project Engineer
George E. Pommer, P.E

December 2017

FINAL ENGINEERING REPORT
DOBBS FERRY WATERFRONT PARK
SITE NO. V-00628-3
VILLAGE OF DOBBS FERRY
WESTCHESTER COUNTY, NEW YORK

TABLE OF CONTENTS

SECTION **PAGE**

FIGURES

APPENDICES

FINAL ENGINEERING REPORT
DOBBS FERRY WATERFRONT PARK
SITE NO. V-00628-3
VILLAGE OF DOBBS FERRY
WESTCHESTER COUNTY, NEW YORK

EXECUTIVE SUMMARY

The Village of Dobbs Ferry conducted soil and groundwater quality investigations on a vacant parcel of land formerly operated as a municipal landfill by the Village of Dobbs Ferry. The property was remediated and redeveloped as a 300 feet by 170 feet recreational field known as the Dobbs Ferry Waterfront Park. This Final Engineering Report (FER) was prepared on behalf of the Village of Dobbs Ferry to document the extent and effectiveness of the site remediation in accordance with the Voluntary Cleanup Agreement (VCA) between the Village of Dobbs Ferry and the New York State Department of Environmental Conservation (NYSDEC) dated July 3, 2003 and the Amendment to the Voluntary Cleanup Agreement executed on October 25, 2005.

The results of investigations conducted at the Dobbs Ferry Waterfront Park have revealed that soil contamination and groundwater contamination were present. The Site's subsurface soils were found to contain concentrations of semi volatile organic compounds (SVOCs) (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene), chlordane, and metals (arsenic, cadmium, chromium, copper, iron, lead, mercury, nickel, selenium, and zinc) above the NYSDEC Recommended Soil Cleanup Objective (RSCO).

Groundwater samples collected at the Site indicate concentrations of volatile organic compounds VOCs (benzene, chlorobenzene, toluene, xylenes) and pesticides (4,4-DDD and 4,4-DDE), and metals (antimony, iron, lead, manganese, sodium) above the NYSDEC Groundwater Standard (GS).

Visual observations of subsurface material indicated the presence of a large amount of debris (household and construction type). Aside from the concentrations of soil contaminants above the NYSDEC RSCO, the presence of this type of debris has been considered in the design of the field. Geotechnical issues such as soil settling and debris shifting have been taken into consideration in the final site design.

Engineering controls, soil cover and long term groundwater monitoring were implemented to mitigate the impacts of subsurface soil and groundwater contamination. These engineering controls are discussed in the approved Site Management Plan (SMP), provided in Appendix 2: Site Management Plan.

Since the remedial action has resulted in contamination above unrestricted levels remaining onsite, institutional control in the form of a Deed Restriction is required for the remedy. The components of the Deed Restriction are further described in the approved SMP.

The Deed Restriction will:

- Restrict the contemplated use of the site to “active recreational use” which is a land use for the primary purpose of establishing an athletic playing field;

- Restrict any development that would impact the integrity of the engineered soil cover made of clean fill;

- Restrict the use of onsite groundwater; and

- Require operation, management and monitoring of the site in accordance with the provisions of the SMP approved by the NYSDEC.

The Deed Restriction was filed 3/28/18.

An active remedial approach for the groundwater contamination was not warranted or required by NYSDEC, however groundwater use will be prohibited and long-term groundwater quality monitoring will be conducted as detailed in the approved SMP.

The Site Management Plan has been reviewed and approved by NYSDEC. A Draft Deed Restriction will be prepared for NYSDEC’s review and approval.

Based on the remedial actions performed at the Site, all requirements of the Remedial Action Work Plan (RAWP) have been met, and the remedy is effective in controlling the remaining contamination at the Site.

The site work for covering the field was completed in 2007 and the field was put into use in Spring of 2008.

The Site Management Plan, SMP, approved: 3/28/18.

CERTIFICATIONS

I, George E. Pommer P.E., am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in a deed restriction created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such restriction has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the Department.

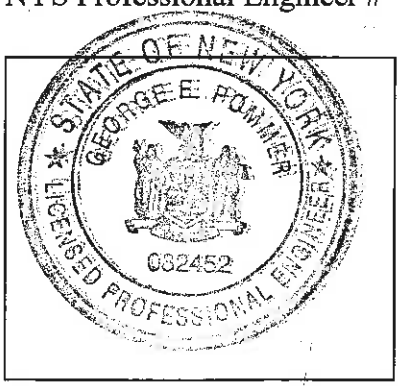
I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.
For reports submitted after July 1, 2011, also include the following:

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, George E. Pommer P.E., of James J. Hahn Engineering P.C., am certifying as Owner's Designated Site Representative, and I have been authorized and designated by all site owners to sign this certification for the site.

082452
NYS Professional Engineer #

3/19/2018
Date

Signature



STAMP

FINAL ENGINEERING REPORT
DOBBS FERRY WATERFRONT PARK
SITE NO. V-00628-3
VILLAGE OF DOBBS FERRY
WESTCHESTER COUNTY, NEW YORK

1.0 INTRODUCTION AND PURPOSE

The Final Engineering Report (FER) was prepared on behalf of the Village of Dobbs Ferry, New York in accordance with the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) Guide and the Draft DER-10 Technical Guidance for Site Investigation and Remediation. The Site was formerly a municipal landfill located adjacent to the Dobbs Ferry Waterfront Park in Dobbs Ferry, New York (hereafter called "the Site"). The regional location of the Site is shown as Figure 1. The Waterfront Park Recreational Field Voluntary Cleanup Area (VCA), Limits of the Installed Soil Cover and Adjacent Uncovered Vacant Lands is included in Figure 2.

The site is located in the County of Westchester, New York and is identified as [a portion of] Section 8, Block 415 and Lot P-60 on the Village of Dobbs Ferry Tax Map #3.80-36-45. The covered and uncovered site is situated on an approximately 1.9879-acre area bounded by private property to the north, parking lot to the south, Metro North Railroad tracks to the east, and steep Hudson River banks to the west (see Figure 1). The boundaries of the site are fully described in Figure 2: Limits of The Installed Soil Cover and Adjacent Uncovered Lands.

The work at the Dobbs Ferry Waterfront Park was conducted in accordance with the Voluntary Cleanup Agreement (VCA) between the Village of Dobbs Ferry and the NYSDEC dated July 3, 2003 and the Amendment to the Voluntary Cleanup Agreement executed on October 25, 2005 (Site No. V-00628).

The purpose of this FER is to (i) provide information related to the soil and groundwater contamination present at the Site, and (ii) provide details regarding the selection, design and implementation of the remedial action conducted for the Site that is protective of both public health and the environment.

1.1 SITE DESCRIPTION

The Site was a vacant parcel of land formerly operated as a municipal landfill by the Village of Dobbs Ferry. Following remediation the site has been redeveloped as a recreational field with an asphalt walking trail and outdoor recreational exercise equipment. The site elevation ranges from approximately 18 to 20 feet NGVD.

1.2 SITE HISTORY

Based on the review of a Site Inspection Report and Hazard Ranking System Model of the Dobbs Ferry Riverfront Park prepared by NUS Corporation in 1986 for the US Environmental Protection Agency (USEPA), the Site was used by the Village as a landfill from 1950 to the early 1970's. The landfill, which is not covered or lined, was mainly used for construction and demolition debris. However, Stauffer Chemical Corp. Ardsley Plant reportedly backfilled the landfill with approximately 200 tons of inorganic and salt bearing wastes between 1950 and 1956. The NUS Corporation Sample Location Map showing the approximate locations of buried waste and fill appears in Appendix 3.

Based on information provided by James Dunn, the Director of Public Works for the Village of Dobbs Ferry, as much as five feet of material consisting of soil, rock, street sweepings and mulch has been placed on top of the original landfill surface since 1956.

2.0 DECRIPTION OF REMEDIAL ACTION

2.1 SUMMARY OF REMEDY

Engineering controls were implemented at the Site as the remedial action for Site soil and groundwater contamination. The engineering control consists of a two feet clean soil cover. A Site Plan showing the final site grades after covering is included in Figure 2. The remedial action work plan was approved by the New York State Department of Environmental Conservation (NYSDEC) in March 2007. The remedial action for soil remediation and construction of the field included:

- Scraping off high spots and filling in low spots
- Covering of the Site soils with geotextile fabric, demarcation layer overlain by two feet of clean fill, including sod and/or grass cover
- Fencing the field area and providing an entrance pathway from the parking lot area
- Completion of a proposed Deed Restriction restricting the future handling of contaminated fill prohibiting groundwater use.
- Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
- Periodic certification of the institutional and engineering controls listed above

Appendix 1 provides the Waterfront Park Recreational Field Voluntary Cleanup Area (VCA) Final As-Constructed Plan (Drawing 1) revised April 18, 2011 for the implemented remedial action. The final VCA was expanded to the south toward the parking lot to include a total of 1.9879 acres of covered and uncovered land. The proposed Deed Restriction addresses the presence of soil contamination underneath the cover. The proposed Deed Restriction acts as the institutional control which is the enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and of ensuring the potential restriction of inappropriate future site uses. The proposed Deed Restriction provides a legal description of the property subject to the Deed Restriction, and details the engineering controls at the Site and the applicable Site restrictions that include, but are not limited to, prohibiting the use of groundwater

for any purposes, and prohibiting any excavation below the geo-membrane marker layer without the implementation of the Site Management Plan for the Site.

A Site Management Plan has also been implemented and is included in Appendix 2. The Site Management Plan addresses the management of any subsurface materials that may be brought to the surface in the future for maintenance/repair activities conducted in the vicinity of the field; it also provides details of the long-term monitoring of groundwater quality.

2.2 SUMMARY OF REMEDIAL ACTIONS COMPLETED

The Village of Dobbs Ferry has redeveloped the Site as a restricted, active recreational playing field measuring 300 feet by 170 feet. The field is currently partially enclosed by a fence on the north, west and east sides of the metes and bounds of the voluntary cleanup area. Appendix 1 provides the Waterfront Park Recreational Field Voluntary Cleanup Area Final As-Constructed Plan (Drawing 1) for the remedial action. This plan provides the final site grades as well as the location of the fence around the perimeter of the field. The remedial plan for soil contamination and construction of the field included scraping off high spots and filling in low spots, then covering the Site with a geotextile fabric underneath two feet of clean fill, including six inches of topsoil and covering with sod and/or grass. As shown on Appendix 1, the soil cover extends beyond the boundaries of the playing field.

No excavation for subsurface utilities or drains was conducted as part of the remedial action other than for a sprinkler system located between twelve to eighteen inches below finished grade, at least six inches above the filter fabric. The recreational field was not constructed with any bleachers, lights, backstops or other structures that required excavation of soil to a depth greater than two feet. The only excavation performed was for the installation of the six foot high fence posts around three sides of the final Site boundary as determined by the surveyed metes and bounds. The fence post excavations were approximately 10-12 inches in diameter every five feet to a depth of approximately 3.5 feet below grade. Soils excavated from above the liner were stockpiled on plastic and kept separate from other subsurface soils. The liner was cut in the area of the excavation to allow installation of the fence post. Prior to Site covering along the fence line, the fence posts were installed so that any excavated materials could be placed underneath the geotextile fabric and cleanfill cover, and remain onsite. The approved Site Management Plan establishes protective procedures to be utilized during any future excavations to a depth greater than the final thickness of the two feet clean fill cover. The Village will maintain the Site fencing that effectively discourages public access to the areas outside the VCA boundary. The remedial action met all requirements of the Remedial Action Work Plan (RAWP).

All work was conducted in accordance with the approved Health and Safety Plan (HASP) previously provided to NYSDEC in the RAWP that was prepared to define the health and safety requirements necessary to protect workers involved in the site grading and construction of the soil cover. As a result of the site's proposed SMP monitoring wells were installed for use in the Long Term Groundwater Monitoring Plan.

Due to the soil remediation and construction activities required for the preparation of the site (e.g. clearing/grubbing, regrading, soil barriers, clean fill deposition), a NYSDEC-required air

monitoring program was designed and implemented, and a Community Air Monitoring Plan Report was submitted to NYSDEC in May 2008. Continuous monitoring for volatile organics and particulates was conducted at upwind and downwind locations during grubbing and re-grading activities. The results of the air monitoring indicated that remediation of the Dobbs Ferry Waterfront Park resulted in no significant increases in either VOCs or fugitive dust. No action level criteria were exceeded at any time during the remediation process.

The SMP prohibits the use of onsite groundwater from the Site for any purpose. The site's proposed Deed Restriction identifies the contaminants remaining in place beneath the implemented engineering control (covering), and indicates that a prohibition on the land use exists in a manner consistent with the engineering controls intended to ensure the long-term effectiveness of the site remediation and eliminate potential exposure pathways to hazardous materials.

The Village has agreed that the terms of this account will apply to any future development of the remaining landfill area and/or the previously excluded riverbank and shoreline.

The only variation from the RAWP that was encountered during the construction of the field was that the grass seed would not germinate due to the dry weather conditions in the summer months. The Village installed an underground, automatic watering system with the piping located between twelve to eighteen inches below finished grade, keeping at least six inches above the filter fabric. There were no other problems encountered during the construction of the recreational field.

The plan for the recreational field was changed from the original plan in that the covered area was expanded beyond the fenced recreational field to the south and now includes a total covered area of 1.7145 acres based on a survey dated October 1, 2007. The final as-constructed plan is included in Appendix 1. The work has been completed under the supervision of a Professional Engineer in accordance with the approved RAWP. The Village has installed passive recreational improvements such as a jogging path, seating and fitness equipment.

During the remediation, contaminated soils were not removed off-site but were spread over the Site, underneath the final clean fill cover, within the fenced recreational field area inside the covered 1.7145 acre Voluntary Cleanup Area. The remediated area consisted of the 300 foot by 170 foot recreational field (51,000 square feet). Man-made fill material observed in test pits conducted at the Site extended to a depth of up to 15 feet below original grade. The approximate volume of contaminated soil placed under the cover was 765,000 cubic feet. No waste streams were generated during the remedial action.

Since post-remedial sampling was not required in the RAWP; a Data Usability Summary Report (DUSR) was not required.

2.3 APPLICABLE REMEDIATION STANDARDS

For soil contaminants, NYSDEC Recommended Soil Cleanup Objectives (RSCO) have been adopted as presented in the NYSDEC Technical Assistance Guidance Memorandum (TAGM)

#4046 – Determination of Soil Cleanup Objectives and Cleanup Levels – Appendix A, Tables 1 through 4. Remediation standards for groundwater are the NYSDEC Groundwater Standards/Criteria (GS) cited in TAGM #4046 Appendix A. TAGM #4046 was rescinded 11/3/2010 and the area was covered prior to 10/7/2007. Therefore work was performed prior to the change in regulations to CP-51.

The remedial work at the Dobbs Ferry Waterfront Park was completed in accordance with the VCA between the Village of Dobbs Ferry and the NYSDEC dated July 3, 2003 and the Amendment to the Voluntary Cleanup Agreement executed on October 25, 2005. All site investigation work was conducted in accordance with the NYSDEC Division of Environmental Remediation Voluntary Cleanup Program Guide and reviewed by the NYSDEC Division of Environmental Remediation and the NYS Department of Health (DOH).

2.3.1 Groundwater Response Action Outcome (RAO)

RAO for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.

2.3.2 Soil RAO

RAO for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAO for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

2.4 SUMMARY OF ENVIRONMENTAL CONDITIONS

Previous soil and groundwater sampling events have been conducted at the Site between 1986 and 2005. These investigations were discussed fully in the Remedial Action Workplan dated October 2006 previously submitted to NYSDEC. Based on the results of the previous soil investigations conducted in 1986, 2002 and 2005 the Site surface soils have been found to contain concentrations of pesticides, SVOCs (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene), and metals (chromium, copper, nickel, zinc) above the NYSDEC RSCO. The Site subsurface soils have been found to contain concentrations of SVOCs (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene), chlordane, and metals (arsenic, cadmium, chromium, copper, iron, lead, mercury, nickel, selenium, and zinc) above the NYSDEC RSCO.

Groundwater samples collected at the Site indicate concentrations of VOCs (benzene, chlorobenzene, toluene, xylenes) and pesticides (4,4-DDD and 4,4-DDE), and metals (antimony, iron, lead, manganese, sodium) above the NYSDEC GS. The NYSDEC, via email dated June 28, 2005, indicated that groundwater use at the Site should be prohibited and that it did not appear likely that the Site is impacting the Hudson River.

Visual observations during both test pit programs indicated the presence of a large amount of debris (household and construction type). Aside from the concentrations of soil contaminants above the NYSDEC RSCO, the presence of this type of debris was also considered in the design of the field. Geotechnical issues such as soil settling and debris shifting were taken into consideration in the final site design.

Data tables and sample location figures for the various investigations conducted at the Site between 1986 and 2005 are included in Appendices 3, 4 and 5. The data collected by NUS Corporation for the US Environmental Protection Agency (USEPA) in 1986 as part of a Site Inspection Report and Hazard Ranking System Model of the Dobbs Ferry Riverfront Park is included in Appendix 3. The sample location plan and analytical data tables for the May 2002 investigation conducted by the Village of Dobbs Ferry appear in Appendix 4. The sample location plan and analytical data tables for the December 2002 Site Investigation Report prepared by Potomac-Hudson Environmental, Inc. (PHEnv) for Site appear in Appendix 5.

As indicated in the various sample location maps in Appendices 3, 4 and 5, and the Site Plan in Figure 4, the soil contaminants found at the Site were all within the covered area of the Site.

2.5 DESCRIPTION OF SITE RESTORATION

Upon completion of scraping off high spots and filling in low spots on the Site, the area was then covered with a geotextile fabric underneath two feet of clean fill, including six inches of topsoil and the covering with sod and/or grass. An active recreational playing field measuring 300 feet by 170 feet was then constructed at the Site. The field was fenced with 15 feet safety zones on sidelines and 10 feet safety zones on the end lines. Appendix 1 provides the Waterfront Park Recreational Field Voluntary Cleanup Area Final As-Constructed Plan (Drawing 1) for the remedial action. As shown on the drawing, the cover extends beyond the boundaries of the playing field south toward the parking lot area.

The following details include information of the Contractor and Environmental Engineer who performed work on the Site.

- Contractor: Acocella Contracting, Inc. 68 Gaylor Road, Scarsdale, New York 10583.

- Environmental Engineer: Potomac-Hudson Environmental, Inc. 207 S. Stevens Ave. S. Amboy, New Jersey 08879.

2.6 DESCRIPTION OF SOURCE AND QUALITY OF FILL

The clean fill material was obtained by the Site general contractor from various sources and after various email submissions to NYSDEC, including laboratory data, was approved by NYSDEC for Site use. The analysis of the fill material met the New York State soil guidance levels established in Technical Guidance Memorandum (TAGM) 4046. Copies of the email correspondence approving the clean fill material are included in Appendix 6.

2.7 COST ESTIMATE OF REMEDIAL ACTION

The estimated cost of the covering with two feet of clean fill is provided below.

Installation of Clean Fill Cover, Geotextile Liner and Field Construction	$ 350,000
Health and Safety/Oversight	$ 22,000
Community Air Monitoring	$ 7,000
Reports/Coordination with NYSDEC	$ 4,000
Total	**$ 383,000**

2.8 AS-BUILT DRAWINGS

Appendix 1 provides the Waterfront Park Recreational Field Voluntary Cleanup Area (VCA) Final As-Constructed Plan (Drawing 1) dated December 31, 2007 for the implemented remedial action. The final VCA site boundaries were extended to the south to include a total covered and uncovered land of 1.9879 acres. The VCA area is based on a site survey dated October 1, 2007.

2.9 WASTE MANIFESTS

No waste materials were generated during the remedial action.

2.10 ENGINEERING AND INSTITUTIONAL CONTROLS

Engineering controls were implemented for Site soil and groundwater contamination. The remedial plan for soil remediation and construction of the field is discussed in the approved SMP, provided in Appendix 2**:** Site Management Plan.

Since the remedy resulted in contamination above unrestricted levels remaining onsite, institutional controls in the form of a proposed Deed Restriction is required for the remedy. The proposed NYSDEC Deed Restriction will include the following EC/ICs

- Restricts the contemplated use of the site to "active recreational use" which is a land use for the primary purpose of establishing an athletic playing field;

- Restricts any development that would impact the integrity of the engineered cover;

- Restricts the use of onsite groundwater; and

- Requires operation, management and monitoring of the site in accordance with the provisions of the Site Management Plan (SMP) approved by the NYSDEC.

Evidence that the Deed Restriction was executed and filed was submitted to the NYSDEC within 30 days of the NYSDEC's approval of the Deed Restriction.

2.11 SITE MANAGEMENT PLAN

An approved Site Management Plan (SMP) was prepared that addressed any excavations which may be conducted in the future to a depth greater than the final thickness of the constructed two feet clean fill cover. The approved SMP addresses the proper management of subsurface materials that may be brought to the surface after completion of the clean fill cover. The approved SMP also discusses the monitoring, inspection, operations and maintenance, repair, and reporting requirements for the engineering controls utilized at the Site as required by the institutional control (Deed Restriction).

- The approved Site Management Plan (SMP) is provided in Appendix 2**.**

2.12 GROUNDWATER

An active remedial approach was not required to address the groundwater contaminant concentrations above Standards, Criteria, Guidance (SCGs) based upon the following:

The source of the contamination was urban fill and municipal solid waste. No hazardous waste or "source areas" were identified during the investigation that could have been addressed. Active groundwater remediation was not justified because of the relatively low level of site contaminants and the restriction against any future use of the groundwater resource. The area is serviced by municipal water, and there are no structures on-site that could pose a potential vapor intrusion concern. The final remedy included a Deed Restriction that restricted the use of Site groundwater.

3.0 CONTAMINATION REMAINING AT THE SITE

The remaining contamination on Site is outlined on the Monitoring Well Construction Log's, dated March 28, 2011 included in Appendix 3 of the Site Management Plan. There are three Well Construction Log's provided in the SMP and each provides details of the subsurface borings materials encountered on Site. A description of the materials and depths are shown on the subsurface profile.

4.0 REFERENCES

Analytical data report dated 5/30/2002, York Analytical Labs. Conducted for the Village of Dobbs Ferry, New York.

Community Air Monitoring Plan Report, Dobbs Ferry Waterfront Park. Potomac-Hudson Environmental, Inc. May 2008.

Final Draft Site Inspection Report and Hazard Ranking System Model, Dobbs Ferry Riverfront Park, Dobbs Ferry, New York. Prepared Under Technical Directive Document No. 02-8603-37A, Contract No. 68-01-6699 for the US Environmental Protection Agency. September 18, 1986. NUS Corporation.

Remedial Action Workplan, Dobbs Ferry Waterfront Park. Potomac-Hudson Environmental, Inc. October 2006.

Site Investigation Report, Dobbs Ferry Waterfront Park. Potomac-Hudson Environmental, Inc. September 2003.

Site Investigation Workplan, Dobbs Ferry Waterfront Park. Potomac-Hudson Environmental, Inc. May 2004 (Revised November 2004).

Site Management Plan, Dobbs Ferry Waterfront Park. Potomac-Hudson Environmental, Inc. May 2008, Revised March 2009.

Supplemental Site Investigation Report, Dobbs Ferry Waterfront Park. Potomac-Hudson Environmental, Inc. September 2005.

P:\Village of Dobbs Ferry\Waterfront Park\NYSDEC Soil Cap\FER Draft for DEC\2017-12-21 Final Engineers Report.docx

FIGURE 1

c:\arcviewproj\dobbsferry\proj2.apr\layout1

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	PROJECT #	SHEET #
May 2004	MDS	KEP	AS SHOWN	454	1 OF 1

Project Location
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

POTOMAC-HUDSON ENVIRONMENTAL, INC.

166 John Street
PO Box 7
South Amboy, NJ 08879

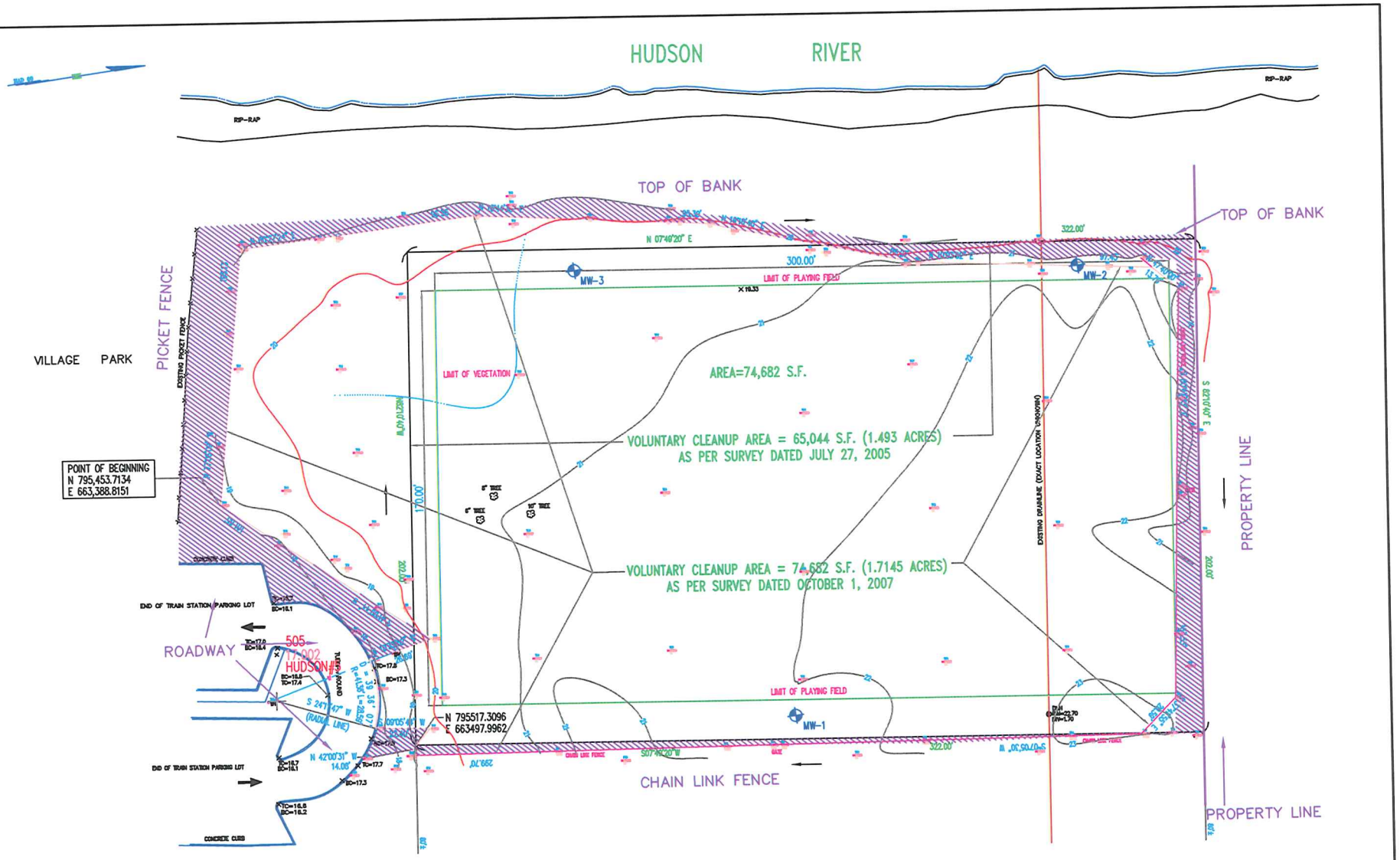
23 Chapel Avenue
Jersey City, NJ 07305

136 W. 16th Street
Suite 3E, POB 1206
New York, NY 10011

SOURCE: Nyack, NY USGS Quadrangle

FIGURE # 1

FIGURE 2



GRAPHIC SCALE (IN FEET)

0 30 60 120

ADJACENT UNCAPPED VACANT LANDS

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	PROJECT #	SHEET #
08/23/10	CJV	EP	AS SHOWN	454	1 OF 1

POTOMAC-HUDSON ENVIRONMENTAL, INC.

207 S. Steves Avenue
PO Box 7
South Amboy, NJ 08879

16-4 Chapel Avenue
Jersey City, NJ 07305

136 W. 16th Street
Suite 3E, POB 1206
New York, NY 10011

LIMITS OF THE INSTALLED SOIL CAP AND ADJACENT UNCAPPED VACANT LANDS

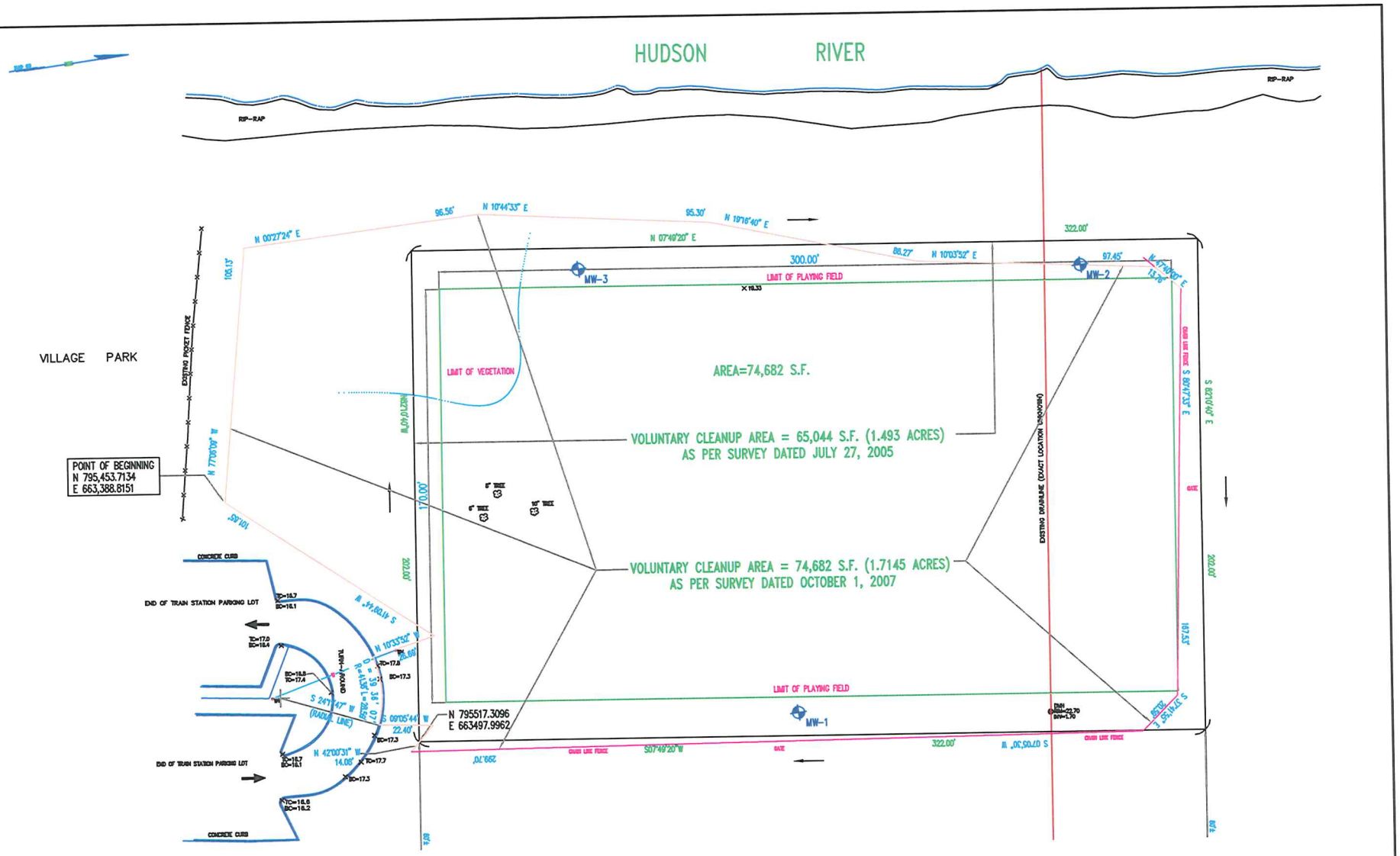
WATERFRONT PARK REC FIELD
VILLAGE OF DOBBS FERRY, NEW YORK

SOURCE: ACAD_2000 WF-6 1-3-06.dwg
PAUL J. PETRETTI (12/31/07)

FIGURE # 2

Plotted: 08/23/10 - 10:01 AM, By: Cvalenzano
Filename: Z:\PROJECTS\Dobbs Ferry\Fig 3.dwg -- Layout: F2
Copyright: Potomac-Hudson Environmental, Inc., 2010

FIGURE 3



DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	PROJECT #	SHEET #
08/23/10	CJV	EP	AS SHOWN	454	1 OF 1

POTOMAC-HUDSON ENVIRONMENTAL, INC.

207 S. Steves Avenue
PO Box 7
South Amboy, NJ 08879

16-4 Chapel Avenue
Jersey City, NJ 07305

136 W. 16th Street
Suite 3E, POB 1206
New York, NY 10011

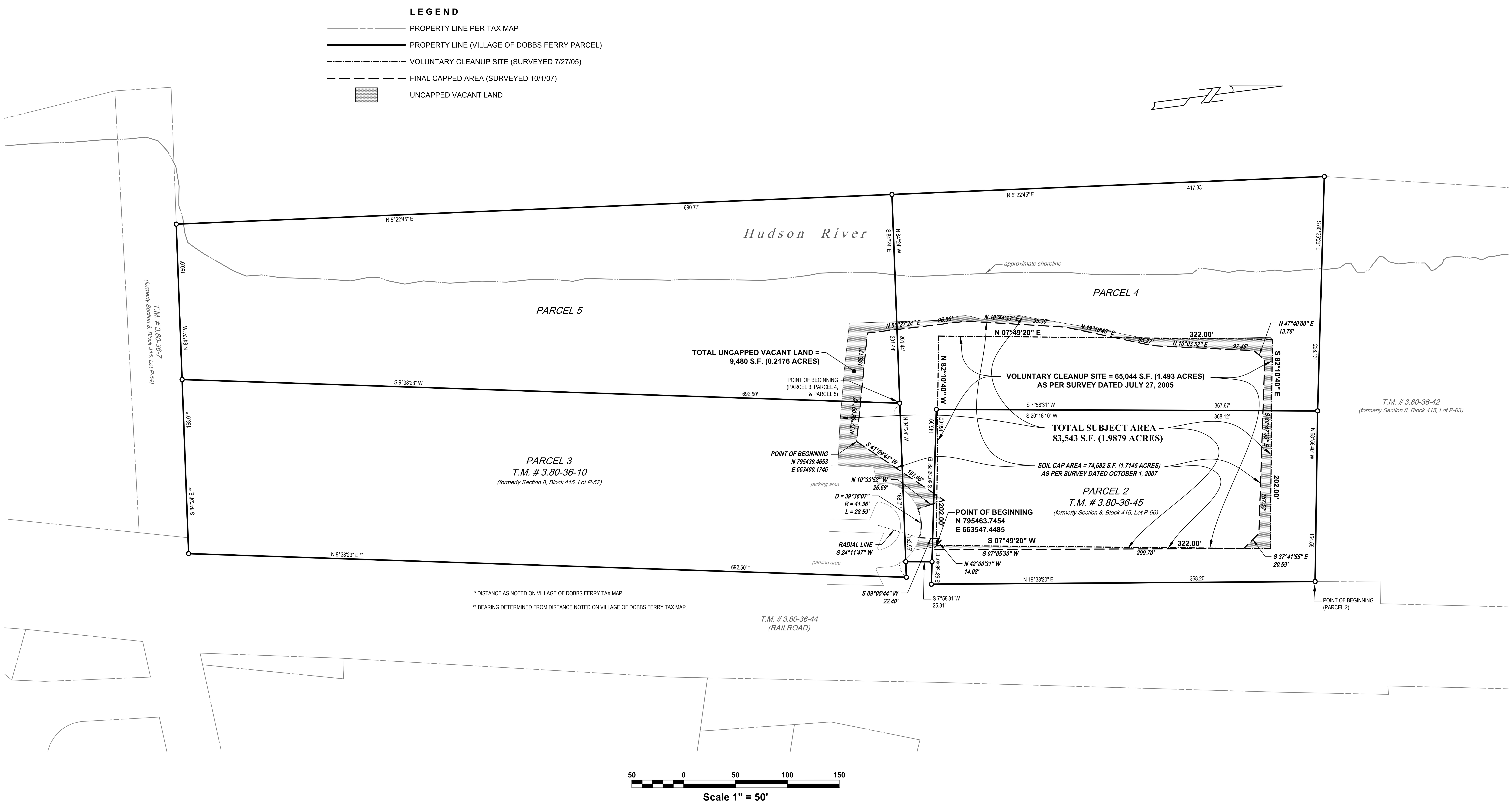
MONITORING WELL LOCATIONS
WATERFRONT PARK REC FIELD
VILLAGE OF DOBBS FERRY, NEW YORK

SOURCE: ACAD_2000 WF-6 1-3-06.dwg
PAUL J. PETRETTI (12/31/07)

FIGURE # 3

Plotted: 08/23/10 - 12:42 PM, By: Cvalenzano
Filename: Z:\PROJECTS\Dobbs Ferry\Fig 3.dwg -- Layout: F3
Copyright: Potomac-Hudson Environmental, Inc., 2010

FIGURE 4



NOTES

1. Voluntary cleanup areas surveyed by Paul J. Petretti, PE. Coordinates and bearings are in the North American Datum 1983 (NAD 83), New York State Plane Coordinates East Zone.

2. Bearings and distances of Village of Dobbs Ferry parcel lines are as noted on recorded deeds and filed maps in the Office of the Clerk of Westchester County unless noted otherwise.

3. The horizontal projection of the Village of Dobbs Ferry parcels is approximate and is based on Village of Dobbs Ferry tax maps.

4. Uncapped vacant land is as shown on a plan prepared by Potomac-Hudson Environmental, Inc., entitled "Limits of the Installed Soil Cap and Adjacent Uncapped Vacant Lands", dated August 23, 2010.

REV.	DATE	
2	10/6/15	MISC.
1	9/13/13	PARCEL 2 REVISION

TITLE: **SITE PLAN**

PROJECT: **VILLAGE OF DOBBS FERRY WATERFRONT PARK RECREATIONAL FIELD VOLUNTARY CLEANUP AREAS**

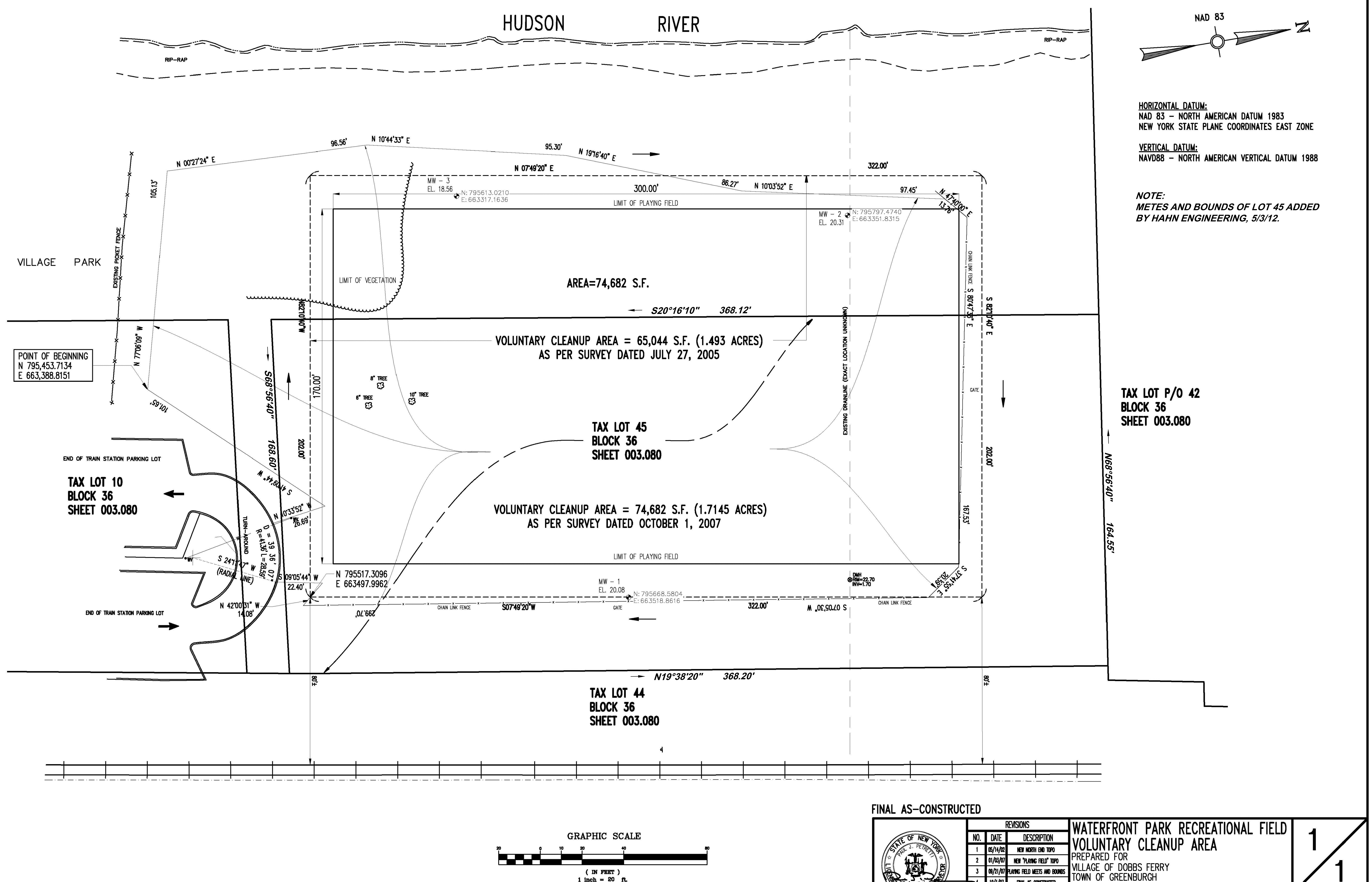
VILLAGE OF DOBBS FERRY, WESTCHESTER COUNTY, NEW YORK

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW. THIS PLAN IS NULL AND VOID FOR CONSTRUCTION PURPOSES WITHOUT THE SIGNATURE AND SEAL OF THE DESIGN ENGINEER.

JAMES J. HAHN ENGINEERING, P.C.
Putnam Business Park
1689 Route 22
Brewster, New York 10509
Tel: (845) 279-2220

SCALE	DATE
1" = 50'	8/21/13
DRAWING NO.	SHEET NO.
-	1 of 1

APPENDIX 1


HUDSON RIVER
RIP-RAP
RIP-RAP
NAD 83
N
HORIZONTAL DATUM:
NAD 83 - NORTH AMERICAN DATUM 1983
NEW YORK STATE PLANE COORDINATES EAST ZONE
VERTICAL DATUM:
NAVD88 - NORTH AMERICAN VERTICAL DATUM 1988
NOTE:
METES AND BOUNDS OF LOT 45 ADDED BY HAHN ENGINEERING, 5/3/12.
VILLAGE PARK
EXISTING PICKET FENCE
N 00°27'24" E
105.13'
96.56'
N 10°44'33" E
95.30'
N 19°16'40" E
N 07°49'20" E
86.27'
N 10°03'52" E
322.00'
97.45'
300.00'
LIMIT OF PLAYING FIELD
MW - 3
EL. 18.56
N: 795613.0210
E: 663317.1636
MW - 2
EL. 20.31
N: 795797.4740
E: 663351.8315
LIMIT OF VEGETATION
AREA=74,682 S.F.
S20°16'10" 368.12'
VOLUNTARY CLEANUP AREA = 65,044 S.F. (1.493 ACRES)
AS PER SURVEY DATED JULY 27, 2005
POINT OF BEGINNING
N 795,453.7134
E 663,388.8151
N 77°06'09" W
101.65'
S68°56'40"
168.60'
170.00'
202.00'
8" TREE
8" TREE
10" TREE
TAX LOT 45
BLOCK 36
SHEET 003.080
EXISTING DRAINLINE (EXACT LOCATION UNKNOWN)
CHAIN LINK FENCE
GATE
202.00'
167.53'
TAX LOT P/O 42
BLOCK 36
SHEET 003.080
N68°56'40"
164.55'
END OF TRAIN STATION PARKING LOT
TAX LOT 10
BLOCK 36
SHEET 003.080
TURN-AROUND
N 10°33'52" W
26.69'
D = 39°36'07"
R=41.36' L=28.59'
S 24°11'47" W
(RADIAL LINE)
S 09°05'44" W
22.40'
VOLUNTARY CLEANUP AREA = 74,682 S.F. (1.7145 ACRES)
AS PER SURVEY DATED OCTOBER 1, 2007
LIMIT OF PLAYING FIELD
N 795517.3096
E 663497.9962
MW - 1
EL. 20.08
N: 795668.5804
E: 663518.8616
DMH
RIM=22.70
INV=1.70
N 42°00'31" W
14.08'
END OF TRAIN STATION PARKING LOT
CHAIN LINK FENCE
S07°49'20"W
GATE
322.00'
S 07°05'30" W
CHAIN LINK FENCE
299.70'
N19°38'20" 368.20'
TAX LOT 44
BLOCK 36
SHEET 003.080
80'±
80'±
GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

FINAL AS-CONSTRUCTED

NO.	DATE	DESCRIPTION
1	05/14/02	NEW NORTH END TOPO
2	01/03/07	NEW "PLAYING FIELD" TOPO
3	08/21/07	PLAYING FIELD MEETS AND BOUNDS
4	10/1/07	FINAL AS-CONSTRUCTED
5	12/31/07	NEW "PLAYING FIELD" TOPO ADDED
6	04/18/11	MONITORING WELLS ADDED

STATE OF NEW YORK · PAUL J. PETRETTI · LICENSED PROFESSIONAL SURVEYOR

ORIGINAL: JANUARY 26, 1999

WATERFRONT PARK RECREATIONAL FIELD VOLUNTARY CLEANUP AREA
PREPARED FOR
VILLAGE OF DOBBS FERRY
TOWN OF GREENBURGH
WESTCHESTER COUNTY, NEW YORK

1 / 1

PAUL J. PETRETTI
CIVIL ENGINEER AND LAND SURVEYOR
30 GOULD AVENUE
DOBBS FERRY, NEW YORK
10522
CIVIL ENGINEERING - LAND SURVEYING & MAPPING
SITE DESIGN AND PLANNING - SANITARY AND GEOTECHNICAL.
Phone Numbers 914-674-9827(Office) 914-693-2848 (Home)

APPENDIX 2

APPENDIX 3

NUS Corporation Sample Location Map and US Environmental Protection Agency (1986) Data Tables

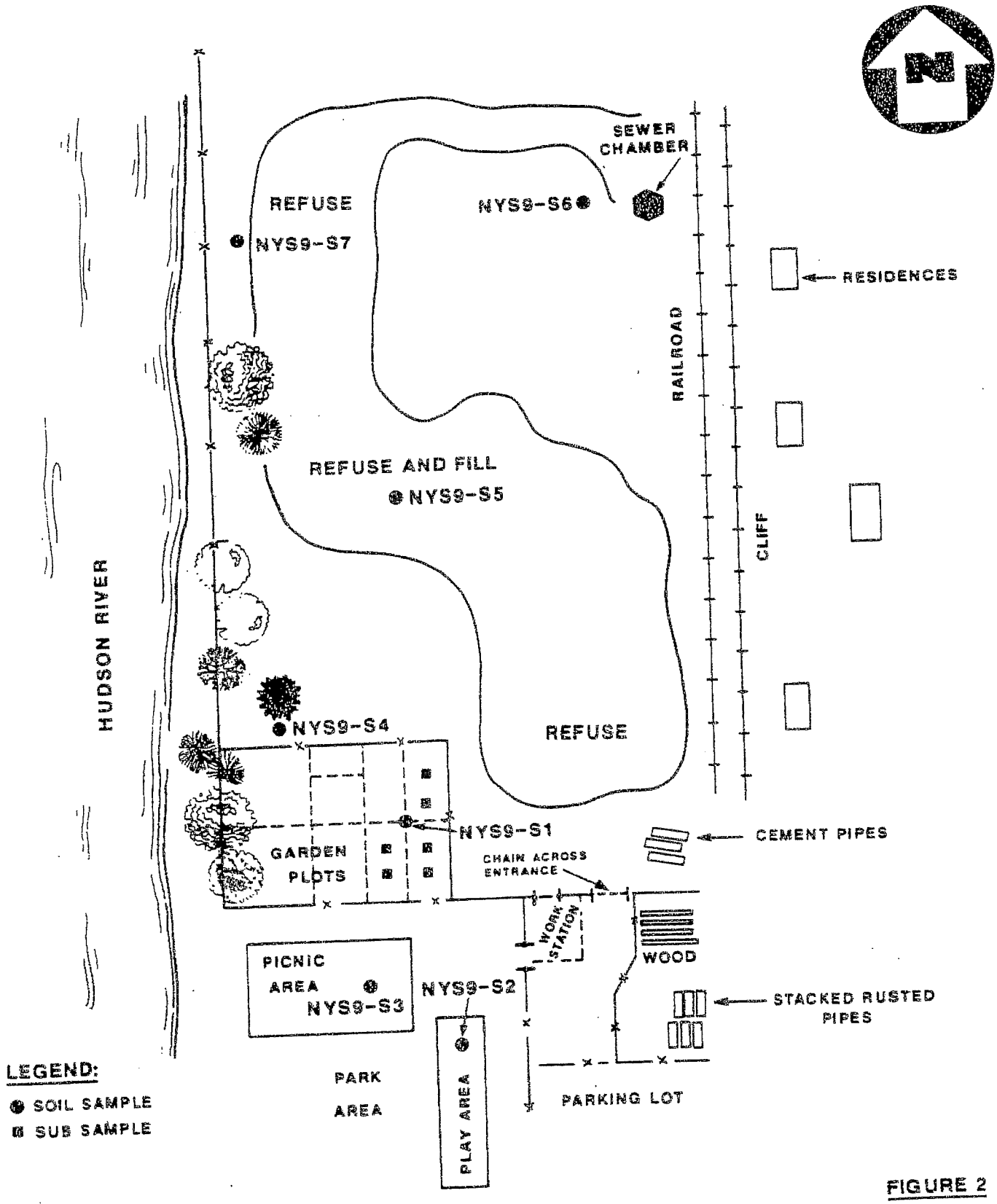


FIGURE 2

SAMPLE LOCATION MAP
DOBBS FERRY RIVERFRONT PARK,
DOBBS FERRY, N.Y.

(NOT TO SCALE)

NUS CORPORATION
A Halliburton Company

TABLE 1

SAMPLE DESCRIPTIONS
DOBBS FERRY LANDFILL
DOBBS FERRY, NEW YORK
CASE #6099

Sample ID Number	Organic Traffic Report #	Inorganic Traffic Report #	Time (Hours)	Sample Type	Sample Location
NYS9-S1	BG065	MBE211	1148	Soil	Composite of six (6) sub-samples collected from three (3) of the nine (9) garden plots located at Southwest corner of lanc Sample depth 0-6 inches.
NYS9-S2	BG066	MBE212	1205	Soil	Sample collected along slide in the playground area along the Northeast fence line. Sample depth inches.
NYS9-S3	BG067	MBE213	1215	Soil	Sample collected in the vicinity of the picnic area along the North fen line. Sample depth 0-6 inches.
NYS9-S4	BG068	MBE214	1244	Soil	Sample collected along the North fence line of t garden plot area in the Southwest corner of land Sample depth 0-6 inches.
NYS9-S5	BG069	MBE215	1256	Soil	Sample collected at center of landfill. Sampl depth 0-6 inches.
NYS9-S6	BG070	MBE216	1326	Soil	Sample collected at the Northeast corner of land. Sample depth 0-6 inches.
NYS9-S7	BG071	MBE217	1338	Soil	Sample collected at Northeast corner of land: Sample depth 0-6 inches.
NYS9-BL1	BG072	N/A*	N/A*	Water	Field VOA water blank collected at EPA Edison, New Jersey.

*N/A = Not Applicable

ORGANIC DATA REPORTING QUALIFIERS

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of such flags must be explicit.

Value -If the result is a value greater than or equal to the detection limit, report the value.

U -Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J -Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J)

C -This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract should be confirmed by GC/MS.

B -This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other -Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ANALYTICAL DATA
NAME: DOBB'S FERRY
SAMPLING DATE: 6/18/86
CASE: 6099

VOLATILES								
SAMPLE NUMBER	NY89-B1	NY89-B2	NY89-B3	NY89-B4	NY89-B5	NY89-B6	NY89-B7	NY89-BL1
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/L
Chloromethane					J			
Bromomethane								
Vinyl Chloride								
Chloroethane								
Methylene Chloride	E	5.15	E	E	E	E	E	E
Acetone	E	JE	E	E	E		E	E
Carbon Disulfide	J				J			
1,1-Dichloroethene								
1,1-Dichloroethane								
Trans-1,2-Dichloroethene								
Chloroform								
1,2-Dichloroethane								
2-Butanone					J			
1,1,1-Trichloroethane								
Carbon Tetrachloride								
Vinyl Acetate								
Bromodichloromethane								
1,1,2,2-Tetrachloroethane								
1,2-Dichloropropane								
Trans-1,3-Dichloropropene								
Trichloroethene								
Dibromochloromethane								
1,1,2-Trichloroethane								
Benzene	J	E	J	E	J	J	J	E
Cis-1,3-Dichloropropene								
2-Chloroethylvinylether								
Bromoform								
2-Hexanone								
4-Methyl-2-Pentanone								
Tetrachloroethene								E
Toluene								
Chlorobenzene								
Ethylbenzene								
Styrene								
Total Xylenes								

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not meet QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

ANALYTICAL DATA
NAME: DOBB'S FERRY
SAMPLING DATE: 6/18/86
CASE: 6099

SEMI-VOLATILES								
SAMPLE NUMBER	NYS9-S1	NYS9-S2	NYS9-S3	NYS9-S4	NYS9-S5	NYS9-S6	NYS9-S7	NYS9-BL1
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	N/A
N-Nitrosodimethylamine								
Phenol								
Aniline								
Bis(2-Chloroethyl)Ether								
2-Chlorophenol								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
Benzyl Alcohol								
1,2-Dichlorobenzene								
2-Methylphenol								
Bis(2-Chloroisopropyl)Ether								
4-Methylphenol								
N-Nitroso-Di-n-Propylamine								
Hexachloroethane								
Nitrobenzene								
Isophorone								
2-Nitrophenol								
2,4-Dimethylphenol								
Benzoic Acid								
Bis(2-Chloroethoxy)Methane								
2,4-Dichlorophenol								
1,2,4-Trichlorobenzene								
Naphthalene								
4-Chloroaniline								
Hexachlorobutadiene								
4-Chloro-3-Methylphenol								
2-Methylnaphthalene								
Hexachlorocyclopentadiene								
2,4,6-Trichlorophenol								
2,4,5-Trichlorophenol								
2-Chloronaphthalene								
2-Nitroaniline								
Dimethyl Phthalate								
Acenaphthylene			700					
3-Nitroaniline								
Acenaphthene			430					
2,4-Dinitrophenol								
4-Nitrophenol								
Dibenzofuran								
2,4-Dinitrotoluene								

ANALYTICAL DATA
NAME: DOBB'S FERRY
SAMPLING DATE: 6/18/86
CASE: 6099

SEMI-VOLATILES								
SAMPLE NUMBER	NYS9-S1	NYS9-S2	NYS9-S3	NYS9-S4	NYS9-S5	NYS9-S6	NYS9-S7	NYS9-BL1
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	N/A
2,6-Dinitrotoluene								
Diethylphthalate								
4-Chlorophenylphenyl ether								
Fluorene		1700						
4-Nitroaniline								
4,6-Dinitro-2-Methylphenol								
N-Nitrosodiphenylamine								
4-Bromophenylphenyl ether								
Hexachlorobenzene								
Pentachlorophenol								
50 Phenanthrene		1500			5800	1200		
Anthracene		2800						
Di-n-Butylphthalate								
50 Fluoranthene		17000			8200	2300	1400	
50 Pyrene		9200			4700	1300		
Butylbenzylphthalate								
3,3'-Dichlorobenzidine								
0.224 Benzo(a)Anthracene		5900			2800			
5.0 Bis(2-Ethylhexyl)Phthalate	E	E			E		E	
0.4 Chrysene		5600			3000		680	
Di-n-Octyl Phthalate								
1.1 Benzo(b)Fluoranthene		2500			1300	520	410	
1.1 Benzo(k)Fluoranthene		3000			1500	520		
0.066 (ND) Benzo(a)Pyrene		2500			1900	590		
3.2 Indeno(1,2,3-cd)Pyrene		2000			1200			
Dibenzo(a,h)Anthracene								
50 Benzo(ghi)Perylene		2100			1350	360		

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

ANALYTICAL DATA
NAME: DOBB'S FERRY
SAMPLING DATE: 6/18/86
CASE: 6099

PESTICIDES/PCBs								
SAMPLE NUMBER	NYS9-S1	NYS9-S2	NYS9-S3	NYS9-S4	NYS9-S5	NYS9-S6	NYS9-S7	NYS9-BL1
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	N/A
Alpha-BHC								
Beta-BHC								
Delta-BHC								
Gamma-BHC (Lindane)								
Heptachlor	E							
Aldrin								
Heptachlor Epoxide								
Endosulfan I					J		J	J		
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								J
4,4 -DDD								135
Endosulfan sulfate		E						
Endrin Aldehyde								
4,4 -DDT	E			E		E		
Methoxychlor								
Endrin Ketone								
0.54 Chlordane	J	338			J	J	J	J	
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
1,10 Aroclor-1260	505.15	22965	E	E	E	E		

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

INORGANIC DATA QUALIFIER

Footnotes:

NR - not required by contract at this time.

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]. Indicate the analytical method used with P (for ICP/Flame AA) or F (for furnace).

U - Indicates elemant was analyzed for but not detected. Report with the detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

s - Indicates value determined by Method of Standard Addition.

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

* - Indicates duplicate analysis in not within control limits.

\+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

ANALYTICAL DATA
NAME: DOBB'S FERRY
SAMPLING DATE: 6/18/86
CASE: 6099

INORGANICS								
SAMPLE NUMBER	NYS9-S1	NYS9-S2	NYS9-S3	NYS9-S4	NYS9-S5	NYS9-S6	NY39-S7	NYS9-BL1
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
UNITS	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	N/A
Aluminum	9570	19100	12200	7030	7550	3080	6440	
Antimony								
Arsenic	J	15	16	3.4	6.5	J		
Barium	J	J	475	J	J	J	J	
Beryllium								
Cadmium								
Calcium	9470	7940	10400	13700	21200	12000	11600	
Chromium	19	39	21	10	16	9	14	
Cobalt								
Copper	32	55	20	J	30	15	36	
Iron	17100	27500	16000	11500	14300	7190	15200	
Lead	188	179	76	J	195	145	238	
Magnesium	5230	7580	6940	6970	10700	4700	5160	
Manganese	339	484	345	232	296	118	232	
Mercury	0.225	0.230	0.410	0.300	0.120		0.120	
Nickel	J	J					J	
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Tin								
Vanadium	J	45	32	J	J		25	
Zinc	184	227	307	75	128	92	165	

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample.
indicates possible/probable blank contamination

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-065

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2661
Sample Matrix: SOIL
Data Release Authorized By:

Case No: 6099
QC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1 pH: 7.2
Percent Moisture: 23

CAS Number		ug/l or ug/Kg (Circle One)
	ber	
87-3	Chloromethane	10.0 U
83-9	Bromomethane	10.0 U
01-4	Vinyl Chloride	10.0 U
00-3	Chloroethane	10.0 U
09-2	Methylene Chloride	~~6.8~~ B
64-1	Acetone	4.9 JB
15-0	Carbon Disulfide	0.4 J
35-4	1,1-Dichloroethene	5.0 U
34-3	1,1-Dichloroethane	5.0 U
-60-5	Trans-1,2-Dichloroethene	5.0 U
66-3	Chloroform	5.0 U
-06-2	1,2-Dichloroethane	5.0 U
93-3	2-Butanone	10.0 U
55-6	1,1,1-Trichloroethane	5.0 U
23-5	Carbon Tetrachloride	5.0 U
-05-4	Vinyl Acetate	10.0 U
27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.9 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

JE
:he result is a value greater than or equal to the detection t, report the value.

cates compound was analyzed for but not detected. Report minimum detection limit for the sample with the U(e.g.10U ed on necessary concentration dilution actions. (This is not essarily the instrument detection limit.) The footnote should d U-Compound was analyzed for but not detected.The number is minimum attainable detection limit for the sample.

icates an estimated value.This flag is used either when timating a concentration for tentatively identified compounds here a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identification has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confirmed by GC/MS

B
This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-065

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2661
Sample Matrix: SOIL
Data Release Authorized By:

Case No: 6099
QC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

resubmitted
w/ corrected
cover

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1 pH: 7.2
Percent Moisture: 23

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10.0 U
74-83-9	Bromomethane	10.0 U
75-01-4	Vinyl Chloride	10.0 U
75-00-3	Chloroethane	10.0 U
75-09-2	Methylene Chloride	6.8 B
67-64-1	Acetone	4.9 JB
75-15-0	Carbon Disulfide	0.4 J
75-35-4	1,1-Dichloroethene	5.0 U
75-34-3	1,1-Dichloroethane	5.0 U
156-60-5	Trans-1,2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1,2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10.0 U
71-55-6	1,1,1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10.0 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.9 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE
If the result is a value greater than or equal to the detection limit, report the value.

U
Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g.10U based on necessary concentration dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U-Compound was analyzed for but not detected.The number is the minimum attainable detection limit for the sample.

J
Indicates an estimated value.This flag is used either when estimating a concentration for tentatively identified compounds where a 1 1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identificat has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confir by GC/MS

B
This flag is used when the analyte is found in the blank as wel as a sample. It indicates possible/probable blank contaminatio and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SAMPLE NO.
BG-065

SEMIVOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/02/86
Conc/Dil Factor:----------> 1
Percent Moisture : 23

GPC Cleanup: Yes Y No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes___

CAS Number		ug/l or ug/Kg (Circle One)
62-75-9	N-Nitrosodimethylamine	330.0 U
108-95-2	Phenol	330.0 U
111-44-4	bis(-2-Chloroethyl)Ether	330.0 U
95-57-8	2-Chlorophenol	330.0 U
541-73-1	1,3-Dichlorobenzene	330.0 U
106-46-7	1,4-Dichlorobenzene	330.0 U
100-51-6	Benzyl Alcohol	330.0 U
95-50-1	1,2-Dichlorobenzene	330.0 U
95-48-7	2-Methylphenol	330.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	330.0 U
106-44-5	4-Methylphenol	330.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
67-72-1	Hexachloroethane	330.0 U
98-95-3	Nitrobenzene	330.0 U
78-59-1	Isophorone	330.0 U
88-75-5	2-Nitrophenol	330.0 U
105-67-9	2,4-Dimethylphenol	1600.0 U
65-85-0	Benzoic Acid	330.0 U
111-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
120-83-2	2,4-Dichlorophenol	330.0 U
120-82-1	1,2,4-Trichlorobenzene	330.0 U
91-20-3	Naphthalene	330.0 U
106-47-8	4-Chloroaniline	330.0 U
87-68-3	Hexachlorobutadiene	330.0 U
59-50-7	4-Chloro-3-Methylphenol	330.0 U
91-57-6	2-Methylnaphthalene	330.0 U
77-47-4	Hexachlorocyclopentadiene	330.0 U
88-06-2	2,4,6-Trichlorophenol	1600.0 U
95-95-4	2,4,5-Trichlorophenol	330.0 U
91-58-7	2-Chloronaphthalene	1600.0 U
88-74-4	2-Nitroaniline	330.0 U
131-11-3	Dimethyl Phthalate	330.0 U
208-96-8	Acenaphthylene	1600.0 U
99-09-2	3-Nitroaniline	

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330.0 U
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	330.0 U
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	1600.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	330.0 U
87-86-5	Pentachlorophenol	1600.0 U
85-01-8	Phenanthrene	330.0 U
120-12-7	Anthracene	330.0 U
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	330.0 U
129-00-0	Pyrene	330.0 U
85-68-7	Butylbenzylphthalate	330.0 U
91-94-1	3,3'-Dichlorobenzidine	660.0 U
56-55-3	Benzo(a)Anthracene	330.0 U
117-81-7	bis(2-Ethylhexyl)Phthalate	1400.0 B
218-01-9	Chrysene	330.0 U
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	330.0 U
207-08-9	Benzo(k)Fluoranthene	330.0 U
50-32-8	Benzo(a)Pyrene	330.0 U
193-39-5	Indeno(1,2,3-cd)Pyrene	330.0 U
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	

(1) - Cannot be separated from diphenylamine

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-065

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: ----> 1
Percent Moisture: 23

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	0.40 J
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	32.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	162.00
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	102.80 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	505.10 B

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

$$\frac{\quad}{\quad} \text{ or } \frac{30}{Ws} \qquad \frac{40000}{Vt} \qquad \frac{3}{Vi}$$

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-065

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: 1
Percent Moisture: 23

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

corrected dates

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	0.40 J
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	32.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	162.00
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	102.80 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	505.10 B

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

Form I A

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE 211

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73-3423 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	9570	P	13.	Magnesium	5230	P
2.	Antimony	32U	P	14.	Manganese	339	P
3.	Arsenic	[5.8]	F	15.	Mercury	.225	Cold.V.
4.	Barium	[101]	P	16.	Nickel	[16]	P
5.	Beryllium	2.6U	P	17.	Potassium	3220U	A
6.	Cadmium	3.2U	P	18.	Selenium	2.8U	F
7.	Calcium	9470	P	19.	Silver	6.3U	P
8.	Chromium	19	P	20.	Sodium	3030U	P
9.	Cobalt	11U	P	21.	Thallium	3.4U	F
10.	Copper	32	P	22.	Tin	19U	P
11.	Iron	17100	P	23.	Vanadium	[17]	P
12.	Lead	188 *	P	24.	Zinc	184	P

Cyanide NR Auto An Percent Solids (%) 77.62

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager _____

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-066

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2662
Sample Matrix: SOIL
Data Release Authorized By:

Case No: 6099
QC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1
pH: 7.7
Percent Moisture: 15

ber		ug/l or ug/Kg (Circle One)
37-3	Chloromethane	10.0 U
83-9	Bromomethane	10.0 U
01-4	Vinyl Chloride	10.0 U
00-3	Chloroethane	10.0 U
09-2	Methylene Chloride	5.1 B
64-1	Acetone	6.2 JB
15-0	Carbon Disulfide	5.0 U
35-4	1,1-Dichloroethene	5.0 U
34-3	1,1-Dichloroethane	5.0 U
-60-5	Trans-1,2-Dichloroethene	5.0 U
66-3	Chloroform	5.0 U
-06-2	1,2-Dichloroethane	5.0 U
93-3	2-Butanone	10.0 U
55-6	1,1,1-Trichloroethane	5.0 U
23-5	Carbon Tetrachloride	5.0 U
-05-4	Vinyl Acetate	10.0 U
27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.5 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

E
he result is a value greater than or equal to the detection
t, report the value.

icates compound was analyzed for but not detected. Report
minimum detection limit for the sample with the U(e.g.10U
ed on necessary concentration dilution actions. (This is not
essarily the instrument detection limit.) The footnote should
d U-Compound was analyzed for but not detected.The number is
minimum attainable detection limit for the sample.

icates an estimated value.This flag is used either when
mating a concentration for tentatively identified compounds
re a 1 1 response is assumed or when the mass spectral data
icates the presence of a compound that meets the identification
teria but the result is less than the specified detection limit
greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identification has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confirmed by GC/MS

B
This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ORGANIC ANALYSIS DATA SHEET
(PAGE 2)

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SAMPLE NO.
BG-066

SEMIVOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/02/86
Conc/Dil Factor:----------> 1
Percent Moisture : 15

GPC Cleanup: Yes X No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes___

AS umber		ug/l or ug/Kg (Circle One)
2-75-9	N-Nitrosodimethylamine	330.0 U
08-95-2	Phenol	330.0 U
111-44-4	bis(-2-Chloroethyl)Ether	330.0 U
95-57-8	2-Chlorophenol	330.0 U
541-73-1	1,3-Dichlorobenzene	330.0 U
106-46-7	1,4-Dichlorobenzene	330.0 U
100-51-6	Benzyl Alcohol	330.0 U
95-50-1	1,2-Dichlorobenzene	330.0 U
95-48-7	2-Methylphenol	330.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	330.0 U
106-44-5	4-Methylphenol	330.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
67-72-1	Hexachloroethane	330.0 U
98-95-3	Nitrobenzene	330.0 U
78-59-1	Isophorone	330.0 U
88-75-5	2-Nitrophenol	330.0 U
105-67-9	2,4-Dimethylphenol	1600.0 U
65-85-0	Benzoic Acid	330.0 U
111-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
120-83-2	2,4-Dichlorophenol	330.0 U
120-82-1	1,2,4-Trichlorobenzene	330.0 U
91-20-3	Naphthalene	330.0 U
106-47-8	4-Chloroaniline	330.0 U
87-68-3	Hexachlorobutadiene	330.0 U
59-50-7	4-Chloro-3-Methylphenol	330.0 U
91-57-6	2-Methylnaphthalene	330.0 U
77-47-4	Hexachlorocyclopentadiene	330.0 U
88-06-2	2,4,6-Trichlorophenol	1600.0 U
95-95-4	2,4,5-Trichlorophenol	330.0 U
91-58-7	2-Chloronaphthalene	1600.0 U
88-74-4	2-Nitroaniline	330.0 U
131-11-3	Dimethyl Phthalate	700.0
208-96-8	Acenaphthylene	1600.0 U
99-09-2	3-Nitroaniline	

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	430.0
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	1700.0
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	1600.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	330.0 U
87-86-5	Pentachlorophenol	1600.0 U
85-01-8	Phenanthrene	1500.0
120-12-7	Anthracene	2800.0
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	17000.0
129-00-0	Pyrene	9200.0
85-68-7	Butylbenzylphthalate	330.0 U
91-94-1	3,3'-Dichlorobenzidine	660.0 U
56-55-3	Benzo(a)Anthracene	5900.0
117-81-7	bis(2-Ethylhexyl)Phthalate	~~2200.0~~ B
218-01-9	Chrysene	5600.0
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	2500.0
207-08-9	Benzo(k)Fluoranthene	3000.0
50-32-8	Benzo(a)Pyrene	2500.0
193-39-5	Indeno(1,2,3-cd)Pyrene	2000.0
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	2100.0

(1) - Cannot be separated from diphenylamine

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-066

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: -----> 1
Percent Moisture: 15

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	32.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	~~965~~.00
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	336.00
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	2298.00 B

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs ____ or Ws 30

Vt 40000

Vi 3

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-066

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: -----> 1
Percent Moisture: 15

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

resubmitted
w/correct
date

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	32.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	965.00
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	336.00
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	2298.00 B

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

FORM I

Form I B

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE 212

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73 3424 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	19100	P	13.	Magnesium	7580	P
2.	Antimony	47U	P	14.	Manganese	484	P
3.	Arsenic	16 D	F	15.	Mercury	0.230	Cold.V.
4.	Barium	[151]	P	16.	Nickel	[32]	P
5.	Beryllium	3.8U ~~2.0U~~ MH	P	17.	Potassium	4745 ~~3200U~~ MH	A
6.	Cadmium	4.6U ~~2.5U~~ MH	P	18.	Selenium	4.7U	F
7.	Calcium	7940	P	19.	Silver	9.3U	P
8.	Chromium	39	P	20.	Sodium	4460U	P
9.	Cobalt	16U	P	21.	Thallium	5.0U	F
10.	Copper	55	P	22.	Tin	28U	P
11.	Iron	27500	P	23.	Vanadium	49	P
12.	Lead	179 *	P	24.	Zinc	227	P

yanide NR Auto An Percent Solids (%) 52.7

ootnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

ments: _____

Lab Manager _____

ORGANIC ANALYSIS DATA SHEET
(PAGE 2)

SAMPLE NO.
BG-067

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SEMIVOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/02/86
Conc/Dil Factor: ----------> 1
Percent Moisture : 18

GPC Cleanup: Yes X No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes___

ber		ug/l or ug/Kg (Circle One)
75-9	N-Nitrosodimethylamine	330.0 U
.95-2	Phenol	330.0 U
-44-4	bis(-2-Chloroethyl)Ether	330.0 U
57-8	2-Chlorophenol	330.0 U
1-73-1	1,3-Dichlorobenzene	330.0 U
5-46-7	1,4-Dichlorobenzene	330.0 U
)-51-6	Benzyl Alcohol	330.0 U
.50-1	1,2-Dichlorobenzene	330.0 U
.48-7	2-Methylphenol	330.0 U
538-32-9	bis(2-chloroisopropyl)Ether	330.0 U
5-44-5	4-Methylphenol	330.0 U
1-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
.72-1	Hexachloroethane	330.0 U
.95-3	Nitrobenzene	330.0 U
.59-1	Isophorone	330.0 U
.75-5	2-Nitrophenol	330.0 U
15-67-9	2,4-Dimethylphenol	1600.0 U
.-85-0	Benzoic Acid	330.0 U
11-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
20-83-2	2,4-Dichlorophenol	330.0 U
20-82-1	1,2,4-Trichlorobenzene	330.0 U
1-20-3	Naphthalene	330.0 U
06-47-8	4-Chloroaniline	330.0 U
7-68-3	Hexachlorobutadiene	330.0 U
9-50-7	4-Chloro-3-Methylphenol	330.0 U
1-57-6	2-Methylnaphthalene	330.0 U
7-47-4	Hexachlorocyclopentadiene	330.0 U
8-06-2	2,4,6-Trichlorophenol	1600.0 U
5-95-4	2,4,5-Trichlorophenol	330.0 U
91-58-7	2-Chloronaphthalene	1600.0 U
88-74-4	2-Nitroaniline	330.0 U
131-11-3	Dimethyl Phthalate	330.0 U
208-96-8	Acenaphthylene	1600.0 U
99-09-2	3-Nitroaniline	

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330.0 U
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	1600.0 U
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	330.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	1600.0 U
87-86-5	Pentachlorophenol	330.0 U
85-01-8	Phenanthrene	330.0 U
120-12-7	Anthracene	330.0 U
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	330.0 U
129-00-0	Pyrene	330.0 U
85-68-7	Butylbenzylphthalate	660.0 U
91-94-1	3,3'-Dichlorobenzidine	330.0 U
56-55-3	Benzo(a)Anthracene	330.0 U
117-81-7	bis(2-Ethylhexyl)Phthalate	330.0 U
218-01-9	Chrysene	330.0 U
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	330.0 U
207-08-9	Benzo(k)Fluoranthene	330.0 U
50-32-8	Benzo(a)Pyrene	330.0 U
193-39-5	Indeno(1,2,3-cd)Pyrene	330.0 U
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	

(1) - Cannot be separated from diphenylamine

COMMENT: NO HSL'S FOUND

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-067

Laboratory Name: NANCO LABORATORY INC.
Lab Sample ID No: >P2663
Sample Matrix: SOIL
Data Release Authorized By: George Udell

Case No: 6099
QC Report No: 055
Contract No: 68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1 pH: 7.3
Percent Moisture: 18

		ug/l or (ug/Kg) (Circle One)
3	Chloromethane	10.0 U
9	Bromomethane	10.0 U
4	Vinyl Chloride	10.0 U
3	Chloroethane	10.0 U
2	Methylene Chloride	5.2 B
1	Acetone	5.8 JB
0	Carbon Disulfide	5.0 U
.4	1,1-Dichloroethene	5.0 U
.3	1,1-Dichloroethane	5.0 U
0-5	Trans-1,2-Dichloroethene	5.0 U
.3	Chloroform	5.0 U
6-2	1,2-Dichloroethane	5.0 U
.3	2-Butanone	10.0 U
.6	1,1,1-Trichloroethane	5.0 U
.5	Carbon Tetrachloride	5.0 U
5-4	Vinyl Acetate	10.0 U
.4	Bromodichloromethane	5.0 U

CAS Number		ug/l or (ug/Kg) (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.6 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	0.8 J
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

ıe result is a value greater than or equal to the detection :, report the value.

:ates compound was analyzed for but not detected. Report ninimum detection limit for the sample with the U(e.g.10U d on necessary concentration dilution actions. (This is not ssarily the instrument detection limit.) The footnote should U-Compound was analyzed for but not detected. The number is ninimum attainable detection limit for the sample.

cates an estimated value. This flag is used either when mating a concentration for tentatively identified compounds e a 1 1 response is assumed or when the mass spectral data cates the presence of a compound that meets the identification teria but the result is less than the specified detection limit greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identification has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confirmed by GC/MS

B
This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

SAMPLE NUMBER
BG-067

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: ----> 1
Percent Moisture: 18

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	32.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	~~89.00~~
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	160.00 U
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	309.00 JB

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-067

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: -----> 1
Percent Moisture: 18

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	32.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	89.00
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	160.00 U
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	309.00 JB

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

Form I C

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE213

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73 3425 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1. Aluminum	12200	P	13. Magnesium	6940	P
2. Antimony	30U	P	14. Manganese	345	P
3. Arsenic	16	F	15. Mercury	0.41U	Cold.V.
4. Barium	475	P	16. Nickel	12U	P
5. Beryllium	2.4U	P	17. Potassium	3020U	A
6. Cadmium	3.0U	P	18. Selenium	3.0U	F
7. Calcium	10400	P	19. Silver	5.9U	P
8. Chromium	21	P	20. Sodium	2840U	P
9. Cobalt	10U	P	21. Thallium	3.2U	F
10. Copper	20	P	22. Tin	18U	P
11. Iron	16000	P	23. Vanadium	32	P
12. Lead	76 *	F	24. Zinc	307	P

Cyanide NR Auto An Percent Solids (%) 82.6

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager _____

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-068

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2672
Sample Matrix: SOIL
Data Release Authorized By: George C Dodd

Case No: 6099
QC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/20/86
Date Analyzed: 6/20/86
Conc/Dil Factor: 1 pH: 7.4
Percent Moisture: 12

ber		ug/l or ug/Kg (Circle One)	CAS Number		ug/l or ug/Kg (Circle One)
87-3	Chloromethane	10.0 U	79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
83-9	Bromomethane	10.0 U	78-87-5	1,2-Dichloropropane	5.0 U
-01-4	Vinyl Chloride	10.0 U	10061-02-6	Trans-1,3-Dichloropropene	5.0 U
-00-3	Chloroethane	10.0 U	79-01-6	Trichloroethene	5.0 U
-09-2	Methylene Chloride	12.0 B	124-48-1	Dibromochloromethane	5.0 U
-64-1	Acetone	4.3 JB	79-00-5	1,1,2-Trichloroethane	5.0 U
-15-0	Carbon Disulfide	5.0 U	71-43-2	Benzene	0.7 JB
-35-4	1,1-Dichloroethene	5.0 U	10061-01-5	cis-1,3-Dichloropropene	5.0 U
-34-3	1,1-Dichloroethane	5.0 U	110-75-8	2-Chloroethylvinylether	10.0 U
6-60-5	Trans-1,2-Dichloroethene	5.0 U	75-25-2	Bromoform	5.0 U
-66-3	Chloroform	5.0 U	591-78-6	2-Hexanone	10.0 U
7-06-2	1,2-Dichloroethane	10.0 U	108-10-1	4-Methyl-2-Pentanone	10.0 U
-93-3	2-Butanone	5.0 U	127-18-4	Tetrachloroethene	5.0 U
-55-6	1,1,1-Trichloroethane	5.0 U	108-88-3	Toluene	5.0 U
-23-5	Carbon Tetrachloride	10.0 U	108-90-7	Chlorobenzene	5.0 U
8-05-4	Vinyl Acetate	5.0 U	100-41-4	Ethylbenzene	5.0 U
5-27-4	Bromodichloromethane		100-42-5	Styrene	5.0 U
				Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

...E
the result is a value greater than or equal to the detection mit, report the value.

...dicates compound was analyzed for but not detected. Report ...e minimum detection limit for the sample with the U(e.g.10U ...ased on necessary concentration dilution actions. (This is not ...ecessarily the instrument detection limit.) The footnote should ...ead U-Compound was analyzed for but not detected.The number is ...he minimum attainable detection limit for the sample.

...Indicates an estimated value.This flag is used either when ...estimating a concentration for tentatively identified compounds ...where a 1 1 response is assumed or when the mass spectral data ...indicates the presence of a compound that meets the identification ...criteria, but the result is less than the specified detection limit but greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identificat has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confir by GC/MS

B
This flag is used when the analyte is found in the blank as wel as a sample. It indicates possible/probable blank contaminatic and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-072

Laboratory Name: NANCO LABORATORY INC.
Lab Sample ID No: >P2660
Sample Matrix: WATER
Data Release Authorized By: [signature]

Case No: 6099
QC Report No: 055
Contract No: 68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1 pH: 8.0
Percent Moisture: N/A

CAS Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.0 U
74-83-9	Bromomethane	10.0 U
75-01-4	Vinyl Chloride	10.0 U
75-00-3	Chloroethane	10.0 U
75-09-2	Methylene Chloride	7.0 B
67-64-1	Acetone	11.0 B
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1,1-Dichloroethene	5.0 U
75-34-3	1,1-Dichloroethane	5.0 U
156-60-5	Trans-1,2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1,2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10.0 U
71-55-6	1,1,1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10.0 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		(ug/l) or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.7 JB
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	0.8 JB
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

[illegible] the result is a value greater than or equal to the detection [illegible], report the value.

[illegible] compound was analyzed for but not detected. Report [illegible] detection limit for the sample with the U(e.g.10U [illegible] necessary concentration dilution actions. (This is not [illegible] the instrument detection limit.) The footnote should [illegible] was analyzed for but not detected.The number is [illegible] attainable detection limit for the sample.

[illegible] estimated value.This flag is used either when [illegible] concentration for tentatively identified compounds [illegible] response is assumed or when the mass spectral data [illegible] presence of a compound that meets the identification [illegible] the result is less than the specified detection limit [illegible] zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identification has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confirmed by GC/MS

B
This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

FORM I

ORGANIC ANALYSIS DATA SHEET
(PAGE 2)

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SAMPLE NO.
BG-068

SEMIVOLATILE COMPOUNDS

Concentration: (LOW) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/02/86
Conc/Dil Factor:----------> 1
Percent Moisture : 12

GPC Cleanup: Yes X No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes___

CAS Number		ug/l or (ug/Kg) (Circle One)
2-75-9	N-Nitrosodimethylamine	330.0 U
08-95-2	Phenol	330.0 U
11-44-4	bis(-2-Chloroethyl)Ether	330.0 U
5-57-8	2-Chlorophenol	330.0 U
41-73-1	1,3-Dichlorobenzene	330.0 U
06-46-7	1,4-Dichlorobenzene	330.0 U
00-51-6	Benzyl Alcohol	330.0 U
5-50-1	1,2-Dichlorobenzene	330.0 U
5-48-7	2-Methylphenol	330.0 U
9638-32-9	bis(2-chloroisopropyl)Ether	330.0 U
06-44-5	4-Methylphenol	330.0 U
21-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
7-72-1	Hexachloroethane	330.0 U
3-95-3	Nitrobenzene	330.0 U
8-59-1	Isophorone	330.0 U
8-75-5	2-Nitrophenol	330.0 U
05-67-9	2,4-Dimethylphenol	330.0 U
5-05-0	Benzoic Acid	1600.0 U
11-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
20-83-2	2,4-Dichlorophenol	330.0 U
20-82-1	1,2,4-Trichlorobenzene	330.0 U
1-20-3	Naphthalene	330.0 U
06-47-8	4-Chloroaniline	330.0 U
7-68-3	Hexachlorobutadiene	330.0 U
9-50-7	4-Chloro-3-Methylphenol	330.0 U
1-57-6	2-Methylnaphthalene	330.0 U
77-47-4	Hexachlorocyclopentadiene	330.0 U
88-06-2	2,4,6-Trichlorophenol	330.0 U
95-95-4	2,4,5-Trichlorophenol	1600.0 U
[illegible]	2-Chloronaphthalene	330.0 U
[illegible]	2-Nitroaniline	1600.0 U
[illegible]	Dimethyl Phthalate	330.0 U
[illegible]	Acenaphthylene	330.0 U
[illegible]	3-Nitroaniline	1600.0 U

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	330.0 U
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	330.0 U
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	1600.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	330.0 U
87-86-5	Pentachlorophenol	1600.0 U
85-01-8	Phenanthrene	330.0 U
120-12-7	Anthracene	330.0 U
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	330.0 U
129-00-0	Pyrene	330.0 U
85-68-7	Butylbenzylphthalate	330.0 U
91-94-1	3,3'-Dichlorobenzidine	660.0 U
56-55-3	Benzo(a)Anthracene	330.0 U
117-81-7	bis(2-Ethylhexyl)Phthalate	330.0 U
218-01-9	Chrysene	330.0 U
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	330.0 U
207-08-9	Benzo(k)Fluoranthene	330.0 U
50-32-8	Benzo(a)Pyrene	330.0 U
193-39-5	Indeno(1,2,3-cd)Pyrene	330.0 U
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	330.0 U

(1) - Cannot be separated from diphenylamine

COMMENTS: NO HSL'S FOUND

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-068

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: ----->
Percent Moisture: 12

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	9.60 J
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	24.70 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	288.00 JB

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

$$\frac{\text{Vt}}{\text{Vi}} \quad \text{or} \quad \frac{\text{Vs}}{\text{Ws}} \qquad \frac{40000}{30} \qquad \frac{3}{\quad}$$

FORM I

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-068

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: ----> 1
Percent Moisture: 12

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	9.60 J
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	24.70 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	288.00 JB

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 _____ Vt 40000 _____ Vi 3 _____

Form I D

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE 214

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73.3426 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	7030	P	13.	Magnesium	6970	P
2.	Antimony	29U	P	14.	Manganese	232	P
3.	Arsenic	2.8 B	F	15.	Mercury	0.30U	Cold.V.
4.	Barium	[56]	P	16.	Nickel	11U	P
5.	Beryllium	2.3U	P	17.	Potassium	2850U	A
6.	Cadmium	2.9U	P	18.	Selenium	2.5U	F
7.	Calcium	13700	P	19.	Silver	5.6U	P
8.	Chromium	10	P	20.	Sodium	2680U	P
9.	Cobalt	9.7U	P	21.	Thallium	3.0U	F
10.	Copper	[16]	P	22.	Tin	17U	P
11.	Iron	11800	P	23.	Vanadium	[17]	P
12.	Lead	25 *	F	24.	Zinc	75	P

Cyanide NR Auto An Percent Solids (%) 87.7

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager EB

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-069

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2665
Sample Matrix: SOIL
Data Release Authorized By:

Ca No: 6099
QC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1 pH: 7.7
Percent Moisture: 12

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	1.7 J
74-83-9	Bromomethane	10.0 U
75-01-4	Vinyl Chloride	10.0 U
75-00-3	Chloroethane	10.0 U
75-09-2	Methylene Chloride	5.2 JB
67-64-1	Acetone	6.6 JB
75-15-0	Carbon Disulfide	0.8 J
75-35-4	1,1-Dichloroethene	5.0 U
75-34-3	1,1-Dichloroethane	5.0 U
156-60-5	Trans-1,2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1,2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10.0 U
71-55-6	1,1,1-Trichloroethane	0.8 J
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10.0 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.7 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

ABLE
f the result is a value greater than or equal to the detection imit, report the value.

ndicates compound was analyzed for but not detected. Report he minimum detection limit for the sample with the U(e.g.10U based on necessary concentration dilution actions. (This is not necessarily the instrument detection limit.) The footnote should ead U-Compound was analyzed for but not detected.The number is he minimum attainable detection limit for the sample.

ndicates an estimated value.This flag is used either when stimating a concentration for tentatively identified compounds here a 1 1 response is assumed or when the mass spectral data ndicates the presence of a compound that meets the identification riteria but the result is less than the specified detection limit ut greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identificatic has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confirme by GC/MS

B
This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contaminatio and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ORGANIC ANALYSIS DATA SHEET
(PAGE 2)

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SAMPLE NO.
83-869

SEMIVOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/02/86
Conc/Dil Factor:----------> 1
Percent Moisture : 12

GPC Cleanup: Yes X No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes

CAS Number		ug/l or ug/Kg (Circle One)
62-75-9	N-Nitrosodimethylamine	330.0 U
108-95-2	Phenol	330.0 U
111-44-4	bis(-2-Chloroethyl)Ether	330.0 U
95-57-8	2-Chlorophenol	330.0 U
541-73-1	1,3-Dichlorobenzene	330.0 U
106-46-7	1,4-Dichlorobenzene	330.0 U
100-51-6	Benzyl Alcohol	330.0 U
95-50-1	1,2-Dichlorobenzene	330.0 U
95-48-7	2-Methylphenol	330.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	330.0 U
106-44-5	4-Methylphenol	330.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
67-72-1	Hexachloroethane	330.0 U
98-95-3	Nitrobenzene	330.0 U
78-59-1	Isophorone	330.0 U
88-75-5	2-Nitrophenol	330.0 U
105-67-9	2,4-Dimethylphenol	330.0 U
65-85-0	Benzoic Acid	1600.0 U
111-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
120-83-2	2,4-Dichlorophenol	330.0 U
120-82-1	1,2,4-Trichlorobenzene	330.0 U
91-20-3	Naphthalene	330.0 U
106-47-8	4-Chloroaniline	330.0 U
87-68-3	Hexachlorobutadiene	330.0 U
59-50-7	4-Chloro-3-Methylphenol	330.0 U
91-57-6	2-Methylnaphthalene	330.0 U
77-47-4	Hexachlorocyclopentadiene	330.0 U
88-06-2	2,4,6-Trichlorophenol	330.0 U
95-95-4	2,4,5-Trichlorophenol	1600.0 U
91-58-7	2-Chloronaphthalene	330.0 U
88-74-4	2-Nitroaniline	1600.0 U
131-11-3	Dimethyl Phthalate	330.0 U
208-96-8	Acenaphthylene	330.0 U
99-09-2	3-Nitroaniline	1600.0 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330.0 U
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	330.0 U
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	1600.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	330.0 U
87-86-5	Pentachlorophenol	1600.0 U
85-01-8	Phenanthrene	5800.0
120-12-7	Anthracene	330.0 U
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	8200.0
129-00-0	Pyrene	4700.0
85-68-7	Butylbenzylphthalate	330.0 U
91-94-1	3,3'-Dichlorobenzidine	660.0 U
56-55-3	Benzo(a)Anthracene	2800.0
117-81-7	bis(2-Ethylhexyl)Phthalate	4600.0
218-01-9	Chrysene	3000.0
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	1500.0
207-08-9	Benzo(k)Fluoranthene	1500.0
50-32-8	Benzo(a)Pyrene	1900.0
193-39-5	Indeno(1,2,3-cd)Pyrene	1200.0
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	1350.0

(1) - Cannot be separated from diphenylamine

COMMENTS: NO HSL'S FOUND

ORGANICS ANALYSIS DATA SHEET

(PAGE 3)

SAMPLE NUMBER
BG-069

LABORATORY NAME: NAMCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: ----> 1
Percent Moisture: 12

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	16.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	~~180.00~~
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	142.00 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	320.00

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

ORGANICS ANALYSIS DATA SHEET

(PAGE 3)

SAMPLE NUMBER
BG-069

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: -----> 1
Percent Moisture: 12

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	16.00 U
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	180.00
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	142.00 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	320.00

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

FORM I

Form I E

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE 215

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73-3427 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	7550	P	13.	Magnesium	10700	P
2.	Antimony	29U	P	14.	Manganese	296	P
3.	Arsenic	6.5	F	15.	Mercury	0.120	Cold.V.
4.	Barium	[62]	P	16.	Nickel	12U	P
5.	Beryllium	2.3U	P	17.	Potassium	2930U	A
6.	Cadmium	2.9U	P	18.	Selenium	2.6U	F
7.	Calcium	21200	P	19.	Silver	5.8U	P
8.	Chromium	16	P	20.	Sodium	2760U	P
9.	Cobalt	10U	P	21.	Thallium	3.1U	F
10.	Copper	30	P	22.	Tin	18U	P
11.	Iron	14300	P	23.	Vanadium	[23]	P
12.	Lead	195*	F	24.	Zinc	128	P

yanide NR Auto An Percent Solids (%) 85.2

ootnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

mments:

Lab Manager EG

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-070

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2666
Sample Matrix: SOIL
Data Release Authorized By:

Case No: 6099
GC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 6/19/86
Conc/Dil Factor: 1 pH: 7.6
Percent Moisture: 7

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10.0 U
74-83-9	Bromomethane	10.0 U
75-01-4	Vinyl Chloride	10.0 U
75-00-3	Chloroethane	10.0 U
75-09-2	Methylene Chloride	11.0 B
67-64-1	Acetone	10.0 U
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1,1-Dichloroethene	5.0 U
75-34-3	1,1-Dichloroethane	5.0 U
156-60-5	Trans-1,2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1,2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10.0 U
71-55-6	1,1,1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10.0 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	1.3 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

[illegible]
If the result is a value greater than or equal to the detection limit, report the value.

U
The cated compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g.10U based on necessary concentration dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read "Compound was analyzed for but not detected.The number is the minimum attainable detection limit for the sample.

J
Indicates an estimated value.This flag is used either when calculating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identifica has been confirmed by GC/MS Single component pesticides greate than or equal to 10 ng/ul in the final extract should be confi by GC/MS

B
This flag is used when the analyte is found in the blank as wel as a sample. It indicates possible/probable blank contaminatic and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SAMPLE NO.
BG-070

SEMIVOLATILE COMPOUNDS

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/03/86
Conc/Dil Factor:----------> 1
Percent Moisture : 7

GPC Cleanup: Yes X No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes_

CAS Number		ug/l or ug/Kg (Circle One)
62-75-9	N-Nitrosodimethylamine	330.0 U
108-95-2	Phenol	330.0 U
111-44-4	bis(-2-Chloroethyl)Ether	330.0 U
95-57-8	2-Chlorophenol	330.0 U
541-73-1	1,3-Dichlorobenzene	330.0 U
106-46-7	1,4-Dichlorobenzene	330.0 U
100-51-6	Benzyl Alcohol	330.0 U
95-50-1	1,2-Dichlorobenzene	330.0 U
95-48-7	2-Methylphenol	330.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	330.0 U
106-44-5	4-Methylphenol	330.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
67-72-1	Hexachloroethane	330.0 U
98-95-3	Nitrobenzene	330.0 U
78-59-1	Isophorone	330.0 U
88-75-5	2-Nitrophenol	330.0 U
105-67-9	2,4-Dimethylphenol	330.0 U
65-85-0	Benzoic Acid	1600.0 U
111-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
120-83-2	2,4-Dichlorophenol	330.0 U
120-82-1	1,2,4-Trichlorobenzene	330.0 U
91-20-3	Naphthalene	330.0 U
106-47-8	4-Chloroaniline	330.0 U
87-68-3	Hexachlorobutadiene	330.0 U
59-50-7	4-Chloro-3-Methylphenol	330.0 U
91-57-6	2-Methylnaphthalene	330.0 U
77-47-4	Hexachlorocyclopentadiene	330.0 U
88-06-2	2,4,6-Trichlorophenol	330.0 U
95-95-4	2,4,5-Trichlorophenol	1600.0 U
91-58-7	2-Chloronaphthalene	330.0 U
[illegible]	2-Nitroaniline	1600.0 U
[illegible]	Dimethyl Phthalate	330.0 U
[illegible]	Acenaphthylene	330.0 U
[illegible]	3-Nitroaniline	1600.0 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330.0 U
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	330.0 U
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	1600.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	330.0 U
87-86-5	Pentachlorophenol	1600.0 U
85-01-8	Phenanthrene	1200.0
120-12-7	Anthracene	330.0 U
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	2300.0
129-00-0	Pyrene	1300.0
85-68-7	Butylbenzylphthalate	330.0 U
91-94-1	3,3'-Dichlorobenzidine	660.0 U
56-55-3	Benzo(a)Anthracene	330.0 U
117-81-7	bis(2-Ethylhexyl)Phthalate	330.0 U
218-01-9	Chrysene	330.0 U
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	520.0
207-08-9	Benzo(k)Fluoranthene	520.0
50-32-8	Benzo(a)Pyrene	590.0
193-39-5	Indeno(1,2,3-cd)Pyrene	330.0 U
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	380.0

(1) - Cannot be separated from diphenylamine

NO HSL'S FOUND

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-079

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: ----> 1
Percent Moisture: 7

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	11.80 J
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	56.80 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	351.00 B

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

$$\frac{\quad}{\quad} \text{ or } Ws \frac{30}{\quad} \quad Vt \frac{40000}{\quad} \quad Vi \frac{3}{\quad}$$

ORGANICS ANALYSIS DATA SHEET

(PAGE 3)

SAMPLE NUMBER
BG-070

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: Low (circled) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: -----> 1
Percent Moisture: 7

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

results [illegible] w/ [illegible]

CAS Number		ug/l or ug/Kg (circled) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	11.80 J
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	32.00 U
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	32.00 U
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	56.80 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	351.00 B

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs ________ or Ws 30 Vt 40000 Vi 3

FORM I

Form I F

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE216

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73428 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	3080	P	13.	Magnesium	4700	P
2.	Antimony	29U	P	14.	Manganese	118	P
3.	Arsenic	[4.6]	F	15.	Mercury	0.10U	Cold.V.
4.	Barium	[38]	P	16.	Nickel	12U	P
5.	Beryllium	2.3U	P	17.	Potassium	2890U	A
6.	Cadmium	2.9U	P	18.	Selenium	2.5U	F
7.	Calcium	12000	P	19.	Silver	5.7U	P
8.	Chromium	9	P	20.	Sodium	2710U	P
9.	Cobalt	9.8U	P	21.	Thallium	3.1U	F
10.	Copper	15	P	22.	Tin	17U	P
11.	Iron	7190	P	23.	Vanadium	13U	P
12.	Lead	145 *	P	24.	Zinc	92	P

Cyanide NR Auto An Percent Solids (%) 86.6

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager EB

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

SAMPLE NUMBER
BG-071

Laboratory Name:NANCO LABORATORY INC.
Lab Sample ID No:>P2667
Sample Matrix: SOIL
Data Release Authorized By:

Case No: 6099
QC Report No: 055
Contract No:68-01-7102
Date Sample Received: 6/19/86

VOLATILE COMPOUNDS

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/20/86
Date Analyzed: 6/20/86
Conc/Dil Factor: 1
pH: 7.6
Percent Moisture: 7

CAS Number		ug/l or ug/Kg (Circle One)
-87-3	Chloromethane	10.0 U
-83-9	Bromomethane	10.0 U
-01-4	Vinyl Chloride	10.0 U
-00-3	Chloroethane	10.0 U
-09-2	Methylene Chloride	4.9 JB
-64-1	Acetone	5.7 JB
-15-0	Carbon Disulfide	5.0 U
-35-4	1,1-Dichloroethene	5.0 U
-34-3	1,1-Dichloroethane	5.0 U
6-60-5	Trans-1,2-Dichloroethene	5.0 U
-66-3	Chloroform	5.0 U
7-06-2	1,2-Dichloroethane	5.0 U
-93-3	2-Butanone	10.0 U
-55-6	1,1,1-Trichloroethane	5.0 U
-23-5	Carbon Tetrachloride	5.0 U
3-05-4	Vinyl Acetate	10.0 U
-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-02-6	Trans-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	0.5 J
10061-01-5	cis-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10.0 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10.0 U
108-10-1	4-Methyl-2-Pentanone	10.0 U
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

E
he result is a value greater than or equal to the detection t, report the value.

cates compound was analyzed for but not detected. Report minimum detection limit for the sample with the U(e.g.10U d on necessary concentration dilution actions. (This is not ssarily the instrument detection limit.) The footnote should U-Compound was analyzed for but not detected.The number is minimum attainable detection limit for the sample.

tates an estimated value.This flag is used either when ating a concentration for tentatively identified compounds a 1:1 response is assumed or when the mass spectral data ates the presence of a compound that meets the identification ria but the result is less than the specified detection limit greater than zero (e.g. 10J).

C
This flag applies to pesticide parameters where the identificat has been confirmed by GC/MS Single component pesticides greater than or equal to 10 ng/ul in the final extract should be confir by GC/MS

B
This flag is used when the analyte is found in the blank as wel as a sample. It indicates possible/probable blank contaminatio and warns the data user to take appropriate action.

OTHER
Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

FORM I

ORGANIC ANALYSIS DATA SHEET
(PAGE 2)

LABORATORY NAME: NANCO LABS. INC.
CASE NO: 6099

SAMPLE NO.
BG-071

SEMIVOLATILE COMPOUNDS

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/03/86
Conc/Dil Factor:----------> 1
Percent Moisture : 7

GPC Cleanup: Yes X No____
Separatory Funnel Extraction: Yes____
Continuous Liquid - Liquid Extraction: Yes

CAS Number		ug/l or ug/Kg (Circle One)
62-75-9	N-Nitrosodimethylamine	330.0 U
108-95-2	Phenol	330.0 U
111-44-4	bis(-2-Chloroethyl)Ether	330.0 U
95-57-8	2-Chlorophenol	330.0 U
541-73-1	1,3-Dichlorobenzene	330.0 U
106-46-7	1,4-Dichlorobenzene	330.0 U
100-51-6	Benzyl Alcohol	330.0 U
95-50-1	1,2-Dichlorobenzene	330.0 U
95-48-7	2-Methylphenol	330.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	330.0 U
106-44-5	4-Methylphenol	330.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	330.0 U
67-72-1	Hexachloroethane	330.0 U
98-95-3	Nitrobenzene	330.0 U
78-59-1	Isophorone	330.0 U
88-75-5	2-Nitrophenol	330.0 U
105-67-9	2,4-Dimethylphenol	330.0 U
65-85-0	Benzoic Acid	1600.0 U
111-91-1	bis(-2-Chloroethoxy)Methane	330.0 U
120-83-2	2,4-Dichlorophenol	330.0 U
120-82-1	1,2,4-Trichlorobenzene	330.0 U
91-20-3	Naphthalene	330.0 U
106-47-8	4-Chloroaniline	330.0 U
87-68-3	Hexachlorobutadiene	330.0 U
59-50-7	4-Chloro-3-Methylphenol	330.0 U
91-57-6	2-Methylnaphthalene	330.0 U
77-47-4	Hexachlorocyclopentadiene	330.0 U
88-06-2	2,4,6-Trichlorophenol	330.0 U
95-95-4	2,4,5-Trichlorophenol	1600.0 U
91-58-7	2-Chloronaphthalene	330.0 U
88-74-4	2-Nitroaniline	1600.0 U
131-11-3	Dimethyl Phthalate	330.0 U
208-96-8	Acenaphthylene	330.0 U
99-09-2	3-Nitroaniline	1600.0 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330.0 U
51-28-5	2,4-Dinitrophenol	1600.0 U
100-02-7	4-Nitrophenol	1600.0 U
132-64-9	Dibenzofuran	330.0 U
121-14-2	2,4-Dinitrotoluene	330.0 U
606-20-2	2,6-Dinitrotoluene	330.0 U
84-66-2	Diethylphthalate	330.0 U
7005-72-3	4-Chlorophenyl-phenylether	330.0 U
86-73-7	Fluorene	330.0 U
100-01-6	4-Nitroaniline	1600.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	1600.0 U
86-30-6	N-Nitrosodiphenylamine (1)	330.0 U
101-55-3	4-Bromophenyl-phenylether	330.0 U
118-74-1	Hexachlorobenzene	330.0 U
87-86-5	Pentachlorophenol	1600.0 U
85-01-8	Phenanthrene	330.0 U
120-12-7	Anthracene	330.0 U
84-74-2	Di-n-Butylphthalate	330.0 U
206-44-0	Fluoranthene	1400.0
129-00-0	Pyrene	330.0 U
85-68-7	Butylbenzylphthalate	330.0 U
91-94-1	3,3'-Dichlorobenzidine	660.0 U
56-55-3	Benzo(a)Anthracene	330.0 U
117-81-7	bis(2-Ethylhexyl)Phthalate	4200.0 B
218-01-9	Chrysene	680.0
117-84-0	Di-n-Octyl Phthalate	330.0 U
205-99-2	Benzo(b)Fluoranthene	410.0
207-08-9	Benzo(k)Fluoranthene	330.0 U
50-32-8	Benzo(a)Pyrene	330.0 U
193-39-5	Indeno(1,2,3-cd)Pyrene	330.0 U
53-70-3	Dibenz(a,h)Anthracene	330.0 U
191-24-2	Benzo(g,h,i)Perylene	330.0 U

(1) - Cannot be separated from diphenylamine

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

SAMPLE NUMBER
BG-071

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/1/86
Conc/Dil Factor: -----> 1
Percent Moisture: 7

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	4.80 J
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	9.70 J
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	135.00
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	46.30 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	320.00 U

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (

Vt = Volume of total extract (ul)

$$\frac{\quad}{\quad} \text{ or } \frac{Ws}{30} \quad \frac{Vt}{40000} \quad \frac{Vi}{3}$$

ORGANICS ANALYSIS DATA SHEET

(PAGE 3)

SAMPLE NUMBER:
BG-071

LABORATORY NAME: NANCO LABS, INC.
CASE NO: EPA 6099

PESTICIDE/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/86
Date Analyzed: 7/2/86
Conc/Dil Factor: ----> 1
Percent Moisture: 7

GPC Cleanup: Yes__X__ No____
Separatory Funnel Extraction: Yes____
Continuous Liquid-Liquid Extraction: Yes____

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	16.00 U
319-85-7	Beta-BHC	16.00 U
319-86-8	Delta-BHC	16.00 U
58-89-9	Gamma-BHC (Lindane)	16.00 U
76-44-8	Heptachlor	16.00 U
309-00-2	Aldrin	16.00 U
1024-57-3	Heptachlor Epoxide	16.00 U
959-98-8	Endosulfan I	16.00 U
60-57-1	Dieldrin	4.80 J
72-55-9	4,4'-DDE	32.00 U
72-20-8	Endrin	32.00 U
33213-65-9	Endosulfan II	32.00 U
72-54-8	4,4'-DDD	9.70 J
7421-93-4	Endrin Aldehyde	32.00 U
1031-07-8	Endosulfan Sulfate	135.00
50-29-3	4,4'-DDT	32.00 U
53494-70-5	Endrin Ketone	32.00 U
72-43-5	Methoxychlor	160.00 U
57-74-9	Chlordane	46.30 J
8001-35-2	Toxaphene	320.00 U
12674-11-2	Aroclor-1016	160.00 U
11104-28-2	Aroclor-1221	160.00 U
11141-16-5	Aroclor-1232	160.00 U
53469-21-9	Aroclor-1242	160.00 U
12672-29-6	Aroclor-1248	160.00 U
11097-69-1	Aroclor-1254	320.00 U
11096-82-5	Aroclor-1260	320.00 U

Vi = Volume of extract injected (ul)

Vs = Volume of water extracted (ml)

Ws = Weight of sample extracted (g)

Vt = Volume of total extract (ul)

Vs _____ or Ws 30 Vt 40000 Vi 3

Form I G

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE 217

Date 7 17 86

INORGANIC ANALYSIS DATA SHEET

LAB NAME JTC Environmental Cnslts. CASE NO. 6099

SOW NO. 784

LAB SAMPLE ID. NO. 73 3429 QC REPORT NO. 269

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	6440	P	13.	Magnesium	5160	P
2.	Antimony	29U	P	14.	Manganese	232	P
3.	Arsenic	5.8U	F	15.	Mercury	0.12U	Cold.V.
4.	Barium	[59]	P	16.	Nickel	[14]	P
5.	Beryllium	2.3U	P	17.	Potassium	2890U	A
6.	Cadmium	2.9U	P	18.	Selenium	3.0U	F
7.	Calcium	11600	P	19.	Silver	5.7U	P
8.	Chromium	14	P	20.	Sodium	2720U	P
9.	Cobalt	9.8U	P	21.	Thallium	3.1U	F
10.	Copper	36	P	22.	Tin	17U	P
11.	Iron	15200	P	23.	Vanadium	25	P
12.	Lead	238 +	P	24.	Zinc	169	P

Cyanide NR Auto An Percent Solids (%) 86.5

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

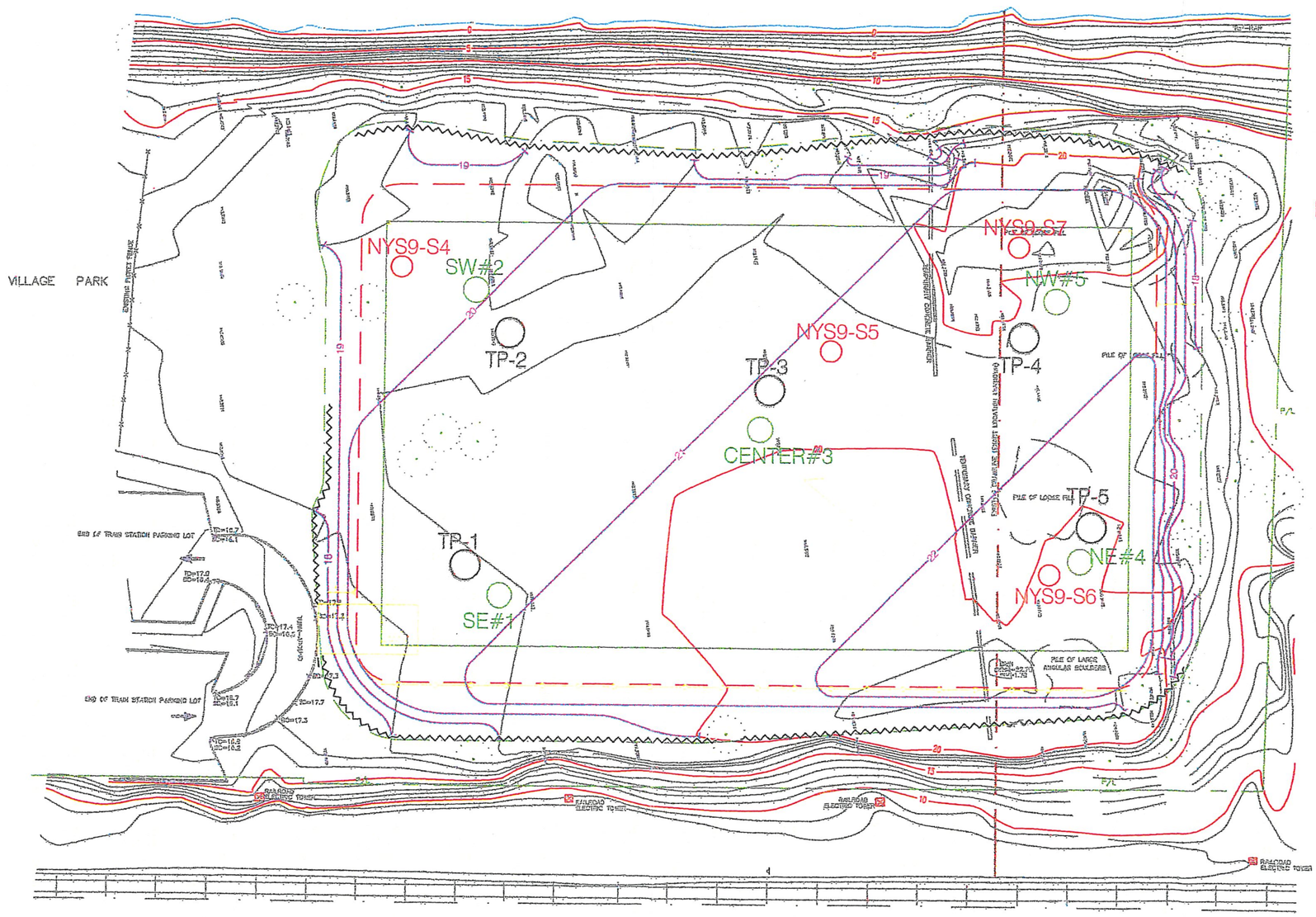
Comments: _____

Lab Manager EB

APPENDIX 4

Sample Location Plan, Village of Dobbs Ferry (2002) and Potomac-Hudson Environmental, Inc. (2002) Data Tables

HUDSON RIVER



METRO NORTH COMMUTER RAILROAD

NYS9-S4 ○ Approximate location of USEPA/NUS 1986 Sample

SW#2 ○ Approximate Location Village of Dobbs Ferry May 2002 Sample

TP-3 ○ Potomac-Hudson Env. October 2002 Test Pit Location

NAD 83

GRAPHIC SCALE (IN FEET)
0 50 100 150

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	PROJECT #	SHEET #
5/18/04	MDS	KEP	AS SHOWN	454	1 OF 1

POTOMAC-HUDSON ENVIRONMENTAL, INC.
168 John Street, PO Box 7, South Amboy, NJ 08879
23 Chapel Avenue, Jersey City, NJ 07305
136 W. 16th Street, Suite 3E, POB 1206, New York, NY 10011

DATE	REVISION	DRAWN BY	REVIEWED BY	RELEASED BY

Previous Sample Locations Waterfront Park Recreational Field Dobbs Ferry, New York

SOURCE: Vollmer Associates LLP

FIGURE # 2

TABLE 2
SOIL SAMPLE RESULTS - VOLATILE ORGANICS
PHE (OCTOBER 2002)
DOBBS FERRY WATERFRONT PARK, DOBBS FERRY, NY

Client ID:	NYSDEC Recommended Soil Cleanup Objective (ppm)	NYSDEC Soil Cleanup Obj. Protective of GW quality (ppm)	TP1A			TP1B			TP2A			TP2B			TP3A			TP3B			TP4A			TP4B			TP5A			TP5B			TP5C [1]		
Sample Depth (ft):			0-0.5			9.5-10			0-0.5			9.5-10			0-0.5			9.5-10			0-0.5			10-11			0-0.5			9.5-10			9.5-10		
Lab ID:			7622-001			7622-002			7622-003			7622-004			7622-005			7622-006			7622-007			7622-008			7622-009			7622-010			7622-011		
Date Sampled:			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002			10/01/2002		
Matrix:			Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil		
Volatiles (ppm)			Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Chloromethane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Vinyl Chloride	0.2	0.12	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Bromomethane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Chloroethane	1.9	1.9	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Trichlorofluoromethane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Acrolein	NA	NA	ND		0.012	ND		0.012	ND		0.014	ND		0.012	ND		0.011	ND		0.013	ND		0.011	ND		0.013	ND		0.011	ND		0.012	ND		0.012
1,1-Dichloroethene	0.4	0.4	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Methylene Chloride	0.1	0.1	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Acrylonitrile	NA	NA	ND		0.012	ND		0.012	ND		0.014	ND		0.012	ND		0.011	ND		0.013	ND		0.011	ND		0.013	ND		0.011	ND		0.012	ND		0.012
trans-1,2-Dichloroethene	0.3	0.3	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,1-Dichloroethane	0.2	0.2	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Chloroform	0.3	0.3	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,1,1-Trichloroethane	0.8	0.76	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Carbon Tetrachloride	0.6	0.6	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,2-Dichloroethane(EDC)	0.1	0.1	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Benzene	0.06	0.06	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	0.00264	J	0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Trichloroethene	0.7	0.7	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,2-Dichloropropane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Bromodichloromethane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
2-Chloroethylvinyl Ether	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
cis-1,3-Dichloropropene	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Toluene	1.5	1.5	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
trans-1,3-Dichloropropene	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,1,2-Trichloroethane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Tetrachloroethene	1.4	1.4	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Dibromochloromethane	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Chlorobenzene	1.7	1.7	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	0.027		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Ethylbenzene	5.5	5.5	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	0.00322	J	0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Total Xylenes	1.2	1.2	ND		0.00575	0.082		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	0.018		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
Bromoform	NA	NA	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,1,2,2-Tetrachloroethane	0.6	0.6	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,3-Dichlorobenzene	1.6	1.55	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,4-Dichlorobenzene	8.5	8.5	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	0.00393	J	0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
1,2-Dichlorobenzene	7.9	7.9	ND		0.00575	ND		0.0061	ND		0.00705	ND		0.0061	ND		0.0055	ND		0.0063	ND		0.00555	ND		0.0067	ND		0.0054	ND		0.006	ND		0.0058
TOTAL VO's:			ND			0.082			ND			ND			ND			0.055	J		ND			ND			ND			ND			ND		
TOTAL TIC's:			ND			0.00952			ND			0.00756			ND			0.183			ND			ND			ND			ND			ND		
TOTAL VO's & TIC's:	10 [2]	NA	ND			0.091			ND			0.00756			ND			0.238	J		ND			ND			ND			ND			ND		

(1) Sample TP5C is duplicate of sample TP5B

(2) Total VO's should be less than 100 ppm

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

NA = Not Available

J = The concentration was detected at a value below the MDL

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

Concentration exceeds NYSDEC Recommended Soil Cleanup Objective

TABLE 3
SOIL SAMPLE RESULTS - SEMIVOLATILE ORGANICS
PHE (OCTOBER 2002)
DOBBS FERRY WATERFRONT PARK, DOBBS FERRY, NY

Client ID:	NYSDEC Recommended	NYSDEC Soil Cleanup	TP1A		TP1B		TP2A		TP2B		TP3A		TP3B		TP4A		TP4B		TP5A		TP5B		TP5C [1]	
Sample Depth (ft):	Soil	Obj. Protective	0-0.5		9.5-10		0-0.5		9.5-10		0-0.5		9.5-10		0-0.5		10-11		0-0.5		9.5-10		9.5-10	
Lab ID:	Cleanup	of GW	7622-001		7622-002		7622-003		7622-004		7622-005		7622-006		7622-007		7622-008		7622-009		7622-010		7622-011	
Date Sampled:	Objective	quality	10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002	
Matrix:	(ppm)	(ppm)	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Semivolatiles - BNA (ppm)																								
N-Nitrosodimethylamine	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Phenol	0.03 or MDL	0.03	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Aniline	0.1	0.1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
bis(2-Chloroethyl)ether	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2-Chlorophenol	0.8	0.8	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
1,3-Dichlorobenzene	1.6	1.55	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
1,4-Dichlorobenzene	8.5	8.5	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Benzyl alcohol	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
1,2-Dichlorobenzene	7.9	7.9	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2-Methylphenol	0.1 or MDL	0.1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
bis(2-chloroisopropyl)ether	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
4-Methylphenol	0.9	0.9	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
N-Nitroso-di-n-propylamine	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Hexachloroethane	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Nitrobenzene	0.2 or MDL	0.2	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Isophorone	4.4	4.4	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2-Nitrophenol	0.33 or MDL	0.33	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2,4-Dimethylphenol	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
bis(2-Chloroethoxy)methane	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Benzoic acid	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2,4-Dichlorophenol	0.4	0.4	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
1,2,4-Trichlorobenzene	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Naphthalene	13	13	ND	0.217	0.167 J	0.214	ND	0.258	ND	0.206	ND	0.199	0.246	0.227	ND	0.199	ND	0.254	0.364	0.194	0.167 J	0.228	1.04	0.462
4-Chloroaniline	0.22 or MDL	0.22	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Hexachlorobutadiene	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
4-Chloro-3-methylphenol	0.24 or MDL	0.24	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2-Methylnaphthalene	36.4	36.4	ND	0.217	0.370	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	0.560	0.462
Hexachlorocyclopentadiene	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2,4,6-Trichlorophenol	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2,4,5-Trichlorophenol	0.1	0.1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2-Chloronaphthalene	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2-Nitroaniline	0.43 or MDL	0.43	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Dimethylphthalate	2	2	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2,6-Dinitrotoluene	1	1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Acenaphthylene	41	41	ND	0.217	0.538	0.214	0.280	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	0.159 J	0.254	1.72	0.194	0.326	0.228	1.23	0.462
3-Nitroaniline	0.5 or MDL	0.5	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Acenaphthene	50 [2]	90	ND	0.217	2.58	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	0.214 J	0.228	2.61	0.462
2,4-Dinitrophenol	0.2 or MDL	0.2	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
4-Nitrophenol	0.1 or MDL	0.1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
2,4-Dinitrotoluene	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Dibenzofuran	6.2	6.2	ND	0.217	1.80	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Diethylphthalate	7.1	7.1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	0.170 J	0.194	ND	0.228	2.31	0.462
Fluorene	50 [2]	350	ND	0.217	4.02	0.214	0.221 J	0.258	ND	0.206	ND	0.199	0.139 J	0.227	ND	0.199	ND	0.254	0.235	0.194	0.276	0.228	3.32	0.462
4-Chlorophenyl-phenylether	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
4-Nitroaniline	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
4,6-Dinitro-2-methylphenol	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
N-Nitrosodiphenylamine	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
1,2-Diphenylhydrazine/Azobenzene	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
4-Bromophenyl-phenylether	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Hexachlorobenzene	0.41	1.4	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Pentachlorophenol	1 or MDL	1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462

TABLE 3
SOIL SAMPLE RESULTS - SEMIVOLATILE ORGANICS
PHE (OCTOBER 2002)
DOBBS FERRY WATERFRONT PARK, DOBBS FERRY, NY

Client ID:	NYSDEC Recommended	NYSDEC Soil Cleanup	TP1A		TP1B		TP2A		TP2B		TP3A		TP3B		TP4A		TP4B		TP5A		TP5B		TP5C [1]	
Sample Depth (ft):	Soil	Obj. Protective	0-0.5		9.5-10		0-0.5		9.5-10		0-0.5		9.5-10		0-0.5		10-11		0-0.5		9.5-10		9.5-10	
Lab ID:	Cleanup	of GW	7622-001		7622-002		7622-003		7622-004		7622-005		7622-006		7622-007		7622-008		7622-009		7622-010		7622-011	
Date Sampled:	Objective	quality	10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002	
Matrix:	(ppm)	(ppm)	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Semivolatiles - BNA (ppm) (CONT.)																								
Phenanthrene	50 [2]	220	0.398	0.217	29.3	0.214	2.32	0.258	0.181 J	0.206	ND	0.199	0.467	0.227	0.409	0.199	0.696	0.254	1.71	0.194	2.23	0.228	38.2	0.462
Anthracene	50 [2]	700	ND	0.217	13.7	0.214	0.668	0.258	ND	0.206	ND	0.199	0.163 J	0.227	ND	0.199	0.303	0.254	1.21	0.194	0.758	0.228	8.16	0.462
Carbazole	NA	NA	ND	0.217	1.71	0.214	0.155 J	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	0.183 J	0.194	0.312	0.228	4.05	0.462
Di-n-butylphthalate	8.1	8.1	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Fluoranthene	50 [2]	1900	1.23	0.217	30.8	0.214	3.81	0.258	0.283	0.206	ND	0.199	1.01	0.227	0.799	0.199	1.38	0.254	10.6	0.194	4.25	0.228	44.6	0.462
Benzidine	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Pyrene	50 [2]	665	1.11	0.217	24.9	0.214	3.46	0.258	0.275	0.206	0.119 J	0.199	1.17	0.227	0.777	0.199	1.54	0.254	9.04	0.194	3.13	0.228	35.3	0.462
3,3'-Dimethylbenzidine	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Butylbenzylphthalate	50 [2]	122	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
3,3'-Dichlorobenzidine	NA	NA	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Benzo[a]anthracene	0.224 or MDL	3	0.826	0.217	13.4	0.214	1.98	0.258	0.188 J	0.206	ND	0.199	0.822	0.227	0.482	0.199	0.933	0.254	8.25	0.194	2.55	0.228	18.6	0.462
Chrysene	0.4	0.4	1.08	0.217	15.3	0.214	2.08	0.258	0.277	0.206	ND	0.199	1.33	0.227	0.621	0.199	1.22	0.254	8.93	0.194	2.97	0.228	20.4	0.462
bis(2-Ethylhexyl)phthalate	50 [2]	435	0.587	0.217	0.255	0.214	ND	0.258	0.501	0.206	ND	0.199	2.14	0.227	ND	0.199	0.526	0.254	ND	0.194	0.148 J	0.228	ND	0.462
Di-n-octylphthalate	50 [2]	120	ND	0.217	ND	0.214	ND	0.258	ND	0.206	ND	0.199	ND	0.227	ND	0.199	ND	0.254	ND	0.194	ND	0.228	ND	0.462
Benzo[b]fluoranthene	1.1	1.1	0.864	0.217	7.76	0.214	1.09	0.258	0.136 J	0.206	ND	0.199	0.718	0.227	0.336	0.199	0.798	0.254	6.09	0.194	2.65	0.228	13.1	0.462
Benzo[k]fluoranthene	1.1	1.1	0.671	0.217	8.13	0.214	1.44	0.258	0.166 J	0.206	ND	0.199	0.639	0.227	0.484	0.199	0.749	0.254	6.90	0.194	1.65	0.228	13.5	0.462
Benzo[a]pyrene	0.061 or MDL	11	0.901	0.217	10.3	0.214	1.58	0.258	0.176 J	0.206	ND	0.199	1.06	0.227	0.480	0.199	1.10	0.254	7.64	0.194	2.65	0.228	15.6	0.462
Indeno[1,2,3-cd]pyrene	3.2	3.2	0.690	0.217	6.03	0.214	1.08	0.258	0.137 J	0.206	ND	0.199	0.514	0.227	0.335	0.199	0.745	0.254	4.36	0.194	1.72	0.228	11.4	0.462
Dibenz[a,h]anthracene	0.014 or MDL	165,000	0.439	0.217	3.04	0.214	0.490	0.258	ND	0.206	ND	0.199	0.308	0.227	0.182 J	0.199	0.403	0.254	2.30	0.194	0.846	0.228	5.40	0.462
Benzo[g,h,i]perylene	50 [2]	800	0.791	0.217	6.03	0.214	1.13	0.258	0.190 J	0.206	ND	0.199	0.887	0.227	0.366	0.199	0.777	0.254	4.07	0.194	1.68	0.228	11.6	0.462
TOTAL BNA'S:			9.59		180 J		21.8 J		2.51 J		0.119 J		11.6 J		5.27 J		11.3 J		73.8 J		28.5 J		251	
TOTAL TIC's:			ND		21.9		1.63		ND		ND		9.53		ND		ND		23.3		2.41		40.7	
TOTAL BNA'S & TIC's:	500 [3]	NA	9.59		202 J		23.4 J		2.51 J		0.119 J		21.1 J		5.27 J		11.3 J		97.0 J		30.9 J		292	

(1) Sample TP5C is duplicate of sample TP5B

(2) Individual SVOs should be less 50 ppm

(3) Total SVOs should be less than 500 ppm

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

NA = Not Available

J = The concentration was detected at a value below the MDL

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

[ ] Concentration exceeds NYSDEC Recommended Soil Cleanup Objective

TABLE 4
SOIL SAMPLE RESULTS - PESTICIDES/PCBs/METALS/GENERAL CHEMISTRY
VILLAGE OF DOBBS FERRY (MAY 2002) and PHE (OCTOBER 2002)
DOBBS FERRY WATERFRONT PARK, DOBBS FERRY, NY

Client ID: / Sample Depth (ft): / Lab ID: / Date Sampled: / Matrix:	NYSDEC Recommended Soil Cleanup Objective (ppm)	NYSDEC Soil Cleanup Obj. Protective of GW quality (ppm)	SE#1 0-0.5 02050532-01 05/22/2002 Soil		SW#2 0-0.5 02050532-02 05/22/2002 Soil		CENTER #3 0-0.5 02050532-03 05/22/2002 Soil		NE#4 0-0.5 02050532-04 05/22/2002 Soil		NW#5 0-0.5 02050532-05 05/22/2002 Soil		TP1B 9.5-10 7622-002 10/01/2002 Soil		TP2B 9.5-10 7622-004 10/01/2002 Soil		TP3B 9.5-10 7622-006 10/01/2002 Soil		TP4B 10-11 7622-008 10/01/2002 Soil		TP5B 9.5-10 7622-010 10/01/2002 Soil		TP5C [1] 9.5-10 7622-011 10/01/2002 Soil	
PCB's (ppm)																								
Aroclor-1016	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Aroclor-1221	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Aroclor-1232	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Aroclor-1242	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Aroclor-1248	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Aroclor-1254	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Aroclor-1260	1 surf; 10 subsurf [2]	10	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.02	ND	0.019	ND	0.016	ND	0.019	ND	0.020	ND	0.018	ND	0.017
Pesticides (ppm)																								
alpha-BHC	0.11	0.2	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
beta-BHC	0.2	0.2	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
gamma-BHC (Lindane)	0.06	0.06	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
delta-BHC	0.3	0.3	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Heptachlor	0.1	0.1	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Aldrin	0.041	0.5	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Heptachlor epoxide	0.02	0.02	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Endosulfan I	0.9	0.9	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
4,4'-DDE	2.1	4.4	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	0.00815	0.00409	0.00986	0.00472	0.033	0.00491	0.018	0.00461	0.00602	0.00421
Dieldrin	0.044	0.1	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	0.011	0.00491	ND	0.00461	0.00867	0.00421
Endrin	0.1	0.1	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Endosulfan II	0.9	0.9	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
4,4'-DDD	2.9	7.7	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	0.036	0.00409	0.021	0.00472	0.056	0.00491	0.011	0.00461	ND	0.00421
Endrin aldehyde	NA	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Endosulfan sulfate	1	1	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
4,4'-DDT	2.1	2.5	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.00464	ND	0.00409	ND	0.00472	ND	0.00491	ND	0.00461	ND	0.00421
Chlordane	0.54	2	0.148	0.050	0.123	0.050	ND	0.050	ND	0.050	0.0632	0.050	ND	0.023	0.245	0.021	0.160	0.024	0.150	0.024	0.171	0.023	0.556	0.021
Methoxychlor	(4)	900	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	~	~	~	~	~	~	~	~	~	~	~	~
Toxaphene	NA	NA	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.023	ND	0.021	ND	0.024	ND	0.024	ND	0.023	ND	0.021
Metals (ppm)																								
Antimony	SB	NA	ND	0.80	ND	0.80	ND	0.80	ND	0.80	ND	0.80	ND	1.22	ND	1.22	ND	1.25	ND	1.32	ND	1.20	ND	1.15
Arsenic	7.5 or SB	NA	7.33	1.00	5.00	1.00	4.81	1.00	2.78	1.00	4.75	1.00	3.75	1.22	3.47	1.22	4.80	1.25	4.45	1.32	4.39	1.20	3.51	1.15
Beryllium	0.16 or SB	NA	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.608	ND	0.608	ND	0.625	ND	0.662	ND	0.598	ND	0.573
Cadmium	1 or SB	NA	ND	0.30	ND	0.30	ND	0.30	ND	0.30	ND	0.30	0.674	0.304	0.579	0.304	2.71	0.313	1.09	0.331	0.367	0.299	0.479	0.287
Chromium	10 or SB	NA	16.1	0.50	16.1	0.50	12.8	0.50	15.6	0.50	13.8	0.50	29.8	2.43	55.2	2.43	40.1	2.50	25.1	2.65	22.0	2.39	23.4	2.29
Copper	25 or SB	NA	34.7	0.60	29.0	0.60	20.2	0.60	13.1	0.60	25.9	0.60	33.8	2.43	47.4	2.43	640	2.50	48.7	2.65	39.3	2.39	36.6	2.29
Lead	SB [3]	NA	71.5	0.30	66.1	0.30	49.8	0.30	7.28	0.30	54.4	0.30	228	0.608	573	0.608	1000	0.625	341	0.662	146	0.598	139	0.573
Mercury	0.1	NA	~	~	~	~	~	~	~	~	~	~	0.379	0.015	0.242	0.015	0.960	0.062	0.343	0.017	0.761	0.060	0.438	0.014
Nickel	13 or SB	NA	16.4	0.90	15.3	0.90	14.5	0.90	14.4	0.90	14.9	0.90	20.2	1.22	18.7	1.22	25.2	1.25	20.4	1.32	19.0	1.20	14.9	1.15
Selenium	2 or SB	NA	1.36	1.00	1.51	1.00	ND	1.00	ND	1.00	ND	1.00	ND	2.43	ND	2.43	ND	2.50	ND	2.65	ND	2.39	ND	2.29
Silver	SB	NA	ND	0.30	ND	0.30	ND	0.30	ND	0.30	ND	0.30	ND	0.608	ND	0.608	ND	0.625	ND	0.662	ND	0.598	ND	0.573
Thallium	SB	NA	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	0.122	ND	0.122	ND	0.125	ND	0.132	ND	0.120	ND	0.115
Zinc	20 or SB	NA	102	0.60	80.8	0.60	54.1	0.60	34.5	0.60	77.6	0.60	195	2.43	210	2.43	535	2.50	330	2.65	145	2.39	131	2.29

TABLE 4
SOIL SAMPLE RESULTS - PESTICIDES/PCBs/METALS/GENERAL CHEMISTRY
VILLAGE OF DOBBS FERRY (MAY 2002) and PHE (OCTOBER 2002)
DOBBS FERRY WATERFRONT PARK, DOBBS FERRY, NY

Client ID:	NYSDEC Recommended	NYSDEC Soil Cleanup	SE#1		SW#2		CENTER #3		NE#4		NW#5		TP1B		TP2B		TP3B		TP4B		TP5B		TP5C [1]	
Sample Depth (ft):	Soil	Obj. Protective	0-0.5		0-0.5		0-0.5		0-0.5		0-0.5		9.5-10		9.5-10		9.5-10		10-11		9.5-10		9.5-10	
Lab ID:	Cleanup	of GW	02050532-01		02050532-02		02050532-03		02050532-04		02050532-05		7622-002		7622-004		7622-006		7622-008		7622-010		7622-011	
Date Sampled:	Objective	quality	05/22/2002		05/22/2002		05/22/2002		05/22/2002		05/22/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002		10/01/2002	
Matrix:	(ppm)	(ppm)	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
General Analytical																								
Cyanide, Total (ppm)	NA	NA	~	~	~	~	~	~	~	~	~	~	ND	1.22	ND	1.22	ND	1.26	ND	1.34	ND	1.20	ND	1.16
Total Recoverable Phenols (ppm)	NA	NA	~	~	~	~	~	~	~	~	~	~	ND	3.06	ND	3.05	ND	3.15	ND	3.36	ND	3.00	ND	2.90
Total Petroleum Hydrocarbons (ppr	NA	NA	~	~	~	~	~	~	~	~	~	~	2450	97.8	1500	48.7	2000	50.4	1000	26.9	1160	48.0	2730	92.8

(1) Sample TP5C is duplicate of sample TP5B

(2) Total PCB Cleanup Objective

(3) USEPA Residential Lead Standard for soil = 400 ppm in bare soil in childrens play area or 1200 ppm for bare soil in rest of yard

(4) As per TAGM #4046, Total VOCs <10 ppm

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

NA = Not Available

J = The concentration was detected at a value below the MDL

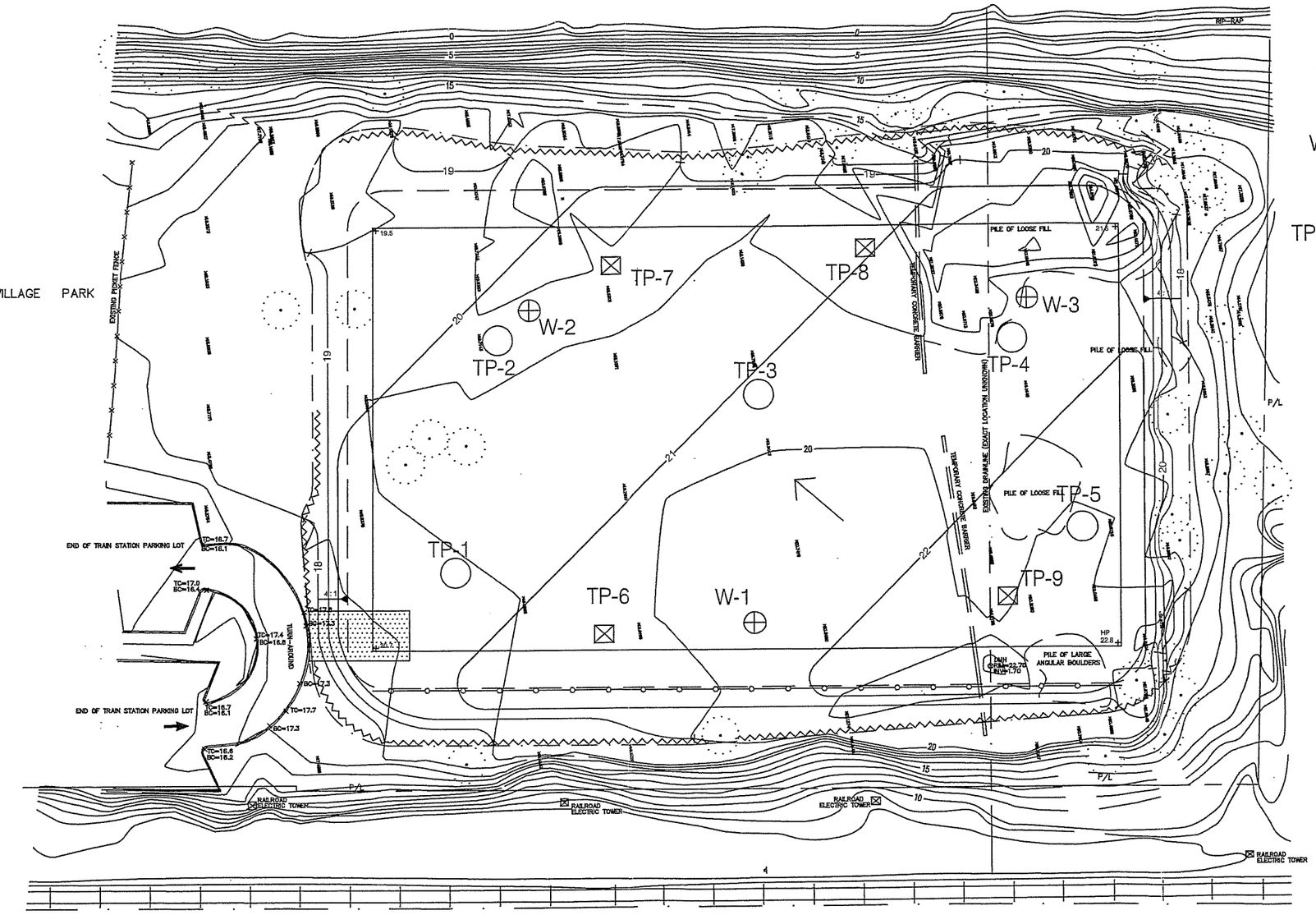
Concentration exceeds NYSDEC Recommended Soil Cleanup Objective

APPENDIX 5

Sample Location Plan and Potomac-Hudson Environmental, Inc. (2005) Data Tables and Data Usability Summary Report

HUDSON RIVER

VILLAGE PARK



TP-3 ○ Previous Test Pit Location (Oct. 2002)

W-1 ⊕ Temporary Well Location

TP-6 ⊠ Test Pit Location 2005

METRO NORTH COMMUTER RAILROAD

NAD 83

GRAPHIC SCALE (IN FEET)

0 50 100 150

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	PROJECT #	SHEET #
Sept. 05	MDS	KEP	AS SHOWN	454	1 OF 1

POTOMAC-HUDSON ENVIRONMENTAL, INC.

166 John Street
PO Box 7
South Amboy, NJ 08879

23 Chapel Avenue
Jersey City, NJ 07305

136 W. 16th Street
Suite 3E, POB 1206
New York, NY 10011

Site Plan/Sample Locations Waterfront Park Recreational Field Dobbs Ferry, New York

SOURCE: Paul J. Petretti

FIGURE # 2

C:\Projects\DobbsFerryWaterfront Park\Layout1.dwg LAYOUT:CorrectLayout3

TABLE 2
Soil Sample Summary - Test Pits 1/28/2005
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	TP6			TP7			TP8			TP9			TP10			FB		
	Sample Depth:	9			6			7			7.5			9					
	Lab ID:	N89577-2			N89577-3			N89577-4			N89577-5			N89577-6			N89577-1		
	Date Sampled:	1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005		
	Matrix:	Soil			Soil			Soil			Soil			Soil			Field Blank Soil		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
GC/MS Volatiles (ppm)	NYSDEC Recommended Soil Cleanup Objective (ppm)																		
Acetone	0.2	0.192		0.014	0.0046	J	0.014	0.0179		0.012	0.0177		0.013	0.156		0.013	ND		10
Benzene	0.06	ND		0.0014	ND		0.0014	ND		0.0012	ND		0.0013	ND		0.0013	ND		1
Bromodichloromethane	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Bromoform	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		4
Bromomethane	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		2
2-Butanone (MEK)	0.3	0.0646		0.014	ND		0.014	0.0073	J	0.012	ND		0.013	0.0512		0.013	ND		10
Carbon disulfide	2.7	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		2
Carbon tetrachloride	0.6	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Chlorobenzene	1.7	ND		0.0071	ND		0.0068	ND		0.0058	0.0051	J	0.0064	0.0026	J	0.0067	ND		1
Chloroethane	1.9	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Chloroform	0.3	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Chloromethane	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Dibromochloromethane	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
1,1-Dichloroethane	0.2	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
1,2-Dichloroethane	0.1	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
1,1-Dichloroethene	0.4	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
cis-1,2-Dichloroethene	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
trans-1,2-Dichloroethene	0.3	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
1,2-Dichloropropane	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
cis-1,3-Dichloropropene	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
trans-1,3-Dichloropropene	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Ethylbenzene	5.5	ND		0.0014	ND		0.0014	ND		0.0012	0.0018		0.0013	ND		0.0013	ND		1
2-Hexanone	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		5
4-Methyl-2-pentanone(MIBK)	1	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		5
Methylene chloride	0.1	0.0242		0.0071	0.0029	J	0.0068	0.0034	J	0.0058	0.0025	J	0.0064	0.0094		0.0067	ND		2
Styrene	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		5
1,1,2,2-Tetrachloroethane	0.6	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Tetrachloroethene	1.4	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Toluene	1.5	ND		0.0014	ND		0.0014	ND		0.0012	0.0017		0.0013	ND		0.0013	ND		1
1,1,1-Trichloroethane	0.8	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
1,1,2-Trichloroethane	NA	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Trichloroethene	0.7	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Vinyl chloride	0.2	ND		0.0071	ND		0.0068	ND		0.0058	ND		0.0064	ND		0.0067	ND		1
Xylene (total)	1.2	ND		0.0028	ND		0.0027	ND		0.0023	0.0061		0.0026	0.0014	J	0.0027	ND		1
TOTAL TARGETED GC/MS Volatiles (ppm)		0.2808			0.0075			0.0286			0.0349			0.2206			0		
TOTAL NON-TARGETED GC/MS Volatiles (ppm)		1.4468	J		0.9673	J		0.69	J		1.2	J		1.5898	J		0		
TOTAL GC/MS Volatiles (ppm)	10 [1]	1.7276			0.9748			0.7186			1.2349			1.8104			0		

TABLE 2
Soil Sample Summary - Test Pits 1/28/2005
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	TP6			TP7			TP8			TP9			TP10			FB		
	Sample Depth:	9			6			7			7.5			9					
	Lab ID:	N89577-2			N89577-3			N89577-4			N89577-5			N89577-6			N89577-1		
	Date Sampled:	1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005		
	Matrix:	Soil			Soil			Soil			Soil			Soil			Field Blank Soil		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
	NYSDEC Recommended Soil Cleanup Objective (ppm)																		
GC/MS Semi-volatiles (ppm)																			
2-Chlorophenol	0.8	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
4-Chloro-3-methyl phenol	0.240 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
2,4-Dichlorophenol	0.4	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
2,4-Dimethylphenol	NA	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
2,4-Dinitrophenol	0.2 or MDL	ND		0.85	ND		0.83	ND		4	ND		0.81	ND		0.86	ND		20
4,6-Dinitro-o-cresol	NA	ND		0.85	ND		0.83	ND		4	ND		0.81	ND		0.86	ND		20
2-Methylphenol	0.1 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
3&4-Methylphenol	0.9 (2)	ND		0.21	ND		0.21	ND		0.99	0.0965	J	0.2	ND		0.21	ND		5
2-Nitrophenol	0.33 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
4-Nitrophenol	0.1 or MDL	ND		0.85	ND		0.83	ND		4	ND		0.81	ND		0.86	ND		20
Pentachlorophenol	1.0 or MDL	ND		0.85	ND		0.83	ND		4	ND		0.81	ND		0.86	ND		20
Phenol	0.03 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
2,4,5-Trichlorophenol	0.1	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
2,4,6-Trichlorophenol	NA	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
Acenaphthene	50(1)	0.481		0.085	0.0249	J	0.083	ND		0.4	0.0253	J	0.081	0.0645	J	0.086	ND		2
Acenaphthylene	41	0.134		0.085	0.0393	J	0.083	ND		0.4	0.0472	J	0.081	0.0506	J	0.086	ND		2
Anthracene	50(1)	0.575		0.085	0.0688	J	0.083	ND		0.4	0.0877		0.081	0.0753	J	0.086	ND		2
Benzo(a)anthracene	0.224 or MDL	1.41		0.085	0.301		0.083	0.163	J	0.4	0.232		0.081	0.243		0.086	ND		2
Benzo(a)pyrene	0.061 or MDL	0.965		0.085	0.332		0.083	0.194	J	0.4	0.238		0.081	0.23		0.086	ND		2
Benzo(b)fluoranthene	1.1	0.791		0.085	0.353		0.083	0.19	J	0.4	0.297		0.081	0.234		0.086	ND		2
Benzo(g,h,i)perylene	50(1)	0.256		0.085	0.149		0.083	ND		0.4	ND		0.081	0.0887		0.086	ND		2
Benzo(k)fluoranthene	1.1	0.606		0.085	0.202		0.083	ND		0.4	0.243		0.081	0.247		0.086	ND		2
4-Bromophenyl phenyl ether	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
Butyl benzyl phthalate	50(1)	ND		0.085	0.0443	J	0.083	ND		0.4	ND		0.081	0.233		0.086	ND		2
2-Chloronaphthalene	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		5
4-Chloroaniline	0.220 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
Carbazole	NA	0.168		0.085	ND		0.083	ND		0.4	0.064	J	0.081	0.0334	J	0.086	ND		2
Chrysene	0.4	1.34		0.085	0.341		0.083	0.173	J	0.4	0.277		0.081	0.276		0.086	ND		2
bis(2-Chloroethoxy)methane	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
bis(2-Chloroethyl)ether	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
bis(2-Chloroisopropyl)ether	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
4-Chlorophenyl phenyl ether	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
1,2-Dichlorobenzene	7.9	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
1,3-Dichlorobenzene	1.6	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
1,4-Dichlorobenzene	8.5	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
2,4-Dinitrotoluene	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
2,6-Dinitrotoluene	1	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
3,3'-Dichlorobenzidine	NA	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
Dibenzo(a,h)anthracene	0.014 or MDL	0.129		0.085	0.0721	J	0.083	ND		0.4	ND		0.081	0.0354	J	0.086	ND		2
Dibenzofuran	6.2	0.332		0.085	ND		0.083	ND		0.4	0.0224	J	0.081	0.0406	J	0.086	ND		5
Di-n-butyl phthalate	8.1	ND		0.085	ND		0.083	ND		0.4	ND		0.081	0.0859	J	0.086	ND		2
Di-n-octyl phthalate	50(1)	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2

TABLE 2
Soil Sample Summary - Test Pits 1/28/2005
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	TP6			TP7			TP8			TP9			TP10			FB		
	Sample Depth:	9			6			7			7.5			9					
	Lab ID:	N89577-2			N89577-3			N89577-4			N89577-5			N89577-6			N89577-1		
	Date Sampled:	1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005		
	Matrix:	Soil			Soil			Soil			Soil			Soil			Field Blank Soil		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
	NYSDEC Recommended Soil Cleanup Objective (ppm)																		
Diethyl phthalate	7.1	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
Dimethyl phthalate	2	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
bis(2-Ethylhexyl)phthalate	50[1]	0.133		0.085	0.198		0.083	0.666		0.4	1.54		0.081	0.146		0.086	ND		2
Fluoranthene	50[1]	2.74		0.085	0.474		0.083	0.275	J	0.4	0.422		0.081	0.459		0.086	ND		2
Fluorene	50[1]	0.636		0.085	0.0289	J	0.083	ND		0.4	0.0386	J	0.081	0.0715	J	0.086	ND		2
Hexachlorobenzene	0.41	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
Hexachlorobutadiene	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
Hexachlorocyclopentadiene	NA	ND		0.85	ND		0.83	ND		4	ND		0.81	ND		0.86	ND		20
Hexachloroethane	NA	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
Indeno(1,2,3-cd)pyrene	3.2	0.264		0.085	0.142		0.083	ND		0.4	ND		0.081	0.085	J	0.086	ND		2
Isophorone	4.4	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
2-Methylnaphthalene	36.4	0.328		0.085	ND		0.083	ND		0.4	0.0424	J	0.081	0.0636	J	0.086	ND		2
2-Nitroaniline	0.43 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
3-Nitroaniline	0.5 or MDL	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
4-Nitroaniline	NA	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
Naphthalene	13	0.775		0.085	0.0234	J	0.083	ND		0.4	0.0703	J	0.081	0.209		0.086	ND		2
Nitrobenzene	0.2 or MDL	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
N-Nitroso-di-n-propylamine	NA	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
N-Nitrosodiphenylamine	NA	ND		0.21	ND		0.21	ND		0.99	ND		0.2	ND		0.21	ND		5
Phenanthrene	50[1]	2.32		0.085	0.215		0.083	0.147	J	0.4	0.33		0.081	0.264		0.086	ND		2
Pyrene	50[1]	2.15		0.085	0.466		0.083	0.249	J	0.4	0.304		0.081	0.375		0.086	ND		2
1,2,4-Trichlorobenzene	3.4	ND		0.085	ND		0.083	ND		0.4	ND		0.081	ND		0.086	ND		2
TOTAL TARGETED GC/MS Semi-volatiles (ppm)		16.533			3.4747			2.057			4.3774			3.6105			0		
TOTAL NON-TARGETED GC/MS Semi-volatiles (ppm)		9.96	J		3.13	J		34.84	J		67.11	J		5.73	J		0		
TOTAL GC/MS Semi-volatiles (ppm)	500[1]	26.493			6.6047			36.897			71.4874			9.3405			0		
GC Semi-volatiles (ppm) (SW846 8081A)																			
Aldrin	0.041	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
alpha-BHC	0.11	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
beta-BHC	0.2	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
delta-BHC	0.3	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
gamma-BHC (Lindane)	0.06	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
alpha-Chlordane	NA	0.0914		0.0032	0.0347		0.0016	0.003		0.0015	0.0672		0.0032	0.0491		0.0034	ND		0.02
gamma-Chlordane	0.54	0.0954		0.0032	0.0378		0.0016	0.0031		0.0015	0.0653		0.0032	0.045		0.0034	ND		0.02
Dieldrin	0.044	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
4,4'-DDD	2.9	0.108		0.0032	0.0101		0.0016	0.0016		0.0015	0.0148		0.0016	0.0471		0.0034	ND		0.02
4,4'-DDE	2.1	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
4,4'-DDT	2.1	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Endrin	0.1	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Endosulfan sulfate	1	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Endrin aldehyde	NA	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Endosulfan-I	0.9	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.05

TABLE 2
Soil Sample Summary - Test Pits 1/28/2005
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	TP6			TP7			TP8			TP9			TP10			FB		
	Sample Depth:	9			6			7			7.5			9					
	Lab ID:	N89577-2			N89577-3			N89577-4			N89577-5			N89577-6			N89577-1		
	Date Sampled:	1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005		
	Matrix:	Soil			Soil			Soil			Soil			Soil			Field Blank Soil		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
	NYSDEC Recommended Soil Cleanup Objective (ppm)																		
Endosulfan-II	0.9	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Heptachlor	0.1	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Heptachlor epoxide	0.02	ND		0.0016	ND		0.0016	ND		0.0015	ND		0.0016	ND		0.0017	ND		0.02
Methoxychlor	(1)	ND		0.0041	ND		0.004	ND		0.0038	ND		0.004	ND		0.0042	ND		0.02
Endrin ketone	NA	ND		0.0041	ND		0.004	ND		0.0038	ND		0.004	ND		0.0042	ND		0.05
Toxaphene	NA	ND		0.02	ND		0.02	ND		0.019	ND		0.02	ND		0.021	ND		0.25
Aroclor 1016	1 surf., 10 subsurf (3)	ND		0.041	ND		0.04	ND		0.038	ND		0.04	ND		0.042	ND		0.5
Aroclor 1221	1 surf., 10 subsurf (3)	ND		0.041	ND		0.04	ND		0.038	ND		0.04	ND		0.042	ND		0.5
Aroclor 1232	1 surf., 10 subsurf (3)	ND		0.041	ND		0.04	ND		0.038	ND		0.04	ND		0.042	ND		0.5
Aroclor 1242	1 surf., 10 subsurf (3)	ND		0.041	ND		0.04	ND		0.038	ND		0.04	ND		0.042	ND		0.5
Aroclor 1248	1 surf., 10 subsurf (3)	0.86		0.041	ND		0.04	ND		0.038	ND		0.04	ND		0.042	ND		0.5
Aroclor 1254	1 surf., 10 subsurf (3)	1.4		0.041	ND		0.04	0.0397		0.038	ND		0.04	0.767		0.042	ND		0.5
Aroclor 1260	1 surf., 10 subsurf (3)	0.47		0.041	0.0444		0.04	ND		0.038	ND		0.04	1.31		0.042	ND		0.5
TOTAL TARGETED GC Semi-volatiles (ppm)		3.0248			0.127			0.0474			0.1473			0.397			0		
Metals Analysis (ppm)														2.6152					
Aluminum	SB	7410		25	7300		24	10800		23	11300		24	8640		25	<200		200
Antimony	SB	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<5.0		5
Arsenic	7.5 or SB	5.9		1.2	2.7		1.2	6.1		1.2	8.3		1.2	3.8		1.2	<5.0		5
Barium	300 or SB	78.3		25	77.3		24	110		23	90.4		24	103		25	<200		200
Beryllium	0.16 (HEAST) or SB	<0.62		0.62	<0.61		0.61	<0.58		0.58	<0.59		0.59	<0.62		0.62	<5.0		5
Cadmium	1 or SB	1.1		0.62	<0.61		0.61	<0.58		0.58	<0.59		0.59	1		0.62	<4.0		4
Calcium	SB	8090		620	9290		610	8050		580	7630		590	12400		620	<5000		5000
Chromium	10 or SB	22.1		1.2	16.8		1.2	20.9		1.2	31.2		1.2	26.5		1.2	<10		10
Cobalt	30 or SB	9.9		6.2	<6.1		6.1	7.8		5.8	9.6		5.9	6.5		6.2	<50		50
Copper	25 or SB	104		3.1	32.2		3	25		2.9	70.9		2.9	78.7		3.1	<25		25
Iron	2,000 or SB	20900		12	13100		12	15700		12	25600		12	16700		12	<100		100
Lead	SB (4)	162		1.2	140		1.2	173		1.2	152		1.2	168		1.2	<3.0		3
Magnesium	SB	4260		620	5480		610	6210		580	5540		590	4690		620	<5000		5000
Manganese	SB	286		1.9	211		1.8	254		1.7	521		1.8	293		1.9	<15		15
Mercury	0.1	0.3		0.041	0.15		0.038	0.16		0.036	<0.036		0.036	<0.043		0.043	<0.20		0.2
Nickel	13 or SB	20.6		4.9	16.1		4.9	16.3		4.7	19.9		4.7	16.3		5	<40		40
Potassium	SB	1040		620	1310		610	1810		580	1930		590	1110		620	<5000		5000
Selenium	2 or SB	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<5.0		5
Silver	SB	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<10		10
Sodium	SB	<620		620	<610		610	<580		580	<590		590	<620		620	<5000		5000
Thallium	SB	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<1.2		1.2	<10		10
Vanadium	150 or SB	18.6		6.2	21.9		6.1	28		5.8	30.3		5.9	19.6		6.2	<50		50
Zinc	20 or SB	168		2.5	109		2.4	97.1		2.3	184		2.4	177		2.5	<20		20

TABLE 2
Soil Sample Summary - Test Pits 1/28/2005
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	TP6			TP7			TP8			TP9			TP10			FB		
	Sample Depth:	9			6			7			7.5			9					
	Lab ID:	N89577-2			N89577-3			N89577-4			N89577-5			N89577-6			N89577-1		
	Date Sampled:	1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005			1/28/2005		
	Matrix:	Soil			Soil			Soil			Soil			Soil			Field Blank Soil		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
	NYSDEC Recommended Soil Cleanup Objective (ppm)																		
General Chemistry (ppm)																			
Cyanide	NA	<0.29		0.29	<0.30		0.3	<0.26		0.26	<0.27		0.27	<0.30		0.3	<0.010		0.01
Solids, Percent (%)	NA	78.5			79.7			84.2			82.6			77.2					

(1) As per TAGM #4046, Total VOCs <10 ppm, Total Semi-VOCs <500 ppm, and Individual Semi-VOCs <50 ppm
(2) Soil Cleanup Objective for 4-Methylphenol
(3) Total PCB Cleanup Objective
(4) USEPA Residential Lead Standard for soil = 400 ppm bare soil in childrens play area or 1200 ppm for bare soil in rest of yard
NA = Not Available
SB = Site Background
ND = Not Detected at Indicated Method Detection Limit
Concentration Exceeds NYSDEC Groundwater Standard

TABLE 3
Soil Sample Summary - Well Locations 1/28/2005
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

	Client ID:	W1-S			W2-S			W3-S		
	Depth:	22-24			16-20			14-16		
	Lab ID:	N94857-1			N94857-4			N94857-7		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Soil			Soil			Soil		
	NYSDEC Recommended Soil Cleanup Objective (ppm)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
GC/MS Volatiles (ppm)										
Acetone	0.2	ND		0.021	0.0484		0.018	ND		0.023
Benzene	0.06	ND		0.0021	ND		0.0018	ND		0.0023
Bromodichloromethane	NA	ND		0.011	ND		0.0089	ND		0.011
Bromoform	NA	ND		0.011	ND		0.0089	ND		0.011
Bromomethane	NA	ND		0.011	ND		0.0089	ND		0.011
2-Butanone (MEK)	0.3	ND		0.021	ND		0.018	ND		0.023
Carbon disulfide	2.7	0.0076	J	0.011	0.0062	J	0.0089	0.011		0.011
Carbon tetrachloride	0.6	ND		0.011	ND		0.0089	ND		0.011
Chlorobenzene	1.7	0.0041	J	0.011	0.0134		0.0089	0.197		0.011
Chloroethane	1.9	ND		0.011	ND		0.0089	ND		0.011
Chloroform	0.3	ND		0.011	ND		0.0089	ND		0.011
Chloromethane	NA	ND		0.011	ND		0.0089	ND		0.011
Dibromochloromethane	NA	ND		0.011	ND		0.0089	ND		0.011
1,1-Dichloroethane	0.2	ND		0.011	ND		0.0089	ND		0.011
1,2-Dichloroethane	0.1	ND		0.011	ND		0.0089	ND		0.011
1,1-Dichloroethene	0.4	ND		0.011	ND		0.0089	ND		0.011
cis-1,2-Dichloroethene	NA	ND		0.011	ND		0.0089	ND		0.011
trans-1,2-Dichloroethene	0.3	ND		0.011	ND		0.0089	ND		0.011
1,2-Dichloropropane	NA	ND		0.011	ND		0.0089	ND		0.011
cis-1,3-Dichloropropene	NA	ND		0.011	ND		0.0089	ND		0.011
trans-1,3-Dichloropropene	NA	ND		0.011	ND		0.0089	ND		0.011
Ethylbenzene	5.5	ND		0.0021	0.004		0.0018	ND		0.0023
2-Hexanone	NA	ND		0.011	ND		0.0089	ND		0.011
4-Methyl-2-pentanone(MIBK)	1	ND		0.011	ND		0.0089	ND		0.011
Methylene chloride	0.1	0.0091	J	0.011	0.0063	J	0.0089	0.0066	J	0.011
Styrene	NA	ND		0.011	ND		0.0089	ND		0.011
1,1,2,2-Tetrachloroethane	0.6	ND		0.011	ND		0.0089	ND		0.011
Tetrachloroethene	1.4	ND		0.011	ND		0.0089	ND		0.011
Toluene	1.5	ND		0.0021	0.0024		0.0018	ND		0.0023
1,1,1-Trichloroethane	0.8	ND		0.011	ND		0.0089	ND		0.011
1,1,2-Trichloroethane	NA	ND		0.011	ND		0.0089	ND		0.011
Trichloroethene	0.7	ND		0.011	ND		0.0089	ND		0.011
Vinyl chloride	0.2	ND		0.011	ND		0.0089	ND		0.011
Xylene (total)	1.2	0.0049		0.0043	0.0649		0.0036	0.0051		0.0046
TOTAL TARGETED GC/MS Volatiles (ppm)		0.0257			0.1456			0.2197		
TOTAL NON-TARGETED GC/MS Volatiles (ppm)		1.256	J		1.032	J		0.244	J	

TABLE 3
Soil Sample Summary - Well Locations 1/28/2005
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

	Client ID:	W1-S			W2-S			W3-S		
	Depth:	22-24			16-20			14-16		
	Lab ID:	N94857-1			N94857-4			N94857-7		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Soil			Soil			Soil		
	NYSDEC Recommended Soil Cleanup Objective (ppm)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
TOTAL GC/MS Volatiles (ppm)	10 [1]	1.2817			1.1776			0.4637		
GC/MS Semi-volatiles (ppm)										
2-Chlorophenol	0.8	ND		0.27	ND		0.24	ND		0.84
4-Chloro-3-methyl phenol	0.240 or MDL	ND		0.27	ND		0.24	ND		0.84
2,4-Dichlorophenol	0.4	ND		0.27	ND		0.24	ND		0.84
2,4-Dimethylphenol	NA	ND		0.27	ND		0.24	ND		0.84
2,4-Dinitrophenol	0.2 or MDL	ND		1.1	ND		0.97	ND		3.3
4,6-Dinitro-o-cresol	NA	ND		1.1	ND		0.97	ND		3.3
2-Methylphenol	0.1 or MDL	ND		0.27	ND		0.24	ND		0.84
3&4-Methylphenol	0.9 [2]	ND		0.27	ND		0.24	0.677	J	0.84
2-Nitrophenol	0.33 or MDL	ND		0.27	ND		0.24	ND		0.84
4-Nitrophenol	0.1 or MDL	ND		1.1	ND		0.97	ND		3.3
Pentachlorophenol	1.0 or MDL	ND		1.1	ND		0.97	ND		3.3
Phenol	0.03 or MDL	ND		0.27	ND		0.24	ND		0.84
2,4,5-Trichlorophenol	0.1	ND		0.27	ND		0.24	ND		0.84
2,4,6-Trichlorophenol	NA	ND		0.27	ND		0.24	ND		0.84
Acenaphthene	50[1]	0.0356	J	0.11	0.0572	J	0.097	ND		0.33
Acenaphthylene	41	0.266		0.11	0.0232	J	0.097	ND		0.33
Anthracene	50[1]	0.17		0.11	0.0844	J	0.097	0.154	J	0.33
Benzo(a)anthracene	0.224 or MDL	0.702		0.11	0.156		0.097	0.262	J	0.33
Benzo(a)pyrene	0.061 or MDL	1.07		0.11	0.171		0.097	0.238	J	0.33
Benzo(b)fluoranthene	1.1	1.49		0.11	0.238		0.097	0.299	J	0.33
Benzo(g,h,i)perylene	50[1]	0.432		0.11	0.0665	J	0.097	ND		0.33
Benzo(k)fluoranthene	1.1	0.528		0.11	0.0832	J	0.097	0.153	J	0.33
4-Bromophenyl phenyl ether	NA	ND		0.11	ND		0.097	ND		0.33
Butyl benzyl phthalate	50[1]	ND		0.11	ND		0.097	1.26		0.33
2-Chloronaphthalene	NA	ND		0.11	ND		0.097	ND		0.33
4-Chloroaniline	0.220 or MDL	ND		0.27	ND		0.24	ND		0.84
Carbazole	NA	0.0576	J	0.11	0.0386	J	0.097	ND		0.33
Chrysene	0.4	0.702		0.11	0.189		0.097	0.287	J	0.33
bis(2-Chloroethoxy)methane	NA	ND		0.11	ND		0.097	ND		0.33
bis(2-Chloroethyl)ether	NA	ND		0.11	ND		0.097	ND		0.33
bis(2-Chloroisopropyl)ether	NA	ND		0.11	ND		0.097	ND		0.33
4-Chlorophenyl phenyl ether	NA	ND		0.11	ND		0.097	ND		0.33
1,2-Dichlorobenzene	7.9	ND		0.11	0.0299	J	0.097	ND		0.33
1,3-Dichlorobenzene	1.6	ND		0.11	ND		0.097	ND		0.33
1,4-Dichlorobenzene	8.5	ND		0.11	0.0684	J	0.097	0.261	J	0.33
2,4-Dinitrotoluene	NA	ND		0.11	ND		0.097	ND		0.33
2,6-Dinitrotoluene	1	ND		0.11	ND		0.097	ND		0.33
3,3'-Dichlorobenzidine	NA	ND		0.27	ND		0.24	ND		0.84
Dibenzo(a,h)anthracene	0.014 or MDL	0.127		0.11	ND		0.097	ND		0.33
Dibenzofuran	6.2	0.0299	J	0.11	0.0451	J	0.097	ND		0.33
Di-n-butyl phthalate	8.1	ND		0.11	0.0758	J	0.097	0.467		0.33
Di-n-octyl phthalate	50[1]	ND		0.11	0.355		0.097	ND		0.33

TABLE 3
Soil Sample Summary - Well Locations 1/28/2005
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

	Client ID:	W1-S			W2-S			W3-S		
	Depth:	22-24			16-20			14-16		
	Lab ID:	N94857-1			N94857-4			N94857-7		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Soil			Soil			Soil		
	NYSDEC Recommended Soil Cleanup Objective (ppm)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Diethyl phthalate	7.1	ND		0.11	ND		0.097	ND		0.33
Dimethyl phthalate	2	ND		0.11	ND		0.097	ND		0.33
bis(2-Ethylhexyl)phthalate	50[1]	0.584		0.11	3.76		0.097	8.01		0.33
Fluoranthene	50[1]	1.21		0.11	0.462		0.097	0.546		0.33
Fluorene	50[1]	0.0597	J	0.11	0.0976		0.097	0.141	J	0.33
Hexachlorobenzene	0.41	ND		0.11	ND		0.097	ND		0.33
Hexachlorobutadiene	NA	ND		0.11	ND		0.097	ND		0.33
Hexachlorocyclopentadiene	NA	ND		1.1	ND		0.97	ND		3.3
Hexachloroethane	NA	ND		0.27	ND		0.24	ND		0.84
Indeno(1,2,3-cd)pyrene	3.2	0.438		0.11	0.0612	J	0.097	ND		0.33
Isophorone	4.4	ND		0.11	ND		0.097	ND		0.33
2-Methylnaphthalene	36.4	0.0775	J	0.11	0.0627	J	0.097	0.4		0.33
2-Nitroaniline	0.43 or MDL	ND		0.27	ND		0.24	ND		0.84
3-Nitroaniline	0.5 or MDL	ND		0.27	ND		0.24	ND		0.84
4-Nitroaniline	NA	ND		0.27	ND		0.24	ND		0.84
Naphthalene	13	0.0335	J	0.11	0.149		0.097	0.53		0.33
Nitrobenzene	0.2 or MDL	ND		0.11	ND		0.097	ND		0.33
N-Nitroso-di-n-propylamine	NA	ND		0.11	ND		0.097	ND		0.33
N-Nitrosodiphenylamine	NA	ND		0.27	ND		0.24	ND		0.84
Phenanthrene	50[1]	0.395		0.11	0.479		0.097	0.648		0.33
Pyrene	50[1]	1.19		0.11	0.431		0.097	0.598		0.33
1,2,4-Trichlorobenzene	3.4	ND		0.11	ND		0.097	ND		0.33
TOTAL TARGETED GC/MS Semi-volatiles (ppm)		9.5978			7.1838			14.931		
TOTAL NON-TARGETED GC/MS Semi-volatiles (ppm)		27.64	J		82.23	J		83.14	J	
TOTAL GC/MS Semi-volatiles (ppm)	500[1]	37.2378			89.4138			98.071		
GC Semi-volatiles (ppm) (SW846 8081A)										
Aldrin	0.041	ND		0.0021	ND		0.0019	ND		0.0018
alpha-BHC	0.11	ND		0.0021	ND		0.0019	ND		0.0018
beta-BHC	0.2	ND		0.0021	ND		0.0019	ND		0.0018
delta-BHC	0.3	ND		0.0021	ND		0.0019	ND		0.0018
gamma-BHC (Lindane)	0.06	ND		0.0021	ND		0.0019	ND		0.0018
alpha-Chlordane	NA	ND		0.0021	ND		0.0019	ND		0.0018
gamma-Chlordane	0.54	ND		0.0021	ND		0.0019	ND		0.0018
Dieldrin	0.044	0.0063		0.0021	0.0164		0.0019	0.0216		0.0018
4,4'-DDD	2.9	ND		0.0021	0.784		0.019	0.0063		0.0018
4,4'-DDE	2.1	0.0103		0.0021	0.147		0.019	0.022		0.0018
4,4'-DDT	2.1	0.0059		0.0021	0.0268		0.0019	0.005		0.0018

TABLE 3
Soil Sample Summary - Well Locations 1/28/2005
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

	Client ID:	W1-S			W2-S			W3-S		
	Depth:	22-24			16-20			14-16		
	Lab ID:	N94857-1			N94857-4			N94857-7		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Soil			Soil			Soil		
	NYSDEC Recommended Soil Cleanup Objective (ppm)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Endrin	0.1	ND		0.0021	ND		0.0019	ND		0.0018
Endosulfan sulfate	1	ND		0.0021	ND		0.0019	ND		0.0018
Endrin aldehyde	NA	ND		0.0021	ND		0.0019	ND		0.0018
Endosulfan-I	0.9	ND		0.0021	ND		0.0019	ND		0.0018
Endosulfan-II	0.9	ND		0.0021	ND		0.0019	ND		0.0018
Heptachlor	0.1	ND		0.0021	ND		0.0019	ND		0.0018
Heptachlor epoxide	0.02	ND		0.0021	ND		0.0019	ND		0.0018
Methoxychlor	(1)	ND		0.0053	ND		0.0048	ND		0.0046
Endrin ketone	NA	ND		0.0053	ND		0.0048	ND		0.0046
Toxaphene	NA	ND		0.026	ND		0.024	ND		0.023
Aroclor 1016	1 surf., 10 subsurf (3)	ND		0.036	ND		0.034	ND		0.033
Aroclor 1221	1 surf., 10 subsurf (3)	ND		0.036	ND		0.034	ND		0.033
Aroclor 1232	1 surf., 10 subsurf (3)	ND		0.036	ND		0.034	ND		0.033
Aroclor 1242	1 surf., 10 subsurf (3)	0.521		0.036	0.356		0.034	0.237		0.033
Aroclor 1248	1 surf., 10 subsurf (3)	ND		0.036	ND		0.034	ND		0.033
Aroclor 1254	1 surf., 10 subsurf (3)	0.171		0.036	ND		0.034	0.138		0.033
Aroclor 1260	1 surf., 10 subsurf (3)	ND		0.036	0.0557		0.034	ND		0.033
TOTAL TARGETED GC Semi-volatiles (ppm)		0.7145			1.3859			0.4299		
Metals Analysis (ppm)										
Aluminum	SB	5890		33	6770		29	3520		28
Antimony	SB	<1.6		1.6	<1.4		1.4	<1.4		1.4
Arsenic	7.5 or SB	9		1.6	5.6		1.4	13.3		1.4
Barium	300 or SB	60.4		33	214		29	71.6		28
Beryllium	0.16 (HEAST) or SB	<0.81		0.81	<0.72		0.72	<0.70		0.7
Cadmium	1 or SB	<0.81		0.81	1.1		0.72	1.3		0.98
Calcium	SB	18800		810	11900		720	14400		700
Chromium	10 or SB	34.6		1.6	27.3		1.4	33		1.4
Cobalt	30 or SB	<8.1		8.1	7.9		7.2	8.8		7
Copper	25 or SB	97.5		4.1	41.2		3.6	70.3		3.5
Iron	2,000 or SB	67200		16	65300		14	108000		20
Lead	SB (4)	147		1.6	185		1.4	2830		1.4
Magnesium	SB	7180		810	4990		720	2250		700
Manganese	SB	326		2.4	366		2.2	709		2.1
Mercury	0.1	0.52		0.051	1.1		0.048	0.37		0.042
Nickel	13 or SB	22.7		6.5	17.6		5.8	24.9		5.6
Potassium	SB	1170		810	1210		720	<700		700
Selenium	2 or SB	2.9		1.6	2.1		1.4	7		1.4
Silver	SB	<1.6		1.6	<1.4		1.4	<1.4		1.4
Sodium	SB	<810		810	<720		720	799		700
Thallium	SB	<1.1		1.1	<1.0		1	<2.0		2
Vanadium	150 or SB	14.6		8.1	17.3		7.2	15		7
Zinc	20 or SB	256		3.3	1830		2.9	1250		2.8

TABLE 3
Soil Sample Summary - Well Locations 1/28/2005
Dobbs Ferry Waterfront Park
Dobbs Ferry, New York

	Client ID:	W1-S			W2-S			W3-S		
	Depth:	22-24			16-20			14-16		
	Lab ID:	N94857-1			N94857-4			N94857-7		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Soil			Soil			Soil		
	NYSDEC Recommended Soil Cleanup Objective (ppm)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
General Chemistry (ppm)										
Cyanide	NA	<0.37		0.37	<0.34		0.34	<1.6		1.6
Solids, Percent (%)	NA	89.7			95.6			99.8		

(1) As per TAGM #4046, Total VOCs <10 ppm, Total Semi-VOCs <500 ppm, and Individual Semi-VOCs <50 ppm
(2) Soil Cleanup Objective for 4-Methylphenol
(3) Total PCB Cleanup Objective
(4) USEPA Residential Lead Standard for soil = 400 ppm bare soil in childrens play area or 1200 ppm for bare soil in rest of yard
NA = Not Available
SB = Site Background
ND = Not Detected at Indicated Method Detection Limit
Concentration Exceeds NYSDEC Groundwater Standard

TABLE 4
Groundwater Sample Summary - Temporary Well Points
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	FB-S			FB-W			TB			W1-W			W2-W			W3-W			W4-W		
	Sample Depth:																					
	Lab ID:	N94857-2			N94857-9			N94857-10			N94857-3			N94857-5			N94857-8			N94857-6		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Field Blank Soil			Field Blank Soil			Trip Blank Soil			Ground Water			Ground Water			Ground Water			Ground Water		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
	NYSDEC Groundwater Standards (ppb)																					
GC/MS Volatiles (ppb)																						
Acetone	50	ND		10	ND		10	ND		10	ND		10	6.7	J	10	25.5		10	17.1		10
Benzene	0.7	ND		1	ND		1	ND		1	1.6		1	ND		1	2.3		1	ND		1
Bromodichloromethane		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Bromoform		ND		4	ND		4	ND		4	ND		4	ND		4	ND		4	ND		4
Bromomethane		ND		2	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2
2-Butanone (MEK)	50	ND		10	ND		10	ND		10	ND		10	ND		10	ND		10	ND		10
Carbon disulfide	50	ND		2	ND		2	ND		2	ND		2	0.49	J	2	1.1	J	2	ND		2
Carbon tetrachloride	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Chlorobenzene	5	ND		1	ND		1	ND		1	57		1	4.8		1	78.9		1	4.5		1
Chloroethane	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Chloroform	7	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Chloromethane		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Dibromochloromethane	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,1-Dichloroethane	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,2-Dichloroethane	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,1-Dichloroethene	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
cis-1,2-Dichloroethene		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
trans-1,2-Dichloroethene	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,2-Dichloropropane		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
cis-1,3-Dichloropropene		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
trans-1,3-Dichloropropene		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Ethylbenzene	5	ND		1	ND		1	ND		1	ND		1	0.98	J	1	1.7		1	0.9	J	1
2-Hexanone		ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5
4-Methyl-2-pentanone(MIBK)	50	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5
Methylene chloride	5	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2
Styrene		ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5
1,1,2,2-Tetrachloroethane	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Tetrachloroethene	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Toluene	5	ND		1	ND		1	ND		1	179		1	0.64	J	1	0.7	J	1	0.54	J	1
1,1,1-Trichloroethane	5	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,1,2-Trichloroethane		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Trichloroethene		ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Vinyl chloride	2	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Xylene (total)	5	ND		1	ND		1	ND		1	ND		1	20.8		1	12.8		1	18.8		1
TOTAL TARGETED GC/MS Volatiles (ppb)		0			0			0			237.6			34.41			123			41.84		
TOTAL NON-TARGETED GC/MS Volatiles (ppb)		0			0			0			0			0			49.7	J		0		
TOTAL GC/MS Volatiles (ppb)		0			0			0			237.6			34.41			172.7			41.84		

TABLE 4
Groundwater Sample Summary - Temporary Well Points
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	FB-S			FB-W			TB			W1-W			W2-W			W3-W			W4-W		
	Sample Depth:																					
	Lab ID:	N94857-2			N94857-9			N94857-10			N94857-3			N94857-5			N94857-8			N94857-6		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Field Blank Soil			Field Blank Soil			Trip Blank Soil			Ground Water			Ground Water			Ground Water			Ground Water		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
	NYSDEC Groundwater Standards (ppb)																					
GC/MS Semi-volatiles (ppb)																						
2-Chlorophenol	50	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
4-Chloro-3-methyl phenol	5	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
2,4-Dichlorophenol	1	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
2,4-Dimethylphenol		ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
2,4-Dinitrophenol	5	ND		20	ND		20	NA			ND		20	ND		22	ND		20	ND		21
4,6-Dinitro-o-cresol		ND		20	ND		20	NA			ND		20	ND		22	ND		20	ND		21
2-Methylphenol	5	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
3&4-Methylphenol	50 (1)	ND		5	ND		5.1	NA			ND		5	2.9	J	5.4	ND		5	2.9	J	5.2
2-Nitrophenol	5	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
4-Nitrophenol	5	ND		20	ND		20	NA			ND		20	ND		22	ND		20	ND		21
Pentachlorophenol	1	ND		20	ND		20	NA			ND		20	ND		22	ND		20	ND		21
Phenol	1	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
2,4,5-Trichlorophenol	1	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
2,4,6-Trichlorophenol		ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
Acenaphthene	20	ND		2	ND		2	NA			2.8		2	0.57	J	2.2	ND		2	ND		2.1
Acenaphthylene	20	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Anthracene	50	ND		2	ND		2	NA			0.91	J	2	ND		2.2	ND		2	ND		2.1
Benzo(a)anthracene	0.002	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Benzo(a)pyrene	0.002 (ND)	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Benzo(b)fluoranthene	0.002	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Benzo(g,h,i)perylene	5	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Benzo(k)fluoranthene	0.002	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
4-Bromophenyl phenyl ether		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Butyl benzyl phthalate	50	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
2-Chloronaphthalene		ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
4-Chloroaniline	5	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
Carbazole		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Chrysene	0.002	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
bis(2-Chloroethoxy)methane		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
bis(2-Chloroethyl)ether		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
bis(2-Chloroisopropyl)ether		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
4-Chlorophenyl phenyl ether		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
1,2-Dichlorobenzene	4.7	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
1,3-Dichlorobenzene	5	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
1,4-Dichlorobenzene	5	ND		2	ND		2	NA			2		2	0.74	J	2.2	0.94	J	2	0.77	J	2.1
2,4-Dinitrotoluene		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
2,6-Dinitrotoluene	5	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
3,3'-Dichlorobenzidine	NA	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
Dibenzo(a,h)anthracene	50	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Dibenzofuran	5	ND		5	ND		5.1	NA			1.3	J	5	ND		5.4	ND		5	ND		5.2

TABLE 4
Groundwater Sample Summary - Temporary Well Points
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	FB-S			FB-W			TB			W1-W			W2-W			W3-W			W4-W		
	Sample Depth:																					
	Lab ID:	N94857-2			N94857-9			N94857-10			N94857-3			N94857-5			N94857-8			N94857-6		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Field Blank Soil			Field Blank Soil			Trip Blank Soil			Ground Water			Ground Water			Ground Water			Ground Water		
	NYSDEC Groundwater Standards (ppb)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Di-n-butyl phthalate	50	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Di-n-octyl phthalate	50	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Diethyl phthalate	50	ND		2	ND		2	NA			ND		2	ND		2.2	1.9	J	2	ND		2.1
Dimethyl phthalate	50	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
bis(2-Ethylhexyl)phthalate	50	ND		2	1.7	J	2	NA			3		2	3.6		2.2	12.4		2	2	J	2.1
Fluoranthene	50	ND		2	ND		2	NA			1.8	J	2	ND		2.2	0.77	J	2	ND		2.1
Fluorene	50	ND		2	ND		2	NA			2.2		2	ND		2.2	ND		2	ND		2.1
Hexachlorobenzene	0.35	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Hexachlorobutadiene		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Hexachlorocyclopentadiene		ND		20	ND		20	NA			ND		20	ND		22	ND		20	ND		21
Hexachloroethane		ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
Indeno(1,2,3-cd)pyrene	0.002	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
Isophorone	50	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
2-Methylnaphthalene	50	ND		2	ND		2	NA			1.5	J	2	1	J	2.2	ND		2	0.9	J	2.1
2-Nitroaniline	5	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
3-Nitroaniline	5	ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
4-Nitroaniline		ND		5	ND		5.1	NA			ND		5	ND		5.4	ND		5	ND		5.2
Naphthalene	10	ND		2	ND		2	NA			1.2	J	2	2.2		2.2	4.5		2	2.2		2.1
Nitrobenzene	5	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
N-Nitroso-di-n-propylamine		ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
N-Nitrosodiphenylamine		ND		5	ND		5.1	NA			1.7	J	5	ND		5.4	ND		5	ND		5.2
Phenanthrene	50	ND		2	ND		2	NA			5		2	1.2	J	2.2	0.99	J	2	1	J	2.1
Pyrene	50	ND		2	ND		2	NA			1.2	J	2	ND		2.2	0.76	J	2	ND		2.1
1,2,4-Trichlorobenzene	5	ND		2	ND		2	NA			ND		2	ND		2.2	ND		2	ND		2.1
TOTAL TARGETED GC/MS Semi-volatiles (ppb)		0			1.7			NA			24.61			12.21			22.26			9.77		
TOTAL NON-TARGETED GC/MS Semi-volatiles (ppb)		0			0			NA			894.6	J		1855	J		671.3	J		1902	J	
TOTAL GC/MS Semi-volatiles (ppb)		0			1.7			NA			919.21			1867.21			693.56			1911.77		
GC Semi-volatiles (ppb) (SW846 8081A)																						
Aldrin	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
alpha-BHC	ND (<0.05)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
beta-BHC	ND (<0.05)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
delta-BHC	ND (<0.05)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
gamma-BHC (Lindane)	ND (<0.05)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
alpha-Chlordane		ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
gamma-Chlordane	0.1	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Dieldrin	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
4,4'-DDD	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	0.037		0.02	ND		0.021	0.023		0.02
4,4'-DDE	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	0.025		0.02	ND		0.021	0.02		0.02

TABLE 4
Groundwater Sample Summary - Temporary Well Points
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	FB-S			FB-W			TB			W1-W			W2-W			W3-W			W4-W		
	Sample Depth:																					
	Lab ID:	N94857-2			N94857-9			N94857-10			N94857-3			N94857-5			N94857-8			N94857-6		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Field Blank Soil			Field Blank Soil			Trip Blank Soil			Ground Water			Ground Water			Ground Water			Ground Water		
	NYSDEC Groundwater Standards (ppb)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
4,4'-DDT	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Endrin	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Endosulfan sulfate	0.1	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Endrin aldehyde		ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Endrin ketone	NA	ND		0.05	ND		0.051	NA			ND		0.05	ND		0.05	ND		0.052	ND		0.051
Endosulfan-I	0.1	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Endosulfan-II	0.1	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Heptachlor	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Heptachlor epoxide	ND (<0.01)	ND		0.02	ND		0.02	NA			ND		0.02	ND		0.02	ND		0.021	ND		0.02
Methoxychlor	35	ND		0.05	ND		0.051	NA			ND		0.05	ND		0.05	ND		0.052	ND		0.051
Toxaphene		ND		0.25	ND		0.25	NA			ND		0.25	ND		0.25	ND		0.26	ND		0.25
Aroclor 1016	0.1 (2)	ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
Aroclor 1221	0.1 (2)	ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
Aroclor 1232	0.1 (2)	ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
Aroclor 1242	0.1 (2)	ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
Aroclor 1248	0.1 (2)	ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
Aroclor 1254	0.1 (2)	ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
Aroclor 1260		ND		0.5	ND		0.51	NA			ND		0.5	ND		0.5	ND		0.52	ND		0.51
TOTAL TARGETED GC Semi-volatiles (ppb)		0			0			NA			0			0.062			0			0.043		
Metals Analysis (ppb)																						
Aluminum	NA	<200		200	<200		200	NA			1330		200	1040		200	316		200	<200		200
Antimony	3	<5.0		5	<5.0		5	NA			<5.0		5	5.9		5	5.2		5	<5.0		5
Arsenic	25	<5.0		5	<5.0		5	NA			13.4		5	18.1		5	10.8		5	19.5		5
Barium	1000	<200		200	<200		200	NA			375		200	274		200	<200		200	266		200
Beryllium	NA	<5.0		5	<5.0		5	NA			<5.0		5	<5.0		5	<5.0		5	<5.0		5
Cadmium	5	<4.0		4	<4.0		4	NA			<4.0		4	<4.0		4	<4.0		4	<4.0		4
Calcium	NA	<5000		5000	<5000		5000	NA			208000		5000	145000		5000	154000		5000	158000		5000
Chromium	50	<10		10	<10		10	NA			12.1		10	<10		10	<10		10	<10		10
Cobalt	NA	<50		50	<50		50	NA			<50		50	<50		50	<50		50	<50		50
Copper	200	<25		25	<25		25	NA			32.2		25	<25		25	<25		25	<25		25
Iron	300	<100		100	<100		100	NA			45800		100	28400		100	22000		100	27300		100
Lead	25	<3.0		3	<3.0		3	NA			36.8		3	20.1		3	13		3	<3.0		3
Magnesium	NA	<5000		5000	<5000		5000	NA			59700		5000	81400		5000	30200		5000	85800		5000
Manganese	300	<15		15	<15		15	NA			577		15	2340		15	1010		15	2360		15
Mercury	0.7	<0.20		0.2	<0.20		0.2	NA			0.35		0.2	<0.20		0.2	<0.20		0.2	<0.20		0.2
Nickel	100	<40		40	<40		40	NA			<40		40	<40		40	<40		40	<40		40
Potassium	NA	<5000		5000	<5000		5000	NA			81300		5000	56000		5000	49000		5000	59200		5000
Selenium	10	<5.0		5	<5.0		5	NA			<5.0		5	<5.0		5	<5.0		5	<5.0		5
Silver	50	<10		10	<10		10	NA			<10		10	<10		10	<10		10	<10		10

TABLE 4
Groundwater Sample Summary - Temporary Well Points
Dobbs Ferry Waterfront Park, Dobbs Ferry, NY

	Client ID:	FB-S			FB-W			TB			W1-W			W2-W			W3-W			W4-W		
	Sample Depth:																					
	Lab ID:	N94857-2			N94857-9			N94857-10			N94857-3			N94857-5			N94857-8			N94857-6		
	Date Sampled:	3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005			3/31/2005		
	Matrix:	Field Blank Soil			Field Blank Soil			Trip Blank Soil			Ground Water			Ground Water			Ground Water			Ground Water		
	NYSDEC Groundwater Standards (ppb)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Sodium	20,000	<5000		5000	<5000		5000	NA			410000		5000	295000		5000	310000		5000	308000		5000
Thallium	NA	<10		10	<10		10	NA			<10		10	<10		10	<10		10	<10		10
Vanadium	NA	<50		50	<50		50	NA			<50		50	<50		50	<50		50	<50		50
Zinc	NA	<20		20	<20		20	NA			110		20	445		20	181		20	389		20
General Chemistry (ppm)																						
Cyanide	200	<0.010		0.01	<0.010		0.01	NA			0.16		0.01	0.025		0.01	0.11		0.01	0.044		0.01

(1) Groundwater Standard for 4-Methylphenol
(2) Total PCB Groundwater Standard
NA = Not Available
ND = Not Detected at Indicated Method Detection Limit

Concentration Exceeds NYSDEC Groundwater Standard

DATA USABILITY SUMMARY REPORT (DUSR) 2005 DATA

The objective of the Data Usability Summary Report (DUSR) is to determine whether the data meets the site/project specific criteria for data quality and data use. The DUSR has been prepared by the Quality Assurance Officer, John Kerber. Mr. Kerber's resume was previously submitted to NYSDEC as part of the Site Investigation Workplan.

The laboratory data was reviewed for accuracy and usability in accordance with the guidelines set forth in Appendix B of the NYSDEC's Voluntary Cleanup Guide dated May 2002. The sample analysis reporting level was the NYSDEC Analytical Services Protocol (ASP) Category B deliverables.

All sample analyses conducted as part of this investigation were done by Accutest Laboratories, a New York State ASP/DOH certified laboratory (#10983). All samples were analyzed using standard USEPA SW-846 methodologies.

The following table presents a summary of the matrix type, number of samples, number of field and trip blanks, analytical parameters, and analytical methods.

Analytical Methods/QA Summary Table

# of Samples	Matrix	Parameter	EPA Method	Sample Duplicates	Field Blanks
7	Soil	TCL VO	8260B	1	1
7	Soil	TCL SVOCs	8270C	1	1
7	Soil	TCL Pesticide/ PCB	8081A/ 8082	1	1
7	Soil	Cyanide	9012M	1	1
7	Soil	TAL Metals	6010B/7471A	1	1
3	Aqueous	TCL VOCs	8260B	1	1
3	Aqueous	TCL SVOCs	8270C	1	1
3	Aqueous	TCL Pesticide/ PCB	8081A/ 8082	1	1
3	Aqueous	Cyanide	335.3	1	1
3	Aqueous	TAL Metals	6010B/7470A	1	1

Upon review, the data packages were found to be complete as defined under the requirements for the NYSDEC ASP Category B deliverables.

All holding times were met for the soil and groundwater sample analyses.

All of the QC data (i.e, blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data) fall within the protocol required limits and specifications with the following exceptions:

1. Job No. N89577 (Test Pit Soil Samples)

Volatiles (aqueous) Method 8260B

- Matrix spike/matrix spike duplicates recovery for benzene, ethylbenzene, xylene (total) are outside control limits due to high level in sample relative to spike amount.
- Matrix spike/matrix spike duplicates recovery for 2-butanone (MEK0 and benzene are outside control limits due to probable matrix interference.
- Sample N89228-3MSD has surrogate outside control limits due to probable matrix interference.
- N89626-6MS/MSD for 2-butanone (MEK) outside control limits due to matrix interference.
- N89626-6MS/MSD for acetone outside control limits due to matrix interference.

Volatiles (solid) Method 8260B

- Matrix spike recoveries for 1,1,2,2-tetrachloroethane, acetone, trichloroethene are outside control limits due to matrix interference.
- Matrix spike duplicate recoveries for 1,1,2,2-tetrachloroethane, acetone, trichloroethene are outside control limits due to matrix interference.
- RPD for MSD for 1,1,2,2-tetrachloroethane are outside control limits due to probable sample homogeneity.
- Sample N89228-3MSD has surrogates outside control limits due to probable matrix interference.
- N89228-3MSD for dibromofluoromethane outside control limits due to probable matrix interference/sample inhomogeneity.
- Matrix spike recovery for acetone is outside control limits due to high level in sample relative to spike amount.

Extractables (aqueous) Method 8270C

- Matrix spike recovery for 2-methylnaphthalene, 4-chloro-3-methyl- phenol, 4-chloroaniline, bis(2-chloroethyl)ether, hexachlorocyclopentadiene, N-Nitroso-di-n-propylamine are outside control limits due to matrix interference.
- Matrix spike duplicate recovery for 2-methylnaphthalene, 4-chloro-3-methyl-phenol, 4-chloroaniline, bis(2-chloroethyl)ether, hexachlorocyclopentadiene, N-

Nitroso-di-n-propylamine, N-Nitrosodiphenylamine are outside control limits due to matrix interference.

- Matrix spike recovery for 2,4-dimethylphenol, 2-methylphenol 3&4-methylphenol, phenol are outside control limits due to high level in sample relative to spike amount.
- RPD for MSD for 2,4,5-trichlorophenol, 2,4-dinitrophenol, 2-nitroaniline, 4-chloroaniline, 4-nitroaniline, n-nitrosodiphenylamine are outside control limits for sample OP19379-MSD due to probable sample homogeneity.
- OP19379-MSD for 4-nitroaniline, 2-nitroaniline and 2,4-dinitrophenol are outside control limits due to matrix interference.
- OP19379-MS for N-Nitroso-di-n-propylamine, hexachlorocyclopentadiene, bis(2-chloroethyl)ether, -chloroaniline, 4-chloro-3-methyl- phenol are outside control limits due to matrix interference.
- OP19379-MSD for 2,4,5-trichlorophenol outside control limits due to high level in sample relative to spike amount.

Extractables (solid) Method 8081A

- N89577-6 for gamma-Chlorodane reported 2nd signal. Percent D of end check (ECC) on 1st signal excess method criteria (15%) so using for confirmation only.
- N89577-4 for alpha-Chlorodane more than 40% RPD for detected concentrations between the two GC columns.
- N89577-3 for alpha-Chlorodane more than 40% RPD for detected concentrations between the two GC columns.
- N89577-2 for gamma-Chlorodane more than 40% RPD for detected concentrations between the two GC columns.
- N89577-2 for alpha-Chlorodane more than 40% RPD for detected concentrations between the two GC columns.
- N89577-5 for gamma-Chlorodane reported 2nd signal. Percent D of end check (ECC) on 1st signal excess method criteria (15%) so using for confirmation only.

Extractables (solid) Method 8082

- N89577-2 for aroclor-1260 reported 2nd due to interference on 1st signal.
- N89577-6 for aroclor-1260 reported 2nd due to interference on 1st signal.

Metals (solid) Method 6010B

- Matrix spike recovery for aluminum, iron, lead, magnesium, manganese, zinc outside control limits due to possible matrix interference and/or sample nonhomogeneity.
- Matrix spike duplicate recovery for antimony, manganese are outside control limits due to probable matrix interference.
- Matrix spike recovery for calcium outside control limits due to skipe amount low relative to sample amount.
- RPD for MSD for iron outside control limits for sample MP28901-S2 due to possible sample nonhomogeneity.

- RPD for serial dilution for arsenic, beryllium, cadmium, selenium, silver, copper, zinc outside control limits for sample MP28901-SD1. Percent difference acceptable due to low initial sample concentrations (<50 times IDL).
- MP28901-SD1 for copper- serial dilution indicates possible matrix interference.
- MP28901-SD1 for zinc - serial dilution indicates possible matrix interference.

Wet Chemistry (aqueous) Method 335.3
- Blank spike recovery for cyanide is outside control limits.
- GP27006-EXT4 for cyanide, spike blank indicates possible high bias, but all associated samples <DL.

2. Job No.N94857 (soil borings and groundwater samples)

Volatiles (aqueous) Method 8260B
- N94857-2, N94857-5 sample pH did not satisfy field preservation criteria.

Volatiles (solid) Method 8260B
- RPD for MSD for carbon disulfide are outside control limits due to matrix interference.

Extractables (aqueous) Method 8270C
- Blank spike recovery for carbazole is outside control limits. High percent recoveries as no associated positive found in the QC batch.
- Matrix spike duplicate recovery for carbazole is outside in house control limits.
- Sample N94857-8 has surrogate recovery outside control limit due to matrix interference.
- Sample N94857-8 re-extraction due to one surrogate outside QC limit performed outside holding time. Original prep date within holding time.

Extractables (aqueous) Method 8081A
- Sample N94857-8 has surrogate outside control limits due to matrix interference.
- OP19887-BS1 for heptachlor – reported 2nd signal, percent D of check on 1st signal exceed method criteria (15%) so using for confirmation only.
- RPD for MSD for heptachlor – reported 2nd signal, percent D of check on 1st signal exceed method criteria (15%) so using for confirmation only.
- OP19887-BS3 for endosulfan sulfate - reported 2nd signal, percent D of end check calibration on 1st signal exceed method criteria (15%) so using for confirmation only.
- N94857-5 for 4,4-DDE, 4,4-DDD – more than 40% RPD for detected concentrations between the two GC columns.
- N94857-6 for 4,4-DDE, 4,4-DDD – more than 40% RPD for detected concentrations between the two GC columns.

Extractables (Aqueous) Method 8082
- N94857-3, N94857-5 after TBA clean up.

Extractables (Solid) Method 8081a

- N94857-7 for 4,4-DDT – more than 40% RPD for detected concentrations between the two GC columns. Reported from 2nd signal.
- N94857-4 for 4,4-DDE - reported 2nd signal, percent D of end check calibration on 1st signal exceed method criteria (15%) so using for confirmation only.
- N94857-7 for 4,4-DDE - reported 2nd signal, percent D of end check calibration on 1st signal exceed method criteria (15%) so using for confirmation only.
- N94857-1 for dieldrin – more than 40% RPD for detected concentrations between the two GC columns. Reported from 2nd signal.
- OP19876-MS, OP19876-MSD for delta-BHC - reported 2nd signal, percent D of end check calibration on 1st signal exceed method criteria (15%) so using for confirmation only.
- OP19876-MS, OP19876-MSD for alpha-chlordane- reported from 2nd signal due to interference on 1st signal.
- N94857-1 for 4,4-DDT - reported from 1st signal. Percent D of end check (ECC) on 2nd signal exceed method criteria (15%) so using for confirmation only.

Extractables (Solid) Method 8082

- N94857-4 for aroclor 1242 – reported from 1st signal due to interference on 2nd signal.

Metals (aqueous) Method 6010B

- RPD for MSD for cadmium is outside control limits due to possible sample nonhomogeneity.
- RPD for serial dilution for arsenic, nickel, selenium, vanadium are outside control limits – percent difference acceptable due to low initial sample concentration (<50 times IDL).
- Matrix spike duplicate recovery for iron, sodium outside control limits – spike amount low relative to sample amount.

Metals (solid) Method 6010B

- Matrix spike recovery for antimony, chromium, magnesium, manganese, zinc are outside control limits indicating possible matrix interference and/or sample nonhomogeneity.
- Matrix spike duplicate recovery for antimony, copper, magnesium are outside control limits indicating possible matrix interference and/or sample nonhomogeneity.
- Matrix spike and matrix spike duplicate recovery for calcium, iron outside control limits – spike amount low relative to sample amount.
- RPD for MSD for calcium, iron, manganese are outside control limits due to possible sample homogeneity.
- RPD for serial dilution for antimony, beryllium, cadmium, selenium, silver are outside control limits – percent difference acceptable due to low initial sample concentration (<50 times IDL).

- RPD for serial dilution for potassium are outside control limits indicating possible matrix interference.
- N94857-7 for cadmium, thallium – elevated detection limit due to dilution required for high interfering element.

Wet Chemistry (aqueous) Method 335.3

- RPD for duplicate for cyanide are outside control limits for sample GP27799-D1. RPD acceptable due to low duplicate and sample concentrations.

Wet Chemistry (solid) Method 9012M

- Matrix spike recovery for cyanide is outside control limits indicating possible matrix interference and/or sample nonhomogeneity.
- RPD for duplicate for cyanide are outside control limits for sample GP27791-D1 due to possible sample nonhomogeneity.
- GP27791-ICV3 for cyanide – blank spike recovery outside control limits indicating possible high bias, but only the associated samples <DL are reported.
- N94857-7 for cyanide – detection limit raised due to matrix interference – result confirmed on later run.

All of the data have been generated using the established and agreed upon analytical protocols.

An evaluation of the raw data confirms the results provided in the data summary sheets and quality control verification forms.

The correct data qualifiers have been used.

Despite the listed exceedances of the quality control data, we find no reason to resample or reanalyze any of the samples.

APPENDIX 6

Fill Approval Documents

Ed Phillips

From: Ed Phillips
Sent: Thursday, June 21, 2007 10:30 AM
To: 'Barbara Jean Wilson'
Subject: RE: Dobbs Ferry Waterfront Park

YES

-----Original Message-----
From: Barbara Jean Wilson [mailto:acocella@verizon.net]
Sent: Thursday, June 21, 2007 10:23 AM
To: Ed Phillips
Subject: Re: Dobbs Ferry Waterfront Park

June 21, 2007

Dear Ed:

Does this mean we can start to deliver the soil to the job site.

Please advise.

Thank you,

Barbara Jean Wilson
ACOCELLA CONTRACTING, INC.
68 GAYLOR ROAD
SCARSDALE, NEW YORK 10583
914-723-2700
FAX 914-723-0927
----- Original Message -----
From: "Ed Phillips" <ephillips@phenv.com>
To: "Barbara Jean Wilson" <acocella@verizon.net>
Sent: Thursday, June 21, 2007 7:19 AM
Subject: FW: Dobbs Ferry Waterfront Park

-----Original Message-----
From: Kathryn Eastman [mailto:kceastma@gw.dec.state.ny.us]
Sent: Wednesday, June 20, 2007 5:43 PM
To: Ed Phillips
Cc: Anthony Giaccio; David Crosby
Subject: Fwd: Dobbs Ferry Waterfront Park

Ed-

The top soil, represented by the analytical results attached below, is approved for use at Dobbs Ferry Waterfront Park.

Sincerely, Kathryn Eastman

>>> "Ed Phillips" <ephillips@phenv.com> 6/19/2007 10:47 AM >>>
Attached are pictures, analytical data and source documentation for proposed topsoil to be used at the Dobbs Ferry Waterfront Park. Please review ASAP as the contractor is anxious to begin bringing the topsoil to the site.

Ed Phillips

Potomac-Hudson Environmental, Inc.

207 S. Stevens Ave.

S. Amboy, NJ 08879

Office # 732-525-3100

Cell # 732-261-2471

Ed Phillips

From: David Crosby [dacrosby@gw.dec.state.ny.us]
Sent: Wednesday, June 06, 2007 11:40 AM
To: Ed Phillips; Barbara Jean Wilson
Cc: Anthony Giaccio; Kathryn Eastman; Martin Minnicino
Subject: RE: FW: Fill Material

Ed and Barb: The photos are fine. They indicate the source is native. Further, you indicate that the material is free of debris. The analytical results you provided indicate that the soil meets the restricted residential numbers in part 375. As such, based on these representations, the material is approved for backfill.

Please let the Department know of when you plan on spreading the material so we can provided field oversight.

The Department appreciates your efforts towards implementing a remedial program for the Dobbs Ferry VCP Site.

If you have any questions, feel free to contact me.

Thanks DAC

David A. Crosby
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233-7014
518-402-9662

>>> "Ed Phillips" <ephillips@phenv.com> 6/6/2007 9:55 AM >>>
I will be out of state starting late today until Monday morning. If a decision is made regarding the second fill source and work continues, please notify Martin Minnicino of PHENV so that he may have the air monitoring program restarted.

Martin can be reached at 732-525-3100. His cell number is 908-347-8118.
His email address is mminnicino@phenv.com

-----Original Message-----
From: Barbara Jean Wilson [mailto:acocella@verizon.net]
Sent: Wednesday, June 06, 2007 8:30 AM
To: David Crosby; Ed Phillips
Cc: Anthony Giaccio; Kathryn Eastman
Subject: Re: FW: Fill Material

June 6, 2007

Dear Ed and David:

Attached are the photo's we promised to you.

Please be advised the dirt is stock piled and not yet spread.
There is no debris of any kind. Soil is native material (Virgin Ground)

Please confirm you have received these pictures.

If you need more information, please contact me.

Thank you,

Bart

----- Original Message -----

From: "David Crosby" <dacrosby@gw.dec.state.ny.us>
To: "Ed Phillips" <ephillips@phenv.com>; "Barbara Jean Wilson" <acocella@verizon.net>
Cc: "Anthony Giaccio" <agiaccio@dobbsferry.com>; "Kathryn Eastman" <kceastma@gw.dec.state.ny.us>
Sent: Tuesday, June 05, 2007 7:57 AM
Subject: Re: FW: Fill Material

Thanks, pictures will help. Is this material presently on-site and spread?
Also, how is the construction going along the river? The Department has concerns with the soil cap near the river (placement, erosion, etc). If work is progressing, we would like to set up a site inspection.

Thanks DAC

David A. Crosby
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233-7014
518-402-9662

>>> "Barbara Jean Wilson" <acocella@verizon.net> 6/5/2007 7:14 AM >>>
June 5, 2007

Dear Ed, Anthony and David:

The soil is Native Soil. We are going to take pictures today. If I get
the camera
back early enough today, we will e-mail the pictures to you today.

Thank you,

Bart Acocella
----- Original Message -----
From: "Ed Phillips" <ephillips@phenv.com>
To: <acocella@verizon.net>
Cc: "Anthony Giaccio" <agiaccio@dobbsferry.com>; "David Crosby" <dacrosby@gw.dec.state.ny.us>
Sent: Monday, June 04, 2007 3:56 PM
Subject: FW: FW: Fill Material

Bart,

In email below NYDEC still has questions about the fill source. Specifically, is there any debris in the material, concrete, wood, brick etc? Is the soil native material or was it fill brought to the residence? Are photos of the soil available?

I will be out most of the week on vacation.

Kathy Eastman of the DEC will be out of the office June 4-6 and back Thursday June7. If you would rather have the DEC inspect the site of the 2nd material source than assemble and submit enough documentation to approve the source" remotely", then contact Dave Crosby of the DEC at (518) 402-9662.

Sorry for the delay on this email. We have been down for three days.

Ed Phillips

-----Original Message-----
From: Kathryn Eastman [mailto:kceastma@gw.dec.state.ny.us]
Sent: Friday, June 01, 2007 5:42 PM
To: Ed Phillips
Cc: David Crosby
Subject: Re: FW: Fill Material

Ed--I'm forwarding information to Dave Crosby. Please contact him Monday morning. It the material native material ? Is there any debris? Photos? D Crosby will answer your e-mail, or visit source personally. KCE.

>>> "Ed Phillips" <ephillips@phenv.com> 6/1/2007 5:07 PM >>>

Don't know if you saw this email gving some info on the next source.

From: Ed Phillips
Sent: Wednesday, May 30, 2007 2:59 PM
To: Kathy Eastman
Cc: Anthony Giaccio
Subject: FW: Fill Material

Kathy,

The email below was sent to me by the contractor for the soil for which you have recent data.

EP

From: Barbara Jean Wilson [mailto:acocella@verizon.net]
Sent: Tuesday, May 29, 2007 7:13 AM
To: Ed Phillips
Subject: Fill Material

May 29, 2007

Dear Ed:

Re: Village of Dobbs Ferry - Waterfront Park:

The reports of the fill came from 14 Skyview Drive, Armonk, New York.

The

fill is a sandy material and was excavated from a big extension on an existing house.

The material was picked up by me and delivered by Barbara Wilson to the American

Analytical Laboratory.

If you need further information please contact Barbara.

The top soil reports should be in this week.

Please respond via e-mail also my phone number is 914-723-2700.

Thank you,

Bart Acocella