



## ecology and environment engineering, p.c.

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BUFFALO CORPORATE CENTER

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September 14, 2006

Mr. Dave Chiusano, Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Bureau of Construction Services  
625 Broadway, 12th Floor  
Albany, New York 12233-7013

Re: Shenango Steel Mold Site, Contract # D005660, Site # 9-15-157,  
Construction Certification Report - Final

Dear Mr. Chiusano:

Ecology and Environment Engineering, P. C. (EEEPC) is pleased to submit one (1) hard copy and one electronic copy in .pdf format of the Construction Certification Report for the Shenango Steel Mold site project performed from January 2006 to June 2006.

EEEPC has responded to NYSDEC's draft document comments in which to finalize and complete the Construction Certification Report. The final document has been signed and approved by Gerald A. Strobel, Program Director for EEEPC. All other project related records, contractor submitted documents, and data will be retained by EEEPC and placed in secured storage at our warehouse.

EEEPC will proceed with project closure once Change Order #1 has been finalized and final CAP #5 has been submitted by Horizon, accepted by EEEPC and recommended for payment to NYSDEC.

If you have any further question regarding the final Construction Certification Report and final work assignment status, please call me at 716-684-8060.

Very truly yours,

**Ecology and Environment Engineering, P. C.**

Michael G. Steffan  
Project Manager

cc: D. Miller, E&E - Buffalo  
CTF- 002700.DC03.01



SEPTEMBER 2006

# CONSTRUCTION CERTIFICATION REPORT FOR THE SHENANGO STEEL MOLD SITE— REMEDIAL ACTIVITY

CITY OF BUFFALO, ERIE COUNTY, NEW YORK

REMEDIAL CONSTRUCTION CONTRACT-D005660 • SITE NUMBER 9-15-172

Prepared for:



NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL REMEDIATION  
625 BROADWAY, ALBANY, NEW YORK 12233-7017

Prepared by:



ecology and environment  
& engineering, p.c.



**Construction Closure and  
Certification Report  
Shenango Steel Mold Site  
Remedial Construction Contract  
#D005660  
Site Number 9-15-172  
City of Buffalo (C)  
Erie County (C), New York**

**September 2006**

**Prepared for:**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Division of Environmental Remediation**  
625 Broadway  
Albany, New York 12233-7017

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## List of Abbreviations and Acronyms

bgs	below ground surface
CAP	contractor application for payment
COC	chain of custody
DUSR	Data Usability Summary Report
EDS	Environmental Data Services, Inc.
EEEPC	Ecology and Environment Engineering, P.C.
EPA	U.S. Environmental Protection Agency
ERM	ERM Engineers Northeast, P.C.
GC/MS	gas chromatography/mass spectroscopy
gpm	gallons per minute
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
Horizon	Horizon Environmental Services, Inc.
HSO	Health and Safety Officer
Hudson	Hudson Environmental Services, Inc.
IRM	Interim Remedial Measure
KW	kilowatt
LF	linear feet
LNAPL	light non-aqueous-phase liquid
LCS/LCSD	laboratory check sample/laboratory check sample duplicate

## List of Abbreviations and Acronyms (cont.)

mg/kg	milligrams per kilogram
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
MS/MSD	matrix spike/matrix spike duplicate
NIOSH	National Institute for Occupational Safety and Health
NTP	Notice to Proceed
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOL	New York State Department of Labor
NYSDOT	New York State Department of Transportation
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCO	potential change order
PPE	personal protective equipment
ppm	parts per million
ppt	parts per trillion
psi	pounds per square inch
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAO	Quality Assurance Officer
QAPP	Quality Assurance Project Plan
RAOs	remedial action objectives
RCRA	Resource Conservation and Recovery Act
RFI	Request for Further Information

## List of Abbreviations and Acronyms (cont.)

RI	remedial investigation
ROD	Record of Decision
SAP	Sampling and Analysis Plan
SDG	sample delivery group
SVOC	semi-volatile organic compound
SWMF	solid waste management facility
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbons
TSDF	treatment, storage, and disposal facility
TGA	target grid area
TSCA	Toxic Substances Control Act
USGS	United States Geological Survey
VOC	volatile organic compound



# 1

## Site Background

### 1.1 Site Location and History

The Shenango Steel Mold Site is a part of the former Hanna Furnace property located at 1750 Furhrmann Boulevard near Route 5 at the southern limit of the City of Buffalo. The site surrounds the eastern end of the Union Ship Canal, which opens onto the Buffalo Outer Harbor (see Figure 1-1). The original Hanna site was divided into four sub-parcels for redevelopment, including the Shenango Steel Mold Site, which consists of approximately 18 acres of land and is currently unoccupied. Hanna Furnace Corporation had historically used the area primarily as an off-loading and storage area for raw materials (i.e., iron ore, coke, and limestone) needed in the production of pig iron.

From 1962 to 1982, the Shenango Steel Mold facility produced ingot molds for the steel industry. In October 1993, the New York State Department of Environmental Conservation (NYSDEC) investigated an anonymous report of trespassers scrapping electrical transformers and disposing of the transformer oil at the abandoned site. Sampling and analysis of oil-soaked soils detected polychlorinated biphenyl (PCB) contamination at hazardous levels greater than 50 parts per million (>50PPM). NYSDEC initiated a removal action in April 1994, excavating and disposing of visually contaminated concrete debris, a small amount of soil, and waste drums and pails from the area. A remedial investigation (RI) was later conducted to determine the nature and extent of any remaining site contamination and the potential impact these contaminants posed to human health and the environment. The RI was completed in 2001, finding that PCBs, hydraulic oil, and semi-volatile compounds (SVOCs) were present in the soils and demolition debris at the site (see Figure 1-2).

A proposed cleanup plan was presented to the public and after all public comments were considered, a final selection of the remedial action was made and documented in a March 2002 Record of Decision (ROD).

A state Superfund supplemental investigation was completed in 2004, which better defined the nature and extent of PCB and hydraulic oil contamination on-site. This investigation revealed significant soil and groundwater contamination. The PCB contamination was highest in the north-central section of the site, with con-

## 1. Site Background

centrations up to 138 parts per million (ppm). Other contaminants found on-site include metals such as lead, iron, mercury, and zinc; polycyclic aromatic hydrocarbons (PAHs); and volatile organic compounds (VOCs), including toluene, ethyl benzene, and xylenes.

NYSDEC contracted the engineering services of ERM Engineers Northeast, P.C. (ERM) to perform remedial design activities at the site. However, ERM could not complete the remedial design work assignment because its Standby Superfund Contract expired. NYSDEC's Division of Environmental Remediation performed the balance of the remedial design in accordance with the ROD. Design drawings and specifications for the remedial cleanup were completed by NYSDEC in June 2005.

Ecology and Environment Engineering, P.C. (EEEPC) of Lancaster, New York, was selected to provide construction oversight services for the Shenango Steel Mold project in May 2005. At the request of NYSDEC, EEEPC initially reviewed the construction documents and provided technical support related to the plans and specifications. EEEPC also performed additional support investigations that covered site access and services and contacting utility companies and the New York State Department of Transportation (NYSDOT) regarding bridge capacity. EEEPC also procured the survey services of Foit-Albert Associates (FAA), Buffalo, New York, to provide initial geodetic control. Moreover, FAA was requested to stake out the exclusion zones for remedial work as depicted on the Contract Documents during the bid phase for understanding by the potential bidders.

### 1.2 Project Bidding Information and Award

A mandatory pre-bid meeting was held by NYSDEC and EEEPC at the project site on August 10, 2005, at 10:00 a.m. to allow potential bidders to view existing site conditions, to discuss the requirements for bidding on the project, including , but not limited to the technical requirements of the Contract Document and the administrative protocol to be used during the performance of the work. Potential bidders were required to sign an attendance sheet to document their presence at the mandatory conference. A walk-through of the site and a question and answer period were held with the contractors and suppliers in attendance.

Only one addendum to the Contract Documents was issued, on August 24, 2005, during the public bidding phase. Addendum #1 revised the original bid opening date to August 30, 2005, and detailed supplemental bidding requirements, including revisions to the Contract Drawings, pre-bid minutes, clarifications of pre-bid questions and responses.

Seven bids were received by NYSDEC on August 30, 2005. A summary of all bids received is provided as Appendix A. The apparent low bidder for the project was Horizon Environmental Services, Inc. (Horizon) of Cranberry Township, Pennsylvania, with a base bid of \$621,087.50. The subsequent inclusion of pollu-

## **1. Site Background**

tion liability insurance premiums of \$9,000, as elected by NYSDEC, adjusted the final total bid amount to \$630,087.50.

NYSDEC notified Horizon of its apparent low bidder status by official letter on August 31, 2005. An Intent to Award letter was also issued to Horizon on August 31, 2005. A post-bid informational meeting was held with Horizon on December 20, 2005, at EEEPC's offices in Lancaster, New York, to address general construction issues (see Appendix B).

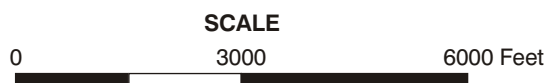
NYSDEC officially advised Horizon of the award of the contract for the remedial effort by certified mail on December 22, 2005. A preconstruction meeting was scheduled and held on January 24, 2006, at the EEEPC offices, and a formal Notice to Proceed was granted to Horizon on January 30, 2006.

The pre-construction meeting was held to explain the roles and responsibilities of all parties and to ascertain Horizon's understanding of the overall scope of services required. A preliminary project schedule based on a January 2006 start was presented by Horizon. Questions, comments, and concerns were addressed, particularly with respect to performing remedial work in winter conditions. Representatives from NYSDEC, EEEPC, and Horizon, including Horizon's President, Mr. Scott Clary, and the Horizon Project Manager, Mr. Brian Spangler, attended. Minutes from the pre-construction meeting are included as Appendix C.





SOURCE: U.S.G.S. Quadrangle Map, Buffalo SE 1965



**Figure 1 Site Location Map, Shenango Steel Mold RI/FS Buffalo, New York**



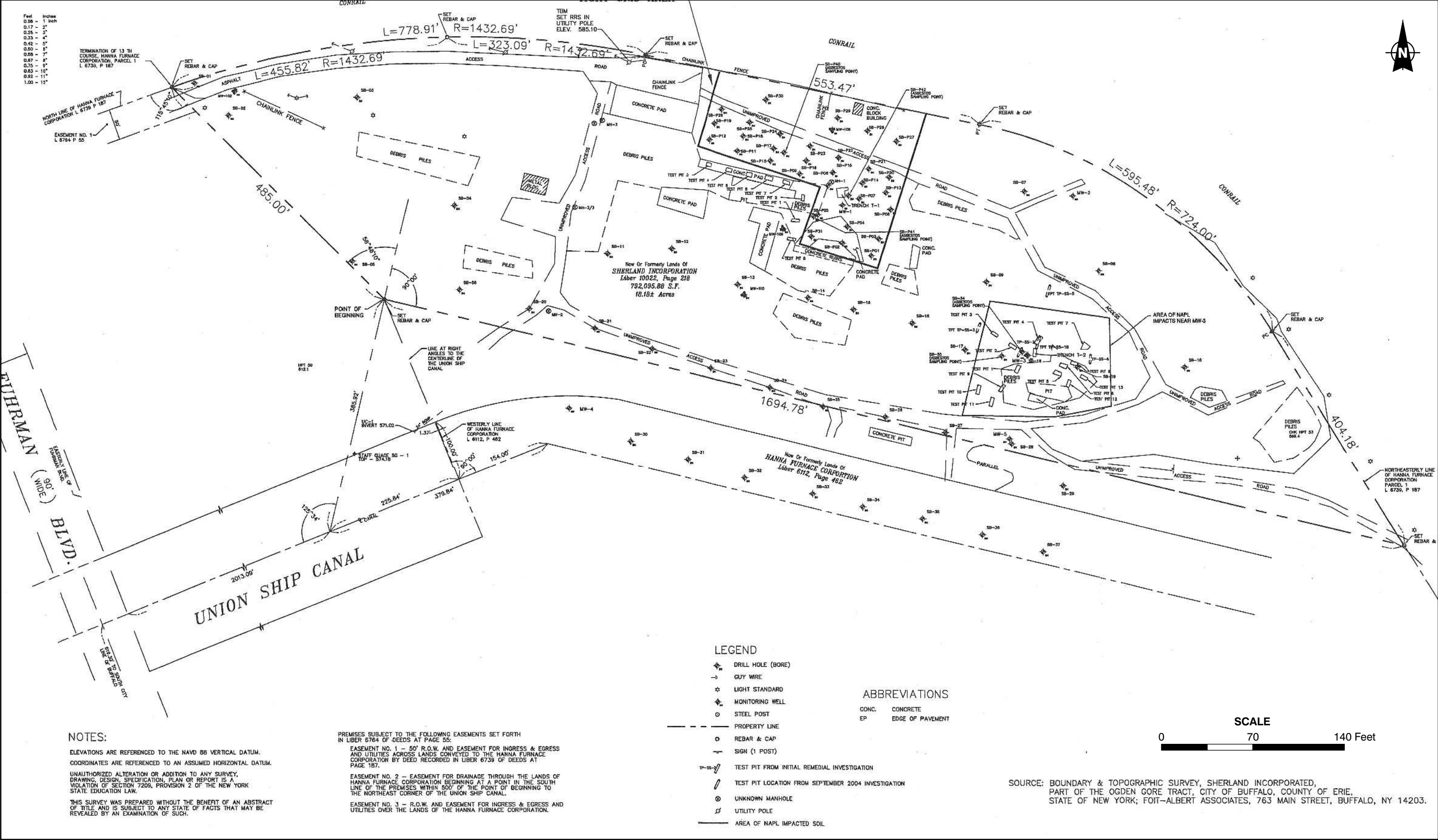


Figure 2 Site Vicinity Map

# 2

## Summary of Pre-Remedial Activities

### 2.1 General

#### 2.1.1 Scope of Work

The project generally consisted of the following major work elements:

- Mobilization of personnel, equipment, and materials to the site;
- Site access improvements;
- Construction of an on-site infiltration basin to receive non-contaminated surface and groundwater encountered during excavation;
- Installation of plugs within existing storm sewer lines leading from the tight grid area (TGA);
- Clearing and minor grubbing at the exclusion zones;
- Demolition of concrete slabs west of the TGA;
- Decommissioning and removal of existing monitoring wells;
- Excavation, handling, and disposal of contaminated soils from the former hydraulic spill (light non-aqueous-phase liquid (LNAPL) area and the TGA);
- Confirmation of remedial cleanup and waste characterization sampling;
- Backfilling and compaction at excavated areas;
- Site restoration; and
- Demobilization of personnel, equipment, and materials from the site.

#### 2.1.2 Site Preparation and Project Plan Submittals

The Contract Documents required Horizon to submit a work plan, an updated progress schedule, a Health and Safety Plan (HASP), and a Sampling and Analysis

## **2. Summary of Pre-Remedial Activities**

Plan (SAP), which included a Quality Assurance/Quality Control (QA/QC) Plan, for review five days after notification of its apparent low bid. All submittals were to be reviewed by EEEPC to verify conformance with the Contract Documents, and the contractor was required to revise the project plans based on EEEPC comments and discussions. The plans would then be resubmitted in the 14-day submittal package and reviewed again by EEEPC for conformance with the Contract Documents.

### **2.2 Work Plan**

The work plan provided descriptions of means, methods, procedures, and equipment to be used by Horizon to complete the project. The plan detailed all major work items, including:

- Mobilization and demobilization to the project site and site services;
- Identification and plugging of storm drains leading from the TGA;
- Survey and stakeout requirements;
- Decommissioning and removal of existing monitoring wells, as shown on the Contract Drawings;
- Clearing and disposal of small trees and brush within the exclusion zones;
- Groundwater management by excavating and installing the infiltration basin;
- Demolition, removal, and transport of concrete debris from the site;
- Characterization, excavation, direct loading or stockpiling of non-hazardous PCB- and LNAPL-contaminated soils for disposal;
- Characterization, excavation, direct loading or stockpiling of hazardous PCB contaminated soils for disposal;
- Transportation and disposal of all stockpiled waste materials; and
- Site security.

Additional details related to these specific tasks were provided in the contractor's work plan submittal.

#### **2.2.1 Mobilization, Site Services, Maintenance, and Setup**

The work plan outlined requirements for mobilization and setup activities at the Shenango site. As a part of these requirements, the contractor was responsible for providing an adequate work site layout, a list of proposed subcontractors, and a Sampling and Analysis Plan. Mobilization and setup activities included providing

## **2. Summary of Pre-Remedial Activities**

temporary site facilities, installing manhole plugs, installing soil erosion and control measures, providing site security, and developing a health and safety plan.

Site services included establishing temporary power for the site offices via a portable generator and provisions for snow removal, dust control, and maintenance. A site security gate and truck weigh-scale installations were also covered. Improvements to temporary access roads and placement of dry decontamination pads were included for each load-out zone.

### **2.2.2 Identification and Plugging of Storm Drains**

Portions of the storm drainage system serving the Hanna Furnace property remained at the Shenango Steel site. The Contract Documents included provisions for locating and temporarily plugging storm drains emanating from the TGA as a precaution to close off any potential preferential contamination pathways from the exclusion zone. Horizon's work plan included locating two manhole structures in the access roadway northwest of the TGA and placing removable pipe plugs within the drainage pipes entering these manholes from the TGA.

### **2.2.3 Survey and Stakeout**

Project Specification Section 01050 addressed survey and stakeout activities at the site, including incorporating NYSDOT standard surveying procedures for construction and materials. The contractor was required to submit separate initial, intermediate, and as-built topographic maps as well as field books, a coordinate list, and additional survey data required to support requests for payments and verification of final quantities and the limits of excavation areas.

### **2.2.4 Existing Groundwater Monitoring Well Decommissioning**

Horizon's work plan called for the well-decommissioning procedure set forth in Specification Section 02227. The riser and screen were to be pulled using either a truck-mounted boom or a hand-operated mechanical system, and the sand pack was to be over-bored as specified. Bentonite powder and portland cement grout mixture were then to be tremied into the open well hole with well borings, concrete, and debris from decommissioning operations and then disposed of off-site.

### **2.2.5 Clearing and Grubbing**

Clearing and grubbing activities required on the Shenango Steel Mold project were outlined in Project Specification Section 02110. The contractor was required to protect land resources, utility lines and poles, and existing facilities in addition to keeping public roads and walks free of dirt and debris at all times. Additional requirements included clearing debris, rubbish, light structures, and living or dead vegetation where indicated or designated on the plans.

Grubbing activities were strictly limited to areas designated by the engineer. No clearing or grubbing was permitted until sediment control measures were in place. Fill/waste areas containing characteristic hazardous waste were specifically omitted from grubbing. Cleared and grubbed materials, i.e., tree trunks, limbs, brush,



## **2. Summary of Pre-Remedial Activities**

foliage, and other vegetation free of soils, were to be chipped and stockpiled in an uncontaminated area, then covered and protected until being spread in a thin layer before placing topsoil. Stumps, tree trunks, and limbs too large for chipping were required to be disposed of off-site by the contractor.

### **2.2.6 Groundwater Management**

Specification Section 01560 required surface waters encountered during excavation operations to be sampled for compliance limits, approved by NYSDEC, and then pumped or trucked to the infiltration basin, shown on the Contract Drawings. Horizon addressed these groundwater management issues in its work plan under a site-specific Infiltration Basin and Dewatering Plan that called for constructing the basin to match details shown on Contract Drawing 003. The anticipated dimensions of the basin were to be approximately 120 feet long by 80 feet wide by 6 feet deep. Any groundwater that entered the excavations was to be sampled and laboratory-tested for contaminant-of-concern levels (contaminants of concern included PCBs, SVOCs, and VOCs) before discharge into the infiltration basin. Diagrams showing locations of pumps and piping were submitted as a part of Horizon's work plan.

### **2.2.7 Concrete Demolition**

All labor, tools, equipment, materials, and services needed to properly demolish and dispose of concrete slabs, foundations, or other structures indicated on the Contract Drawings were covered under Specification Section 02150.

The approved work plan submitted by Horizon called for concrete specified for removal to be resized, cleaned of soil, and loaded onto steel-body dump trailers by excavator or wheel loader. Rebar was to be cut as necessary and removed. Swift River Recycling on River Road in Tonawanda was designated in Horizon's work plan to receive non-hazardous concrete suitable for recycling. Horizon's plan for concrete encountered in the excavation areas was to sample the material, perform analysis, and then assess disposal options. Disposal options would have been to call area-permitted disposal facilities and then submit a waste profile for disposal acceptance.

### **2.2.8 Excavation of Non-Hazardous Soils and Debris**

The extent of non-hazardous soils slated for excavation was delineated on the Contract Drawings prepared by ERM Engineers Northeast, Inc. for NYSDEC. The detail shown on the drawings was supplemented by definitions published in Supplementary Specifications Section 02220.

Horizon's work plan outlined procedures for excavating and disposing of non-hazardous soil and debris. Boundaries shown on the Contract Drawings were geotically located in the field by a New York State-licensed surveyor, and an excavator was to be used to remove non-hazardous soil and debris. Temporarily stockpiled materials were to be protected from wind and rain until such time they were disposed off-site. Non-hazardous soils for disposal were to be temporarily

## **2. Summary of Pre-Remedial Activities**

staged on top of undisturbed soil having the same waste characterization. Co-mingling of waste streams from the LNAPL-impacted area and the TGA would not be permitted: each truck was loaded and manifested from only one stockpile.

### **2.2.9 Excavation of Hazardous Soils and Debris**

The extent of hazardous soils slated for excavation was delineated on the Contract Drawings prepared by ERM Engineers Northeast, Inc. for NYSDEC. The detail shown on the drawings was supplemented by definitions published in Supplementary Specifications Section 02220.

Horizon's work plan called for staking out the excavation limits of hazardous soil and debris shown on the Contract Documents and for treating and transporting groundwater entering the excavations. Horizon's plan called for construction of designated loading zones adjacent to the exclusion zones to prevent trucks from entering areas designated for remediation. Excavation was to proceed until specified areas and depths were achieved, at which time confirmation sampling would be performed to confirm that cleanup goals were met prior to backfill operations. The work plan called for all sample results to be transmitted and reviewed with NYSDEC and EEEPC.

### **2.2.10 Transportation and Disposal of Hazardous and Non-Hazardous Soils and Debris**

Specification Section 02223 listed the requirements for transportation and disposal of all items, including solid hazardous and nonhazardous wastes removed from the Shenango site. Horizon submitted a detailed Transportation and Disposal Plan, as part of its work plan, that covered truck traffic on-site and between the site and the designated disposal facility. Routes to and from the disposal facility and the site were clearly defined, as were procedures for weighing, loading, and decontaminating disposal vehicles.

On-site certified scales were installed to tare all wastes for disposal prior to highway transport for highway loading purposes. The on-site scale weights were also used as a comparison or check of the weight of materials delivered to the disposal facility. Where significant differences were found, further evaluation of the individual transported loads could be evaluated for these discrepancies.

### **2.2.11 Site Security**

The contractor was solely responsible for the security of the engineer and contractor work areas, equipment, materials, and supplies provided under the contract. In addition, Specification Section 01540 stated that the contractor was responsible for site security within the project site, 24 hours per day, 7 days per week for the duration of the contract. Control of all persons and vehicles entering and leaving the project site, including maintaining a project log to track persons and vehicles, was specifically stipulated in Specification Section 01540.

## **2. Summary of Pre-Remedial Activities**

The contractor was required to contact local law enforcement officials, emergency medical care units, local fire departments, and utility emergency teams to ascertain the type of response required in any emergency situation and to coordinate the responses of the various units. Preparing and updating a list of emergency points of contact and telephone numbers to ensure dependable responses was also a requirement.

Horizon's work plan required all personnel to sign in and out within a site log. Specifically, persons not affiliated with Horizon were to be directed to the site representative's office, and Horizon would not discuss project details or provide interviews with any visitors entering the site. Horizon planned to erect signs around the site reading "Hazardous Work Area - Do Not Enter Unless Authorized." In addition, all office trailers were to be padlocked and all entrance roads were to be blocked during off hours. Access to exclusion zones was strictly prohibited under Horizon's work plan, which called for the contractor to take reasonable precautions to prevent vandalism.

### **2.2.12 Transportation Control Plan**

Specification Section 02223 required the contractor to properly transport and dispose of all items, including solid hazardous and nonhazardous wastes removed from the site, oversized clearing and grubbing materials, concrete, sediments, etc. to the appropriate waste disposal facilities. Existing wastes as well as those collected by the contractor were included in the specifications. In addition, the contractor was responsible for ensuring that all sampling, analysis, transportation, and disposal requirements of the treatment, storage, and disposal facility (TSDF), solid waste management facility (SWMF), reclamation or salvage facilities, and federal, state, and local government regulations were complied with and properly documented.

A Transportation Control Plan was developed by Horizon and submitted as a part of the five-day submittal package. It included descriptions of intended waste haulers, hauling routes, and times and designated staging areas and decontamination procedures for trucks prior to leaving the site. EEEPC and NYSDEC reviewed Horizon's Transportation Plan and returned it with comments. Horizon incorporated the comments into the work plan and resubmitted it as part of the 14-day submittal package.

### **2.2.13 Temporary Access Road Plan**

Specification Section 01600 of the Contract Documents established requirements for all labor, materials, equipment, and incidentals required to construct access and service roads, as shown on Contract Drawing 001. The contractor was required to maintain access roads until completion of the project and to promptly refill and grade areas that had settled or were otherwise unsatisfactory for traffic. Upon completion of all construction activity, the contractor was also required to construct and restore access roads to conditions equal to or better than those that had existed before the contractor's use during construction. In addition, the site

## **2. Summary of Pre-Remedial Activities**

access road was to be blocked by a concrete jersey barrier(s) after the gate and fence were decommissioned.

Horizon incorporated details for temporary access roads into the 5 and 14 day submittal packages as a sketch showing minor improvements adjacent to the LNAPL-impacted area and the TGA. Construction of extensive temporary access roadways was not required under the submittal because Horizon planned to direct-load contaminated material from stockpiles kept isolated within the exclusion zones. The proximity of an existing site access roadway extending around the perimeter of the site made temporary access roadways unnecessary.

On February 22, 2006, EEEPC accepted the final version of Horizon's project-specific work plan as being responsive to and in compliance with the Contract Documents.

### **2.3 Sampling and Analysis Plan**

#### **2.3.1 Time-Sensitive Analytical Reporting**

Horizon submitted a Sampling and Analysis Plan as a part of its approved work plan. The submittal included the name and address of Hudson Environmental Services, Inc. of Glens Falls, New York, as the designated testing laboratory for analysis of all project samples and incorporated Hudson's Laboratory Quality Manual. Horizon's work plan also included a QA/QC organizational chart listing key Horizon personnel and their qualifications. Cleanup goals established by the Supplementary Specifications were outlined, as were guidelines for the frequency of confirmatory and characterization sampling outlined in the bid documents and the protocol to be used. Horizon's approved work plan stipulated that all sample tests were to be completed with a 24-hour turnaround time, with the exception of toxicity characteristic leaching procedure (TCLP) results, which could require an additional 24 hours for the digestion holding period.

#### **2.3.2 Analytical Data Protocol**

Horizon's work plan included providing Category B Analytical Data Packages for all soils to NYSDEC. Category A deliverables were required on all water analyses performed under the scope of work.

Horizon's Sampling and Analysis Plan was reviewed and accepted as being in conformance with the Contract Documents on February 22, 2006.

#### **2.3.3 Quality Assurance Project Plan**

Supplementary Project Specification Section XI, Division 1, Section 01400, outlined specific requirements of the Quality Assurance Project Plan (QAPP) for the Shenango Steel Mold Site Project. Included in this section were quality assurance and control of installations, references and standards, tolerances, field sampling, inspection and testing services, testing by the contractor, and manufacturers' field services and reports.

## **2. Summary of Pre-Remedial Activities**

A QA/QC Plan regarding project control and analytical work was developed by Horizon and initially submitted under the work plan included in its five-day submittal package on January 5, 2006. It briefly described the QA protocols for each separate task. The final version of the QA/QC Plan was received and approved by EEEPC as being in compliance with the Contract Documents on February 22, 2006.

### **2.3.4 Data Usability Requirements**

Project Specification Section 01425 included NYSDEC Data Usability Summary Reporting (DUSR) requirements for environmental samples collected by the contractor. This process was a part of the quality control procedures established by NYSDEC to verify the accuracy of laboratory analysis of the samples collected.

Horizon submitted details for compliance with the DUSR requirements to EEEPC as part of the work plan. At the time of its initial submittal, Horizon had not selected an independent agency to complete the DUSR. Horizon eventually selected Environmental Data Services (EDS) of Concord, New Hampshire to provide DUSR services for the Shenango Steel project.

## **2.4 Progress Schedule**

The project schedule describes the order in which the contractor will perform work to allow for successful completion of the project in the time allotted. The Shenango Steel Mold contract time allowed 60 calendar days from Notice to Proceed to Substantial Completion and 120 calendar days from Notice to Proceed or 60 calendar days from Substantial Completion, whichever was sooner. Liquidated damages (\$1,150 per calendar day for Substantial Completion and \$600 per day for Final Completion) were exceeded.

The Contract Documents required Horizon to prepare, submit, finalize, and periodically update a project schedule in order to plan, manage, schedule, and execute the remedial work at the Shenango site. The progress schedule, updated biweekly by Horizon and outlining the work remaining, was used jointly by NYSDEC and EEEPC to evaluate the impact of potential delays or change orders. In addition, Horizon was required to prepare record drawings and data showing the sequencing, timing, and rate of progress of the work. The contractor's project schedule is provided as Appendix D.

Horizon submitted a full project schedule on January 25, 2006, that was approved by EEEPC as being in compliance with the Contract Documents on January 30, 2006.

## **2.5 Bid Breakdown**

The Bid Breakdown or Schedule of Values per Section III Article 12 of the Contract Documents is used to review the contractor's submittal for any discrepancies, ambiguities, or conflicts encountered with the bids. The schedule is further used

## **2. Summary of Pre-Remedial Activities**

as a tool for measurement and payment, along with the contractor's application for payment (CAP) and contract price fluctuations for any adjustments in quantities that may occur during the work. Horizon's Bid Breakdown is presented as Appendix E.

Horizon provided a Bid Breakdown/Schedule of Values for each individual bid item. The contractor's initial submittal was revised and resubmitted on January 19, 2006, as incomplete due to the lack of an appropriate individual bid-item breakdown, resulting in errors in the summation of overall project costs. The contractor's Bid Breakdown was resubmitted and approved by EEEPC as being in compliance with the Contract Documents on January 20, 2006.

### **2.6 Health and Safety Plan**

#### **2.6.1 General Health and Safety**

The Shenango site was divided into three major areas, as depicted on the Contract Drawings: the LNAPL-hydraulic oil-impacted and TGA exclusion zones, which were known to contain contaminated materials; the infiltration basin; and the support zone, for office trailers and equipment storage. All personnel entering the exclusion zones were required to provide documentation that Occupational Safety and Health Administration (OSHA) medical surveillance requirements and training were current.

Horizon's Health and Safety Plan was reviewed by EEEPC to determine if compliance with Standard Specifications were followed in the plan. Horizon's designated Health and Safety Officer (HSO) was Mr. Scott Clary. The HSO was responsible for all air monitoring and sampling, all water and soil sampling, and for enforcing the HASP. In addition, the HSO was responsible for the safety of all on-site personnel and off-site communities affected by the remediation. Horizon's HASP contained specific requirements for all personnel working on the site and all site visitors. The HASP was reviewed by EEEPC in draft form as part of Horizon's 5- and 14-day submittal packages. Horizon's HSO provided EEEPC with copies of medical examinations and 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training certifications for all Horizon personnel entering the exclusion zones. The final version of the plan was received and accepted by EEEPC as being in compliance with the Contract Documents and with the standards of practice in the industry on February 9, 2006.

#### **2.6.2 Decontamination of Equipment and Personnel**

Horizon's HASP included a description of decontamination procedures for personnel exiting the exclusion zones, provided for portable boot-wash stations for each exclusion zone, and contained guidelines for the disposal of all used personal protective equipment (PPE). The HASP also described the equipment and proposed location of the decontamination station.



## **2. Summary of Pre-Remedial Activities**

### **2.6.3 Contingency Measures**

Horizon included an Emergency Response and Contingency Plan as part of the HASP. The plan included chain-of-command, communication, and evacuation procedures; location of first aid equipment; standard operating procedures; and procedures to be followed in the event of an accident.

The route to the nearest hospital was established and documentation posted on the site. A chain-of-command was established and implemented for all working personnel and visitors to the site. The HSO was required to rapidly assess potential hazards and notify Horizon's site superintendent and EEEPC's site representative. Emergency evacuation routes and procedures were established. The Horizon office trailer was the designated assembly area in the event of an emergency.

### **2.6.4 Air Monitoring**

Horizon's HASP included an on-site air monitoring program. On-site air monitoring included real-time monitoring for dust and VOCs and soil was sampled for PCBs, metals, and SVOCs. (See Section 4.1.1 for a more detailed description of the on-site air monitoring program.)

## **2.7 Project Shop Drawing Submittals**

Numerous materials, equipment, and methods required for the completion of the project were specified in the Contract Documents. Shop drawings, samples, and product information submitted by Horizon were reviewed for conformance with the Contract Documents.

### **2.7.1 Prepared List of Project Submittals**

The contractor was directed to review the project shop drawing list in the Contract Documents in order to organize his submittals with project requirements outlined in Section 01340. Horizon submitted a total of 33 shop drawings. A copy of the complete Project Record of Shop Drawings is provided in Appendix F. The log includes post-construction submittals as required by the Contract Documents.

### **2.7.2 Record Drawings**

The contractor was required to prepare, maintain and submit record drawings that documented pre- and post-construction conditions at the work site. Horizon utilized a set of Contract Drawings marked up in the field to satisfy the requirements outlined in Supplementary Specifications Section 01050. Record Drawings are found in Appendix G.

### **2.7.3 Equipment and Materials**

Equipment and materials specified for the execution of the project were reviewed and approved by NYSDEC/EEEP, as required in the Contract Documents. Equipment and materials that were submitted for approval by Horizon included groundwater treatment equipment, including pumps, piping, fittings, valves, and controls; stone aggregate for the infiltration basin; backfill materials; and geotextile.

### **2.8 Site Services Provided by Horizon**

Horizon provided the following site services for the duration of the project:

- Equipment and personnel trailers (a separate office trailer was provided for NYSDEC/EEEP use);
- Site utilities, including temporary power via generator, internet and cellular communications, and portable rest rooms;
- Drinking water;
- Copier/facsimile machine;
- Garbage disposal;
- Snow removal;
- A project identification sign and signs directing all visitors entering the site to sign-in at the field office; and
- A temporary chain-link fence and locked access road entry gate, which was additionally blocked by large boulders after working hours.



# 3

## Summary of Remedial Activities

Based on a Notice to Proceed date of January 30, 2006, the contract required all work at the Shenango Steel Mold Site to be completed by March 31, 2006. The contract field work was completed within the 60-calendar day Substantial Completion period as per Section VI Article 6 of the Agreement. However, Substantial Completion Certification (Appendix H) was not awarded to Horizon until May 24, 2006. Further discussion of the delay of Substantial Completion is provided in Section 5 of this report. Final Completion Certification (Appendix I) was awarded to Horizon on May 30, 2006.

### 3.1 Site Mobilization Activities

Horizon began mobilization activities at the site on January 30, 2006. The west entrance area of the existing paved site-access road was enlarged to allow delivery of excavation equipment and office trailers. A two-trailer office complex and support area was established northwest of the LNAPL-impacted area, and an 80-KW generator to provide temporary power to the offices was energized on February 1, 2006.

A truck scale and equipment storage container were placed to the east side of the access roadway at the support area, and a dedicated decontamination pad was installed just west of the LNAPL load-out area.

After off-loading heavy equipment, the entrance road from Furhrmann Boulevard was cleaned and the locations of existing manholes to be plugged were verified. A temporary concrete slab was placed over the north manhole (MH-3) and then covered with stone to match the surrounding roadway elevation. Two other manholes (MH 2 and MH 2/3) also located in the roadway were stacked with discarded tires to prevent injury and inadvertent damage to vehicles or structures.

At the time of mobilization the site was completely accessible and was being used by off-road vehicles; illegal dumping of solid waste was an ongoing problem. Horizon took steps to prevent unauthorized entry to the area by closing off each of the casual pathways onto the site. In each case, large boulders, stone piles, and/or logs were placed at each of these locations and a chain-link construction gate was erected at the single authorized entrance. This gate was secured with a padlock

### **3. Summary of Remedial Activities**

each night at the close of daily operations. As an additional security measure, two very large boulders were pushed into position behind the gate to block the roadway from vehicular traffic. Orange construction fencing was erected at all access points around both exclusion zones to alert unauthorized persons determined to violate the perimeter of the site of the presence of open excavations.

A project sign was erected at the southwest side of the site that identified the Shenango Steel Mold Site as part of the State Superfund Program and NYSDEC. Because the entrance to the Shenango Site was in a remote location, the sign was located at the southwest side of the site nearest Commerce Drive and the Union Ship Canal to increase its visibility to the public.

The Shenango Steel project plans and specifications called for the construction of a temporary infiltration basin—a shallow, stone-lined depression intended to receive and redistribute clean groundwater encountered during remedial activity. Originally the basin was to be placed between the two exclusion zones. However, exploratory excavations revealed large areas of saturated soil and perched groundwater within 2 feet of the ground surface. A more suitable location was found, with NYSDEC and EEEPC approval, approximately 200 feet southwest and downgradient of the TGA. The basin was installed after test pits were made to verify percolation capacity. The approximate depth to the existing water table was approximately 9 feet at the final location. Horizon determined a larger infiltration basin was needed, but the additional size would not require anything extra from NYSDEC. The final dimensions of the basin were approximately 60 feet wide by 150 feet long by 6 feet deep. This area was considerably larger than the 2,500 square foot area initially called for on Contract Drawing 001, eventually proving more than adequate for containing groundwater discharged from the excavations (see Section 3.4 below for additional details).

Prior to mobilization, erosion-control fencing (fabric type) was placed downslope of the infiltration basin between the west spoils piles excavated from the basin and the access roadway. Once installation was complete, concrete jersey barriers and soil segregation mats were placed next to the LNAPL-impacted area and TGA to control contamination from truck-loading operations. A lined decontamination station for trucks and equipment was constructed to the northwest of the LNAPL-impacted area and temporary pipe plugs were placed in existing, still active storm lines leading from the south at the two manholes shown on the plans. Air monitoring equipment was deployed upwind and downwind of the exclusion zones and these devices were calibrated and hardwired to the power supply.

The first daily health and safety meeting was conducted for all site personnel on February 1, 2006. Emergency procedures and responsibilities were reviewed. The EEEPC site representative specifically cautioned equipment operators about the potential for encountering undocumented foundations and mill pits not visible from the surface that could collapse under the weight of an excavator or other heavy equipment. In addition, Horizon was notified that equipment moved into

### **3. Summary of Remedial Activities**

the exclusion zones was to be treated as contaminated equipment and was not to be moved outside of these areas unless decontamination procedures were followed. Horizon began breaking up the concrete slabs at the TGA on February 8, 2006, and removal of contaminated soil and debris at the LNAPL-impacted area began on February 9, 2006. As a result of mild February and March weather, there were no work days lost due to inclement weather.

#### **3.1.1 Site Services Provided by Contract**

Horizon provided site services for the duration of the project, including electrical power, trash removal and disposal, potable water, and bathroom facilities. Horizon mobilized two field office trailers to the site. One trailer was exclusively used by NYSDEC and EEEPC. The NYSDEC/EEEEPC trailer was supplied with all office furniture, a copy machine, a facsimile machine, telephone, Internet access, and printer in accordance with the Contract Documents. The location of the office trailer is shown on the Record Drawings.

#### **3.1.2 Surveying Services**

Horizon subcontracted Wendel Duchscherer Surveyors of Lockport, New York, a professional land surveyor licensed in the State of New York, for all surveying services, including preparation of the Record Drawings (see Appendix G). Wendel Duchscherer initially surveyed the Shenango site on February 1, 2006, establishing control and recording existing topographical data prior to remediation. Wendel Duchscherer established excavation limits and grade control within two days of initial mobilization activity at the site.

After excavation of contaminated soils was completed and confirmation sample results were obtained, Wendel Duchscherer completed a topographical survey inclusive of both open excavations to document pre-backfill conditions. Upon completion of remedial operations and backfill of both excavations and the infiltration basin, Wendel Duchscherer surveyed and recorded post-remedial site topography. A total of three Record Drawings were prepared per the Contract Documents.

#### **3.1.3 Baseline Environmental Sampling**

Horizon collected five baseline pre-mobilization surface soil samples from the combined LNAPL-impacted area and the TGA to identify existing contamination limits. In addition, Horizon collected two water samples during the initial phase of the project, one from the LNAPL area and the other from an existing concrete vault located just beyond the westernmost boundary of the LNAPL area, to provide background information before beginning pumping and excavation operations. Pre-mobilization soil sample results indicated that the contaminants tested were below the action level of 1 ppm. Confirmatory wall and floor sample locations are noted on Record Drawing 002.

**3.1.4 On-Site Truck Scale**

A truck scale was installed on-site next to Horizon's office trailer to document the weights of disposal trucks entering and exiting the site, as required by the Contract Documents. The data collected by Horizon was recorded on a log spreadsheet and transmitted to the EEEPC site representative on a daily basis. Horizon used the data to compare truck weights with waste manifest records made at the disposal facility and to control the weight of trucks transporting excavated soil over public highways.

**3.2 Project Access Road Installation****3.2.1 General**

Access to the Shenango Steel Mold site was limited to a paved one-lane roadway along the western side of the main parcel, technically an extension of Fuhrmann Boulevard. An unpaved earth and stone roadway encircled the actual project site and was used as a temporary access road. Horizon upgraded the earth roadway by scraping away debris, marking and covering open manholes, and filling potholes with slag collected from the shoulder of the roadway. Efforts were made to secure and close off several transient access pathways onto the site historically used by four-wheelers and motorcycles. The means included the use of large boulders, berms, and railroad timbers on-site. While these were a deterrent for vehicular access, motorcycles, all terrain vehicles, and pedestrian traffic could still gain access to the work site.

**3.2.2 Access Road, Fencing, and Gates**

The existing paved access road provided an acceptable travel route to and from the site. A stone pad, planned originally for truck control at the end of the paved access to the site, was intentionally omitted to avoid saw cutting and possibly fracturing the existing frozen pavement. Truck traffic and travel speed on the roadway was controlled by Horizon. The width of the dual-leaf access gate (12 feet) allowed only one truck to enter or exit the site at any given time.

**3.3 Project Clearing**

The Shenango Steel Mold Site has been an abandoned property since the mold-casting operations ceased and the initial demolition of mill buildings and foundations in the late 1980s. Since that time, fugitive and illegal dumping has occurred on an ongoing basis. In particular, residential construction debris, used tires and furniture, and abandoned cars were found to be littered about the site at the start of remediation. Before beginning excavation operations, clearing debris from the existing roadways, proposed support areas, and exclusion zones was necessary. Clearing and grubbing required at each exclusion zone was minimal because the majority of the project site is populated by a thin scrub brush, vegetation, and juvenile trees. Confirmatory sampling after initial excavations indicated that each exclusion zone had to be expanded; only minor clearing and grubbing were required and no large trees were removed during these operations. As a result, non-hazardous solid waste debris left during the initial remediation phase and the con-

### **3. Summary of Remedial Activities**

struction waste, discarded furniture, and used automotive tires dumped by the public were quickly consolidated. These materials were simply pushed into two compact stockpiles located just outside each exclusion zone before beginning the sampling and excavation process. The piles were left on-site as per the Contract Documents.

## **3.4 Infiltration Basin Construction**

### **3.4.1 General Installation**

The infiltration basin was originally designed to be constructed as a 2,500-square foot shallow excavation to be used to reintroduce groundwater and surface water (meeting the Contract Documents discharge criteria) encountered during remedial excavation into the existing water table at the site. After initial observations indicated groundwater was very close to the surface in the location shown on the Contract Drawings for the basin, an alternate location was chosen by the Contractor with EEEPC's concurrence.

The basin was re-sited to a location upgradient of both exclusion zones but a sufficient distance away from each to prevent groundwater discharged into the basin from reinfiltrating the open excavations. Horizon increased the size of the basin from the area originally shown on the plans to approximately 60 feet wide by 150 feet long, or 9,000 square feet. While this represented a significant oversizing of the basin, Horizon opted to increase the basin limits, at no additional cost to NYSDEC, because of the potential for freezing temperatures during the remediation operations.

### **3.4.2 Project Groundwater Management**

Groundwater management was required after excavation began at the LNAPL-impacted area when large amounts of groundwater began to be encountered as the excavation passed beyond the 5-foot level. The groundwater came primarily from perched water and seeps emanating from seams between layers of fill and soil.

Horizon initially used a vacuum truck to remove groundwater from the excavated areas. When this methodology proved ineffective and costly, EEEPC enforced the Supplementary Specifications requirement that the excavations be dewatered completely prior to removal of additional soils. As such, Horizon began using a skid-mounted pump that was hard-piped directly from the excavations to the infiltration basin. When freezing temperatures caused icing within the pipes, Horizon drained them before the close of daily operations, which drastically reduced the number of problems associated with ambient winter temperatures.

### **3.4.3 Discharge Sampling and Analysis**

All groundwater and surface water collected in the open excavations was sampled and analyzed for the contaminants listed in Specification Section 02140 prior to and during discharge. As a result, all water pumped to the infiltration basin met the discharge criteria, in compliance with the Supplementary Specifications. In addition to sampling and analyzing the water, surface removal and collection de-

### **3. Summary of Remedial Activities**

vices were used at the pump intake to remove any fugitive oil and oil sheen present before the groundwater was transported to the infiltration basin.

#### **3.4.4 Pre- and Post-Construction Sampling**

Pre-construction and post-construction soil sampling was performed as a basis for confirmation that there were no increased levels of contamination as a result of Horizon's activity at the site. The analytical results indicated that cleanup goals for the contaminants of concern in the areas designated on the Contract Documents did not exceed the initial baseline analytical results.

### **3.5 Demarcation and Excavation of Soils – LNAPL-Impacted Area**

#### **3.5.1 General**

Demarcation of LNAPL-impacted soils present at the Shenango site used data collected during the RI, which was completed by NYSDEC in 2004. Horizon subcontracted Wendel Duchscherer Surveyors of Lockport, New York, to stake out test pits made as part of the RI from coordinates shown on the Contract Drawings.

Coordinates taken from the September 2004 RI were used to locate corners of the remedial area shown on Contract Drawing 003. These locations delineated the approximate limit of soil excavation anticipated for remedial construction. Horizon took characterization samples for waste profiling and characterization. Analytical results and the waste profiles were sent to the disposal facilities—ENSOL, in Tonawanda, New York, and BFI, in Niagara Falls, New York—for acceptance of the waste from the Shenango site. EEEPC signed the waste profiles for disposal facility processing and acceptance.

During the course of sampling and excavation it was found that the extent of LNAPL contamination present at the Shenango site was greater than that originally shown on the Contract Drawings. Based on procedures outlined in the Contract Documents under the Spill Area Soil Excavation Management Plan, the southern and western limits of the excavation were extended 5 feet in each direction in accordance with Specifications Section 02220. Horizon continued to excavate to the revised limits and provide confirmatory sampling in compliance with the Contract Documents. This process was repeated until confirmatory analysis and visual observation (the excavation clearly indicated a change in material from a dark, oily stained fill to a light grey native clay) revealed the final limit of remediation, in accordance with the project's remedial action objectives (RAOs).

#### **3.5.2 Non-Hazardous Waste Transport and Disposal**

Tare weights of all trucks used for waste transport entering and exiting the site were recorded using a certified and calibrated on-site weigh scale temporarily installed at the support area by Root Neal Co. of Buffalo, New York. Non-hazardous waste manifests were imprinted with weight information at the disposal facility and copies were returned to Horizon. On-site truck weight data were re-



### **3. Summary of Remedial Activities**

viewed and tabulated by EEEPC for comparison of official manifest weights recorded at the disposal facility and tare weight recorded at the site. The comparison of disposal weights leaving the project site and re-weighing at the disposal facility was very close. No exception reporting was required for weigh-variation problems. Horizon temporarily stockpiled excavated soil and debris from the both the TGA and LNAPL area within their respective exclusion zones and loaded out trucks from each area as the availability of approved haulers permitted. Temporary stockpiles remaining at the end of daily operations were secured with tarps and weights.

All soils and debris removed from the LNAPL-impacted area were ultimately disposed of as non-hazardous waste at the ENSOL disposal facility in Tonawanda, New York. In addition, a large concrete transfer pit was discovered after excavation had begun. The bulk of the concrete pit was demolished and hauled off-site as non-hazardous material. At the direction of the Department and EEEPC, the footings associated with the pit were below the excavation limit (approximately 9 feet below ground surface [bgs]) and were cleaned of visually contaminated soil and left in place. LNAPL-impacted soil removed during this phase of the work amounted to 5,955.27 tons.

#### **3.5.3 Confirmation Sampling for Area Closure**

Prior to placing backfill at the LNAPL-impacted area, confirmatory wall and floor samples were taken in accordance with the requirements of Specification Section 01425. Analytical results were transmitted from Hudson Environmental Services, Inc. to Horizon. Horizon initially notified EEEPC verbally of the confirmatory analytical results beyond the required reporting period in the technical specifications. EEEPC specifically advised Horizon both verbally and in writing that this procedure was not acceptable and that Horizon was proceeding with excavation, disposal, and backfill operations at its own risk. The process was then revised to receive fax or electronic copies of the results with hard copy submissions to follow. The results could then be reviewed, and Horizon, EEEPC, or the Department could decide on either further excavation or backfilling of the area under review.

#### **3.5.4 Data Usability Summary Report (DUSR) Reviews of Analytical Information**

All final confirmatory analytical data was found to be within acceptable QA limits by Environmental Data Services (EDS), Concord, New Hampshire, on May 24, 2006. DUSR memoranda regarding the acceptability of data and results were prepared and reviewed by EEEPC. EDS's DUSR reviews of analytical information collected during LNAPL-impacted soil remediation are presented in Appendix J, Analytical DUSR Reviews. EEEPC's review of EDS's DUSR Reports are found in Appendix K.

### **3.6 Demarcation and Excavation of Soils – Tight Grid Area**

#### **3.6.1 General**

PCB-impacted soils present at the Shenango site were demarcated using data collected during the NYSDEC 2004 RI phase of the project. Horizon subcontracted Wendel Duchscherer Surveyors of Lockport, New York, to stake out limits of excavation points established as part of the RI from coordinates shown on the Contract Drawings. These locations delineated the approximate limit of soil excavation anticipated by the RI. Horizon took characterization samples for waste profiling. Analytical results and the waste profiles were sent to the disposal facilities for acceptance of the waste from the Shenango site. EEEPC, as the Department designated representative, signed the waste profiles for disposal facility processing and acceptance.

During the course of sampling and excavation, it was found that the extent of low-level (less than 5 ppm) PCB contamination present at the Shenango site was greater than shown on the Contract Drawings. As a result, the northern limits of the excavation were extended 5 feet with EEEPC concurrence in accordance with Specification Section 02220-4. Horizon continued to excavate to the revised limits and provide confirmatory sampling, in compliance with the Contract Documents. This process was repeated until confirmatory sampling and visual observation denoted by a change in soil color and texture revealed the final limit of removal, which was approximately 35 feet north of the original limit shown on Contract Drawing 002.

#### **3.6.2 Non-Hazardous Soil Transport and Disposal**

Horizon removed and transported 3,997.30 tons of low-level PCB-impacted soil and debris from the TGA. These materials were excavated and direct-loaded or temporarily stockpiled within the exclusion zone and then transported to the ENSOL disposal facility in Tonawanda, New York, as required by the project specifications. Also, 978.74 tons from the infiltration basin area showed slightly elevated levels of metals contamination, but this material was within non-hazardous acceptance levels for the disposal facility, BFI, in Niagara Falls, New York. These materials were excavated, segregated, transported, and disposed of at the BFI disposal facility separately from other non-hazardous soil from the Shenango site.

#### **3.6.3 Hazardous Soil Transport and Disposal**

No hazardous waste was removed from the TGA.

#### **3.6.4 Concrete Disposal**

Concrete identified on the Contract Drawings for demolition at the TGA was sampled by taking chips and compositing materials of potentially contaminated areas and analyzed for contaminants of concern by Hudson Environmental Services, Inc. Analytical results revealed that the concrete could be re-sized and re-



### **3. Summary of Remedial Activities**

moved from the site as non-hazardous waste and disposed of at the ENSOL disposal facility.

Due to the proximity of PCB contamination in the TGA, the NYSDEC Project Manager requested additional sampling and testing of concrete at specific locations within the exclusion zone. All of the concrete noted on the Contract Drawings or encountered during the excavation process was broken up and removed from the site as non-hazardous material. A summary of sample analytical results is presented in Appendix L.

#### **3.6.5 Confirmation Sampling for Area Closure**

Before placing backfill at the TGA, confirmatory wall and floor samples were taken in accordance with Specification Section 01425. Analytical results were transmitted from Hudson Environmental Services to Horizon. In one instance, Horizon was required to go back and re-excavate a small area after written test results revealed a failure. All surrounding backfill material that came into contact with the remedial area was removed from the site and replaced at no additional expense to NYSDEC.

#### **3.6.6 Data Usability Summary Report Reviews of Analytical Information**

In general, all final verification analytical data was found to be within acceptable QA limits by EDS, Inc. All DUSR results were reviewed and results confirmed by EEEPC. EDS's DUSR reviews of analytical information collected during PCB-impacted soil remediation are presented in Appendix J, Analytical DUSR Reviews. EEEPC's review of EDS's DUSR Reports are presented in Appendix K.

#### **3.7 Decommissioning of Site Monitoring Wells**

Horizon subcontracted with SJB Services, Inc. of Hamburg, New York, to locate and decommission eight existing monitoring wells originally installed at the site by NYSDEC. SJB mobilized on February 2, 2006, and began decommissioning the wells designated under Specification Section 02227. Each well was decommissioned in accordance with NYSDEC requirements. The location of the decommissioned monitoring wells are provided on the Record Drawings in Appendix G. Following decommissioning activities, no site related wells remain.

#### **3.8 Transportation and Disposal of all Project-Generated Waste Streams**

Soil samples were collected from stockpiled soil at a frequency of one every 500 cubic yards of excavated material. The analyses of these samples were used to determine whether the soil would be transported and disposed of as a hazardous or non-hazardous material.

### 3. Summary of Remedial Activities

All non-hazardous, low-level PCB-contaminated and LNAPL- impacted soils were transported to the ENSOL disposal facility in Tonawanda, New York. Portions of soils excavated from the infiltration basin that showed elevated levels of TCLP metals contaminants were disposed of as non-hazardous waste at BFI's disposal facility in Niagara Falls, New York. Horizon used licensed waste haulers, including Pariso Trucking of Buffalo, New York, and Oneida Trucking, Inc., to transport non-hazardous soils.

#### Waste Profiles for Disposal Facility Acceptance

A total of 10,931.31 tons of material were removed from the TGA, LNAPL, and infiltration basin areas of the site. A summary of waste disposal quantities is given in Table 3-1. Waste profiles, certificates of disposal, and manifests for all wastes were maintained in the project file. A Manifest Tracking Log for waste generated and disposed from the TGA, LNAPL, and infiltration basin is provided in Appendix M. A discussion of changes in disposal quantities is provided in Section 5.

**Table 3-1 Waste Disposal Quantities by Area, Shenango Steel Mold Site**

On-site Location	Disposal Facility	Hazardous Material (tons)	Non-hazardous Material (tons)	Total (tons)
LNAPL	ENSOL	0	5,955.27	5,955.27
TGA	ENSOL		3,997.30	3,997.30
Infiltration Basin	Niagara BFI	0	978.74	978.74
<b>Total (tons)</b>		<b>0</b>	<b>10,931.31</b>	<b>10,931.31</b>

### 3.9 Project Area Restoration

#### 3.9.1 Backfill Placement at Excavated Areas

Material used to backfill excavated areas consisted of clean soil from a pre-approved source operated by Lafarge, Inc. (Buffalo, New York). Per Section 02224 of the Supplementary Specifications, full total compound list (TCL) analyses were conducted on all fill material to verify that it was acceptable for use and would not re-contaminate the site. Horizon submitted analytical results and provided locations of borrow sources in a shop drawing submittal. EEEPC reviewed and approved the submittal as being in compliance with the Contract Documents on February 21, 2006. Field Density and Compaction Test Results collected during placement of backfill for the TGA and LNAPL-impacted areas indicate that the project achieved the density and compaction values required by the Supplementary Specifications. Test results are found in Appendix N.

**3.9.2 Site Restoration**

The paved access road from Fuhrmann Blvd to the site entrance was cleaned of mud and debris and then restored to pre-construction conditions. The pre-existing stone and earth site perimeter road was re-graded and left in place. Manholes that had been temporarily plugged prior to remedial activities at the site were permanently filled at the request of NYSDEC.

**3.9.3 Demobilization of Equipment and Support Facilities**

The truck scale and the office trailers were removed from the staging areas after all excavation, backfill, and restoration activities were completed. The shallow excavations that had been necessary for the scale and generator were backfilled and graded off to meet the surrounding grade, and the crushed stone used to construct the staging areas, including the parking area, was left in place.

**3.10 Remediation Inspection and Monitoring Services Provided by EEEPC**

All construction work was inspected and monitored by EEEPC. The EEEPC site representative compiled and filed daily reports for the Shenango Steel Mold project with NYSDEC in accordance with Standby Work Assignment D004442-3 to provide information on daily activities and to monitor daily progress, including photographs. EEEPC's daily reports are presented in Appendix O. In addition, EEEPC was responsible for:

- Preparing change orders;
- Reviewing and approving Contractor's Applications for Payment (CAPs);
- Preparing and responding to Contractor's requests for information (RFIs);
- Preparing and responding to potential change orders (PCOs);
- Preparing change orders;
- Preparing progress meeting agendas and meeting minutes;
- Preparing and issuing field orders;
- Reviewing shop drawings;
- Review and approval of record drawings;
- Reviewing analytical information and results;
- Signing manifests and bills of lading for waste disposal as an agent of NYSDEC;

### 3. Summary of Remedial Activities

- Reviewing and signing off on waste profiles of characterized waste streams; and
- Preparing correspondence regarding construction issues and delays.

#### 3.10.1 Project Requests for Further Information

Only two formal Requests for Further Information for clarification or interpretation of the Contract Documents were issued on the Shenango Steel Project. RFI 001 was based on a request by EEEPC to Horizon regarding its anticipated plan of action in the event groundwater was encountered during excavations in the LNAPL-impacted area. RFI 002 was a request for cost information by EEEPC to Horizon with regard to an entrance pad at the access roadway that was intentionally omitted from the scope of work. An RFI log is included as Appendix P.

#### 3.10.2 Potential Change Orders

A total of five PCOs were issued for the Shenango project. PCOs were typically developed by EEEPC after evaluating changed site conditions and holding discussions with both NYSDEC and Horizon. PCOs were then incorporated into formal change orders in accordance with the General Conditions of the Contract Documents.

- PCO 001 addressed additional required sampling and analysis, at the request of NYSDEC, within the infiltration basin and TGA;
- PCO 002 also addressed additional characterization sampling within the infiltration basin;
- PCO 003 covered the additional costs associated with permanently plugging the manholes downstream of the TGA. In addition, the PCO provided compensation to the Contractor for use of specialty equipment during the TGA excavation process;
- PCO 004 addressed costs required to excavate and dispose of soils generated from the infiltration basin, TGA, and LNAPL-impacted areas;
- PCO 005 was related to additional costs required to provide and place off-site backfill material within the infiltration basin.

The PCOs were combined under Change Order 001. A PCO log is included as Appendix Q.

#### 3.10.3 Progress Meetings

Primarily on a biweekly basis and during the course of construction, project progress meetings were held with Horizon, NYSDEC, and EEEPC to review the pro-

### **3. Summary of Remedial Activities**

gress of the construction and to discuss any project issues and changes to the scope of service.

Four scheduled on-site progress meetings were held, and meeting minutes were developed and dispersed to all parties. A copy of these minutes is provided in Appendix R.

Upon completion of construction and demobilization from the project site, four additional teleconferences were held with prepared agendas; meeting minutes were developed and distributed. These teleconferences were primarily held as a result of Horizon's failure to provide the full analytical deliverables and DUSRs within the time frame specified for project Substantial Completion. Teleconference meeting minutes are also provided in Appendix R.

# 4

## Sampling and Analysis

### 4.1 Air Sampling and Analysis

Horizon's Health and Safety Officer (HSO) documented the air sampling and real-time air monitoring upwind and downwind of intrusive activities and for "at-risk" personnel working in the exclusion zones. DustTrak™ dust meters were used for real-time air monitoring for dust and SidePak™ aerosol monitors were used for real-time air monitoring for VOCs. Action levels for airborne contaminants were established or regulatory guidelines were used in the Contract Documents to minimize the threat to workers and the surrounding area.

Meteorological data was collected from U.S. Weather Bureau records by the contractor after completion of the remedial phase and were submitted to EEEPC in a prepared daily format. EEEPC personnel monitored real-time readouts on the DustTrak meters on a consistent basis and reported these observations as a part of their daily reports.

Horizon's HSO conducted baseline air sampling for fugitive dust emissions both upwind and downwind of the exclusion zones before beginning intrusive activities to determine ambient air quality. Daily real-time air sampling for total dust at the air sampling locations upwind and downwind of exclusion zones also was conducted throughout the duration of intrusive operations. Air sample results collected during remedial operations at the site indicated that emissions guidelines established in the Supplementary Specifications were maintained. No elevated levels of dust or VOCs were observed or recorded during the field activities performed by Horizon. The daily air monitoring logs are found in Appendix S.

### 4.2 Infiltration Basin Water Discharge Monitoring

Water collected in the excavations at the Shenango Steel Mold site was sampled by Horizon and tested by Hudson Environmental Services, Inc., in accordance with Supplementary Specification sections 01400 through 01425 of the Contract Documents for contaminants of concern before pumping or discharge. Analytical results indicated that the water collected in the excavations was below the RAOs for on-site discharge in accordance with Supplementary Specification Section 02140, Appendix A, of the Contract Documents.

### **4.3 Confirmation and Verification Soil Sampling for Area Closure**

Confirmation soil samples were collected at final excavation locations to determine if contamination clean-up criteria had been satisfied. Because contamination limits were extended in both of the remedial areas shown on the Contract Drawings, additional verification sampling was required. Upon completion of the final excavation work, all additional sample locations were documented on Horizon's Record Drawings and the analytical results used to verify that RAOs had been achieved. Analytical results from the soil samples indicated the cleanup criteria had been achieved at all excavations.

### **4.4 Pre- and Post-Sampling of Soil for Project Completion**

Pre- and post-remedial samples were collected by Horizon and analyzed by Hudson Environmental Services. This data was used to confirm that contamination had not increased over the initial baseline results. Analytical results compiled by Hudson Environmental Services indicated that pre-existing contaminant levels were below the guidelines established in the Contract Documents and the initial baseline levels.

### **4.5 Waste Characterization Sampling**

Waste profiles, based on samples collected during the 2004 RI conducted at the site by NYSDEC, were developed by Horizon for submittal and approval by both landfill facilities and the NYSDEC disposal facilities representative. As part of the waste disposal process, further waste characterization sampling was conducted by Horizon to ensure compliance with the waste profile submittal process. Waste profiles for excavated soils transported to disposal facilities are presented in Appendix T. Waste manifests for soils transported to disposal facilities from the Shenango Steel Mold site are in Appendix U.

#### **4.5.1 LNAPL-Impacted Area**

Characterization samples LN-01, LN-02, and LN-03 were collected at the LNAPL-impacted area on January 31, 2006. Analytical test results prepared by Hudson Environmental Services on soil sampled within the LNAPL area for Aroclor contaminants indicated that the levels of contamination present ranged between 0.02 milligrams per kilogram (mg/kg) and 0.03 mg/kg.

TCLP metals analytical results also showed that levels for the listed contaminants were well below established TCLP regulatory action levels. The analytical results placed the soil well within approved waste stream guidelines. Additional characterization samples, LN-04 and LN-05, collected on February 3, 2006, revealed the presence of similar contaminant levels.

#### **4.5.2 Target Grid Area**

Characterization sample numbers TG-0-01 and TG-0-02 were collected at the TGA on January 30, 2006. Analytical tests by Hudson Environmental Services on



soil sampled within the TGA for TCLP metals also showed levels for the listed contaminants were well below established TCLP regulatory action levels. PCB characterization sample TG-PCB test results indicated low levels of PCB contamination that were within approved non-hazardous waste stream guidelines for the ENSOL disposal facility.

#### **4.5.3 Miscellaneous Concrete**

During the course of remedial operations at the Shenango Steel Mold site, portions of concrete piers, foundations, and slabs were encountered. The Contract Drawings delineated limits of concrete removal in the TGA, and costs associated with sampling, testing, and removal were included in the contract price under a separate bid item. However, as excavation progressed in the LNAPL-impacted area, a large reinforced concrete slab and foundation not indicated on the Contract Drawings was discovered. Because of the configuration of the foundation and its location within the LNAPL exclusion zone, upon written directive by the Engineer, Horizon sampled, analyzed, and removed the majority of the concrete associated with the foundation to the excavation depth of the surrounding area. A representative sample (LN-15C) of the concrete foundation was collected on March 3, 2006, and was sent to Hudson Environmental Services for testing and contaminant analysis.

#### **4.5.4 Infiltration Basin**

Excavated soils placed along the berm of the infiltration basin were tested at the request of NYSDEC. Under PCO 002, EEEPC created a sampling grid to delineate distinct zones on each of the stockpiles. After the grid was defined in the field, 14 samples were taken from the soil stockpiles that had been created during construction of the basin. All samples were sent to Hudson Environmental Services for analysis. The analytical results showed that the majority of the excavated material could be pushed back into the basin upon completion of field operations at the site. An amount of the excavated soil exhibited elevated levels of metal contamination. These included bermed materials in grid areas A and E and wall samples in grid areas B, C, F, and G. The areas were mainly located on the eastern and southern area of the basin.

Approximately 979 tons of soils associated with the infiltration basin were removed from the south end and eastern portion of the infiltration basin and disposed of off-site as non-hazardous waste at the BFI Niagara Falls, New York, disposal facility under PCO 004.

### **4.6 Additional or Special Analytical Testing**

#### **4.6.1 General**

The Contract Documents detailed the anticipated number of samples required to provide adequate delineation for contaminants of concern at each of the identified work zones. However, two additional samples were taken at the request of NYSDEC and EEEPC at the LNAPL-impacted area. The first was a water sample taken by Horizon on February 1, 2006, inside the LNAPL exclusion zone before



#### **4. Project Sampling and Analysis**

excavation operations began. The purpose of the initial water sampling was to ascertain if groundwater, which might be contaminated, could be discharged into the on-site infiltration basin or would have to be disposed off-site. Specifically, test pits dug in the proposed location for the infiltration basin, as shown on the Contract Documents, filled with groundwater within minutes, causing some concern regarding the ability of the contractor to handle large amounts of potentially contaminated groundwater and still maintain the construction schedule. Analytical results showed that the groundwater was below the RAOs. These results confirmed that significant amounts of groundwater collected in the LNAPL excavation could be discharged to the infiltration basin as specified.

A second water sample was taken from an existing concrete vault located between the west side of the LNAPL area and the existing site access road. The vault was scheduled for demolition and removal, but the last time water in the vault had been tested was during the 2004 RI conducted by NYSDEC. Because liquid waste had been dumped at the site during the interim, it was decided that a fresh sample may reveal any significant changes in the vault contents. This sample (LN-Vault Water) was analyzed for contaminants of concern by Hudson Environmental Services on February 2, 2006. The results indicated that the water contained in the vault was below the discharge requirement limits and could be discharged to the on-site infiltration basin.

Final confirmation samples collected from the LNAPL area were analyzed by Hudson Environmental Services before beginning backfill operations. Samples collected between March 14 and March 23, 2006, indicated that remedial cleanup objectives established in the Supplementary Specifications had been met.

At its own risk, Horizon proceeded with backfill operations at the TGA during this period based on verbal transmittal of analytical results from the laboratory. Subsequent analysis by the laboratory revealed a failure on one of the samples. As a result, additional contaminated materials were removed and subsequent confirmation sampling and analysis indicated that remedial cleanup objectives had been met.

##### **4.6.2 Infiltration Basin Soils**

More than 70% of the soils excavated and stockpiled during construction of the infiltration basin were pushed back into the basin and tamped in place prior to Substantial Completion of the project. The discovery of elevated TCLP metals contaminants in the remaining excavated infiltration basin soil resulted in this material being disposed off-site as non-hazardous wastes, and the area was backfilled with clean soil from the same off-site source used to backfill the LNAPL area and TGA (refer to Section 3.9.1). The metals concentrations were below the levels that categorize a hazardous waste. As a result, the material was able to be accepted under an approved waste profile for disposal at the BFI Niagara Falls, New York, disposal facility. The volume disposed off-site was 978.74 tons (refer to Section 4.5.4).

#### **4.6.3 Target Analyte List and Toxicity Characteristic Leaching Procedure Metals in Soils**

Samples were collected from the TGA and the infiltration basin excavation areas during the remediation phase of the project. These samples were analyzed for Target Analyte List (TAL) and TCLP metals before they were transported. The results of these sample analyses indicated that the soils in the infiltration basin contained elevated levels of metals contamination. These soils were approved for disposal at BFI in Niagara Falls, New York.

#### **4.6.4 Fugitive Oils in Groundwater – PCB Analysis**

Samples collected from groundwater present in the TGA and LNAPL excavation areas during the remediation phase of the project were analyzed for PCB contamination prior to discharge to the infiltration basin. The analytical results indicated that no PCB contamination was present.

### **4.7 Analytical QA/QC Compliance**

Horizon submitted the qualifications of Hudson Environmental Services, Inc. to perform laboratory testing services for the project. Hudson encountered internal difficulties with the preparation and format of test results required for compliance with the DUSR requirements in the Supplementary Specifications. Although this issue caused significant delays in the delivery of analytical data to EDS (approximately 50 days), compliance with the QA/QC section of the specification was maintained.

### **4.8 Results of DUSR Review**

Horizon subcontracted to EDS of Concord, New Hampshire, to prepare the DUSR for the Analytical Category B deliverables for the Shenango Steel Mold Site. Category B deliverables were required for all soils analyses for the project, including waste characterization and confirmation analytical results. EDS certified that the data packages for the samples collected at the Shenango Steel site contained all required deliverables consistent with the requirements outlined in Specification Section 01425. The sample-specific analyses performed included SVOCs, PCBs, total petroleum hydrocarbons (TPHs), metals, and TCLP metals. All analyses used EPA Standard Method SW-846, Method 8082 or 8270 (24-hour turn-around time).

EDS further certified that the data was validated according to the protocols and QC requirements of the analytical methods detailed in the contractor's Quality Assurance Project Plan (QAPP). The EDS reviewer noted no discrepancies in the chain of custody (COC) for samples and other tests specified on the COCs for the designated samples. In addition, EDS reviewed the following specific items for the DUSR:

- Sample delivery group (SDG) narrative and deliverables compliance;

#### **4. Project Sampling and Analysis**

- Holding times;
- Surrogate compound recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) recovery summary forms;
- Laboratory check sample/Laboratory check duplicate (LCS/LCSD) recovery summary forms;
- Positive results reported for method blanks;
- Gas chromatography (GC)/mass spectroscopy (MS) tuning summary forms;
- Initial and continuing calibration summaries, and
- Internal standard area and retention time summary forms.

The DUSR was initially submitted to EEEPC on May 18, 2006. The report was determined to be incomplete because EDS had not received data packages for several of the samples collected at the site during March 2006. This resulted in delays in the review process for both EDS and EEEPC, which eventually delayed Project Final Completion to June 2006. A complete copy of the DUSR prepared by EDS is included as Appendix J. The EEEPC review of EDS's May 2006 DUSR documentation is included in Appendix K.

# 5

## Changes to the Contract and Project Issues

### 5.1 Construction Changes

#### 5.1.1 Project Schedule

Horizon submitted a progress schedule with estimated durations and milestones for major work elements at the pre-construction meeting held on January 24, 2006. The field work for the Contract was completed on March 29, 2006, within the 60-calendar day period required by the Contract Documents. However, Horizon's failure to submit Category B analytical results and the DUSR caused a delay in Substantial Completion until May 24, 2006.

The schedule was negatively impacted again during the 60-day Final Completion period because EEEPC did not receive the required Category A and B deliverables and the DUSR review of the analytical data from Horizon that was needed to satisfy the Contract Documents.

#### 5.1.2 Project Scope

##### 5.1.2.1 Expanded Areas of Excavation

During the remediation process, the extent of target contaminants found at the LNAPL-impacted area and TGA expanded beyond the limits shown on the Contract Drawings. Observation by the EEEPC site representative indicated the presence of additional visually stained areas. Horizon was requested to continue excavating material in the affected area based on the Soil Excavation Management Plans (Contract Document Figures 02220-1 and 02220-2) in the Supplementary Specifications and on the presence of visible contamination.

As the extension of these areas was completed, excavation was stopped and confirmatory samples were obtained from the sidewalls and floors of the excavations. When analytical results confirmed the presence of additional contamination, the excavation process was repeated until analytical (confirmation) results indicated that the areas of discoloration were below the RAOs.

##### 5.1.2.2 Additional Contaminated Soils

The extent of contamination found at both the LNAPL-impacted area and TGA required an expansion of the excavation areas to remove additional contaminated soils. The Contract Documents originally estimated the combined quantity of

## **5. Issues and Changes to the Contract**

non-hazardous LNAPL-impacted and PCB-impacted soil to be removed at the Shenango Steel site to be 5,750 tons. The amount of hazardous soil to be removed within the TGA was 500 tons. Upon completion of remedial activity at the site, the LNAPL-impacted area had been expanded to include approximately 22,031 square feet, and the TGA ultimately expanded to 26,607 square feet. The total quantity of non-hazardous soil removed from the Shenango Steel site was 10,931.31 tons, which was 5,181.31 tons more than had been originally estimated in the contract documents.

### **5.1.2.3 Infiltration Basin Soils**

As a precautionary measure, soil excavated from the infiltration basin was sampled and analyzed (via PCO 002) to determine if additional disposal was required. Analytical results indicated that elevated levels of lead and mercury contamination were present above RAOs in a selected gridded area of the stockpiled excavated material. This contaminated soil was isolated from the stockpile and then transported off-site to the BFI Niagara Falls disposal facility. Grid areas showing contaminant levels below the RAO for metals in soils were pushed back into the basin as non-contaminated soil. Refer to Section 4.5.4 for further discussion.

### **5.1.2.4 Blocking and Plugging of Existing On-Site Manholes**

All pre-existing structures at the Shenango Steel site were demolished and removed prior to the remediation of contaminated soil covered by the contract. However, portions of the storm drainage system on the site were still intact and functional. These systems were identified during the RI by NYSDEC and were considered under the work plan for the Shenango Steel Mold Project. As a result, storm drains originating south of on-site manholes MH-2 and MH-2/3 and running west and south of the TGA were temporarily plugged to circumvent a potential preferential pathway of contaminated groundwater in the excavations from reaching the system discharge located at the Union Ship Canal.

Prior to Substantial Completion, these temporary pipe plugs were scheduled for removal. As a precautionary measure, NYSDEC directed the contractor to permanently close the manholes (PCO 003). This was accomplished by placing multiple bags of dry concrete mix into the partially water-filled manholes, preventing any future flow from the exclusion zones from reaching the canal through the storm drainage system.

### **5.1.2.5 Existing Concrete Substructures**

Although most of the contaminated material removed from the excavations was soil, a large pre-existing concrete foundation was discovered below grade in the LNAPL-impacted area. This foundation was heavily reinforced and was approximately 55 feet long by 15 feet wide. As directed by NYSDEC and EEEPC, Horizon broke up the main upper slab and found that the structure was likely used as a material transfer pit to move raw materials from railcars to a conveyor stockpile. The concrete walls for the structure were demolished to approximately 9 feet bgs, and the remaining 15-foot by 55-foot base slab was left in place. All concrete

## 5. Issues and Changes to the Contract

removed from the LNAPL area was disposed of as non-hazardous waste. The reinforcing steel sorted from the broken concrete was recycled as scrap through a brokerage firm, Gerdau Ameristeel. The metal for recycling was shredded in Buffalo and shipped to the Timken Bearing Co. in Canton, Ohio.

### 5.1.2.6 Soils Contaminated with Metals

None of the soil removed from the LNAPL-impacted area or TGA contained metals contaminants. At the request of NYSDEC, 14 additional waste characterization samples on stockpiled soils excavated from the infiltration basin were taken. Analytical results indicated that selected grid areas of the excavated material contained metals contaminant levels that characterized the material as a non-hazardous waste. As a result, the selected material was isolated from uncontaminated soils and transported and disposed of separately. Based on waste profiles, the ENSOL facility could not accept metals contaminated soils. A waste profile was submitted to the BFI disposal facility in Niagara Falls that could accept the the level of metals concentration. A total of 978.74 tons of metals-contaminated soil was disposed of as non-hazardous material. Additional costs associated with the metals contamination investigation and disposal costs were covered under PCO 002 and 004.

## 5.2 Final Changes in Project Costs

### 5.2.1 Change Orders

One Change Order was executed during completion of the remediation for a total of \$330,469.50, which increased the overall contract cost to \$960,557.00 or 53% of Horizon's original bid. Changed conditions or additional work necessitating the change orders have been discussed throughout this report. A summary of Change Order #1 is provided in Table 5-1. Additional details are provided in the copy of executed Change Order #1 provided in Appendix V.

**Table 5-1 Project Change Orders, Shenango Steel Mold Site**

Change Order	Date Issued	Changes	Value
1	June 23, 2006	<ul style="list-style-type: none"> <li>■ Site Services</li> <li>■ Health and Safety</li> <li>■ Excavation and Off-site Disposal of Hazardous Soils and Wastes</li> <li>■ Excavation and Off-Site Disposal of Non-Hazardous Soils and Wastes</li> <li>■ Excavation and Off-Site disposal of Non-Hazardous Concrete</li> <li>■ Site Restoration: Clean Off-site Backfill of Excavated Areas</li> <li>■ Sampling and Analyses of Soils: PCBs in Soils</li> <li>■ Sampling and Analysis of Soils: SVOCs in Soils</li> </ul>	

## 5. Issues and Changes to the Contract

**Table 5-1 Project Change Orders, Shenango Steel Mold Site**

Change Order	Date Issued	Changes	Value
		<ul style="list-style-type: none"> <li>■ Sampling and Analysis of Soils: TCLP SVOCs in Soils</li> <li>■ Additional Sampling and Analysis for TCLP Metals: TGA and Infiltration Basin</li> </ul>	
		<ul style="list-style-type: none"> <li>■ Additional Sampling and Analysis: Infiltration Basin Soils</li> <li>■ Plugging of Manholes and Specialty Equipment Use</li> <li>■ Elimination of the Construction Zone Entrance and Exit Ramp</li> <li>■ Reimbursement of Engineer's Costs</li> </ul> <p style="text-align: right;"><b>Total:</b></p>	<b>\$330,469.50</b>

The final project costs, including the executed project change orders and all unit quantity adjustments, totaled \$960,557.00. A summary of the unit quantities and project costs are provided in Appendix W.

### 5.2.2 Contract Costs

The total cost of several unit-cost bid items changed due to changes in schedule and quantity, including excavation and disposal of both hazardous and non-hazardous soils, sampling and monitoring, and well installation. A comparison of Horizon's bid with the estimated bid quantities and the actual quantities and costs of those bid items that changed is presented in Table 5-2.

**Table 5-2 Estimated and Actual Quantities and Costs, Shenango Steel Mold Site**

Bid Item	Description	Estimated Quantity	Estimated Total Cost	Actual Quantity	Actual Total Cost
2	Site Services	50 days	\$5,000.00	55 days	\$5,500.00
3	Health and Safety	45 days	\$3,375.00	37.5 days	\$2,812.50
4A	Excavation and Off-site Disposal (hazardous)	500 tons	\$51,250.00	0 tons	\$0.00
4B	Excavation and Off-site Disposal (non-hazardous)	5,750 tons	\$353,337.50	10,931 tons	\$671,729.00
5	Excavation and Off-site Disposal (non-hazardous concrete)	523 tons	\$7,325.00	0 tons	\$0.00
8	Site Restoration-Backfilling Excavated Areas	4000 cubic yards	\$104,000.00	6,413 cubic yards	\$166,738.00



## 5. Issues and Changes to the Contract

**Table 5-2 Estimated and Actual Quantities and Costs, Shenango Steel Mold Site**

Bid Item	Description	Estimated Quantity	Estimated Total Cost	Actual Quantity	Actual Total Cost
9A	Sampling and Analyses of Soils: PCBs in Soils	40	\$4,880.00	76	\$9,272.00
9B	Sampling and Analyses of Soils: SVOCs in soils	40	\$11,720.00	53	\$15,529.00
9C	Sampling and Analyses of Soils: TCLP SVOCs in Soils	10	\$3,660.00	29	\$10,614.00
10	Sampling and Analyses for TCLP Metals: TGA and Infiltration Basin	0	\$0.00	5	\$1,035.00
11	Additional Sampling and Analysis: Infiltration Basin Soils	0	\$0.00	14	\$15,083.54
12	Plugging of Manholes and Specialty Equipment Use	0	\$0.00	2	\$3,035.69
13	Elimination of Construction Zone Entrance/Exit Ramp	1	\$789.37	0	\$0.00
New	Reimbursement of Engineer's Costs	2	-	249 hours	\$25,542.00

This table shows that a total of 10,931.31 tons of non-hazardous and 0 tons of hazardous soil were disposed of off-site. The increase in the quantity of non-hazardous soil disposal is based on analytical results obtained after soils assumed to be hazardous for bidding purposes were proven, upon sampling for characterization, to be non-hazardous, and additional excavation (i.e., wider) was performed at the excavation limits, as described in Sections 3.5 and 3.6.

### 5.3 Project Completion Issues

Completion of the remedial or field phase of the project was accomplished without incurring contractual delays with the contractor or his subcontractors despite the additional contract work covered under Change Order #1. Mobilization, survey, excavation, sampling, restoration, and demobilization activities proceeded in general accordance within the prescribed 60-calendar day period despite delays in achieving Substantial Completion based on delays with analytical and DUSR deliverables.

## **5. Issues and Changes to the Contract**

Horizon experienced substantial delays with delivery of analytical laboratory results for DUSR review. Several weeks of additional administrative project time were required to monitor and coordinate final submittals of required project documentation. This issue had a negative impact on the normal progression of the project and resulted in additional costs to the contractor in the form of additional engineering costs recovered by change order as required by the contract.

### **5.3.1 Schedule Delays Resulting from Expanded Areas of Excavation**

The original contract time was 120 calendar days, with a start date of January 30, 2006, and a completion date of May 30, 2006. No construction delays in the project schedule were incurred due to the increase of the excavated areas.

### **5.3.2 Security**

Horizon was responsible for site security within the project site, 24 hours per day, 7 days per week for the duration of the project. The contractor contacted local law enforcement officials regarding activities at the site and placed physical barricades at the numerous points of entry around the site. Because of the project timing and the relatively remote, out-of-the-way nature of the site, it appeared to be very unlikely that a major security incident would occur. However, an attempted break-in at the office trailer complex occurred between the end of operations on Monday, March 13 and start of operations on Tuesday, March 14, 2006. Vandals broke into the Horizon office trailer and stole two-way radios used to communicate with truck drivers at the scale house. The resident engineer's office suffered only minor damage to the door and no unauthorized entry took place. Aside from the single incident noted above, no construction equipment theft, damage, records destruction, or other vandalism occurred during the field activity phase of the project. Horizon filed a police report for insurance purposes.

### **5.3.3 Change in Status - Hazardous Waste Disposal Tax**

The contractor was not required to pay the Hazardous Waste Special Assessment or all local disposal taxes (generator tax) for all of the hazardous waste disposed of off-site from the Shenango Steel Mold project. As stated in Specification Section 02223-4, "Remedial work which generates hazardous waste from inactive waste disposal sites . . . are not subject to the special assessment 'tax.'" The contractor remained responsible for paying any local and or county taxes that were applicable to the disposal of wastes from the remedial work.

Based on analytical data results showing that no hazardous waste was disposed of off-site, no hazardous waste disposal tax was required to be paid by the contractor.

### **5.3.4 Contractor Payments**

Horizon submitted five Contractor Applications for Payment and a final release of retention in accordance with the Contract Documents. EEEPC evaluated the accuracy of each CAP for quantities and percentage of completion for each individual bid item and change order item prior to approval. EEEPC reviewed the CAPs for errors by Horizon. If errors were found, Horizon was contacted and asked to

## 5. Issues and Changes to the Contract

revise and resubmit the request. After the CAP was accepted and recommended for payment by EEEPC, each CAP was submitted to NYSDEC for processing through the NYSDEC Project Manager and the NYS Controller's Office.

The summary of CAP payments for the Shenango Steel Mold site to Horizon are presented in Table 5-3.

**Table 5-3 Shenango Steel Mold Site – CAP Payment to Horizon Environmental Services, Inc.**

CAP #	Date Submitted	Amount Requested
1	2/10/06	\$68,172.48
2	3/14/06	\$404,862.36
3	4/20/06	\$125,542.98
4	7/26/06	\$31,409.70
5 <sup>1</sup>	Pending	\$330,569.49
<b>Total</b>		<b>\$960,557.00</b>

<sup>1</sup> Change order #1 under final review by the NY State Controller.

At the time of the Construction Certification Report submittal, Change Order no. 1 had not been executed by the NY State Controller. This report reflects the intended final payment to the Contractor pending final execution of Change Order no. 1 and CAP no. 5.

### 5.3.5 Certified Payrolls

Horizon submitted certified payrolls based on prevailing wage rates published in the Contract Documents to EEEPC with each CAP. EEEPC verified the proper wage rate and hours for individual Horizon employees and ensured that certified payrolls were accurate before approving CAPs.

### 5.3.6 EPA Generator Identification Status

After NYSDEC discovered that the Shenango Steel Mold Site had no EPA number for the potential disposal of waste material from the site, the EEEPC Project Manager submitted a request to the EPA for an I.D. number.

The EPA-required Generator Identification Number for the Shenango Steel Mold site (NYR000132472) was received from the EPA in December 2005.

### 5.3.7 Weather Conditions for Construction

Mild weather conditions at the Shenango Steel Mold Site in January, February, and March of 2006 contributed to the successful and timely completion of the remedial phase of the project. While freezing overnight temperatures were encountered, cooler daytime temperatures often helped in the excavation and transport of

## **5. Issues and Changes to the Contract**

materials on-site by keeping the ground from thawing out and bogging down trucks and equipment. The lack of significant snowfall experienced during the substantial completion period translated into less than one day of lost time and extremely minimal snow removal efforts.

Dry, sunny weather experienced in March 2006 allowed the contractor to backfill and compact material at the exclusion zones at stable moisture contents and under optimal conditions. This increased the effectiveness of the equipment and expedited the restoration and demobilization effort.

### **5.3.8 Substantial Completion**

Horizon was required to complete the contaminant remediation work and have all equipment and materials off the Shenango Steel Mold site by March 31, 2006. All work was to be performed in a five-day work week with eight-hour days (i.e., 40 hours per week). Substantial Completion inspection was requested on March 23, 2006, and was performed on Wednesday, March 29, 2006. In attendance at the Substantial Completion site walk were David Locey of NYSDEC Region 9; Mike Steffan, EEEPC Project Manager; Greg Jones, EEEPC site representative; Doug Klonsinski, acting Health and Safety officer for Horizon Environmental Services, Inc.; and Ed Pooters, acting Site Superintendent for Horizon Environmental Services, Inc.

While the Substantial Completion site walk indicated that the field effort was essentially complete, a number of outstanding, critical project submittal items still needed to be provided before Final Substantial Project Completion could be recommended. EEEPC compiled a list of items on an Incomplete Work List. These outstanding items included all analytical and DUSR project information that was critical to the closure of the project. These items included all the analytical results from the field work, the complete Category A and B analytical deliverables, and the DUSR for the analyses of soils for characterization and confirmation. The balance of the final project deliverables were received by EEEPC on Tuesday, May 23, 2006, and were reviewed by EEEPC for technical acceptability.

As a result of delays in the timely submittal of closeout documentation, the coordination and review process required additional time and effort on the part of EEEPC personnel beyond that covered in their work assignment with NYSDEC. Several post-construction telephone conferences were held to provide updates to all parties involved in the status of the final project deliverables required for Substantial Completion. These minutes are included in Appendix R. Through these efforts, the submittal process was completed and all incomplete work items were completed by the time the analytical results and DUSR documentation were received, reviewed, and accepted.

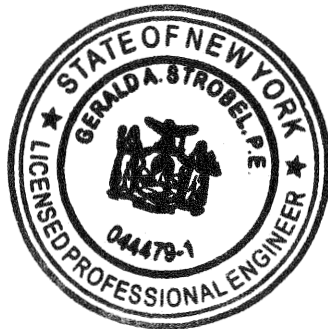
As of Wednesday, May 24, 2006, Horizon had achieved Substantial Completion of the project. A copy of the signed Substantial Completion Certificate is provided in Appendix H.

# 6

## Engineer's Construction Certification

### Conclusion and Certification

Ecology and Environment Engineering, P.C. (EEEPC) certifies that the Remedial Action of the Shenango Steel Mold Project (NYSDEC Contract Number D005660) was completed in substantial compliance with the March 2002 Record of Decision, approved plans, Remedial Construction Contract Documents entitled *Shenango Steel Mold, Site Number 9-15-172, City of Buffalo, Erie County, New York*, dated June 2005, and Addendum Number 1, entitled *Shenango Steel Mold Site Remedial Construction Addendum Number 1* dated August 24, 2005.



Signature: \_\_\_\_\_

*Gerald A. Strobel*

Gerald A. Strobel, P.E.  
Program Director

Date: \_\_\_\_\_

*9/14/06*

# A

## Summary of Bids



# Project: Shenango Steel Mold Site

Site # 9-15-172

Contract # D005660

Public Bid Opening: **Tuesday, August 30, 2005 1:00PM**



## Results of Bid Opening

Payment Item No.	Bid Item Description	QTY	Units	Engineer's Estimate		Bidder: Horizon Environmental (1)		Bidder: EQ Northeast (2)		Bidder: Sciencetech (3)	
				Unit Price Estimate	Total	Unit Price Cost	Bid Item Total	Unit Price Cost	Bid Item Total	Unit Price Cost	Bid Item Total
1	Site Preparation	1	Lump Sum	\$ 60,000.00	\$ 60,000.00	\$ 59,875.00	\$ 59,875.00	\$125,000.00	\$ 125,000.00	\$151,974.00	\$ 151,974.00
2	Site Services	50	Days	\$ 1,000.00	\$ 50,000.00	\$ 100.00	\$ 5,000.00	\$ 1,100.00	\$ 55,000.00	\$ 1,086.94	\$ 54,347.00
3	Health & Safety	45	Days	\$ 500.00	\$ 22,500.00	\$ 75.00	\$ 3,375.00	\$ 600.00	\$ 27,000.00	\$ 404.21	\$ 18,189.45
4A	Excavation, Transportation, and Off-site Disposal of Hazardous Waste	500	Tons	\$ 200.00	\$ 100,000.00	\$ 102.50	\$ 51,250.00	\$ 125.00	\$ 62,500.00	\$ 121.48	\$ 60,740.00
4B	Excavation, Transportation, and Off-site Disposal of Non-Hazardous Waste	5750	Tons	\$ 95.00	\$ 546,250.00	\$ 61.45	\$ 353,337.50	\$ 40.00	\$ 230,000.00	\$ 56.38	\$ 324,185.00
5	Excavation, Demolition, Transportation, and Off-site Disposal of Non-Hazardous Concrete	535	Tons	\$ 95.00	\$ 50,825.00	\$ 14.00	\$ 7,490.00	\$ 35.00	\$ 18,725.00	\$ 50.92	\$ 27,242.20
6	Monitoring Well Decommissioning	1	Lump Sum	\$ 8,000.00	\$ 8,000.00	\$ 12,000.00	\$ 12,000.00	\$ 3,000.00	\$ 3,000.00	\$ 6,737.50	\$ 6,737.50
7	Infiltration Basin	1	Lump Sum	\$ 35,000.00	\$ 35,000.00	\$ 4,500.00	\$ 4,500.00	\$ 37,000.00	\$ 37,000.00	\$ 4,468.78	\$ 4,468.78
8	Restoration - CleanOff-site Backfill (supply, placement, compaction, and grading)	4000	Cubic Yards	\$ 30.00	\$ 120,000.00	\$ 26.00	\$ 104,000.00	\$ 22.00	\$ 88,000.00	\$ 17.24	\$ 68,960.00
9A	Analysis - SW846 - Method 8082 (PCBs in soil)	40	Each	\$ 100.00	\$ 4,000.00	\$ 122.00	\$ 4,880.00	\$ 150.00	\$ 6,000.00	\$ 93.85	\$ 3,754.00
9B	Analysis - SW846 - Method 8270C (SVOCs in soil)	40	Each	\$ 100.00	\$ 4,000.00	\$ 293.00	\$ 11,720.00	\$ 400.00	\$ 16,000.00	\$ 196.90	\$ 7,876.00
9C	Analysis - SW846 - Method 8270C (TCLP - SVOCs in soil)	10	Each	\$ 800.00	\$ 8,000.00	\$ 366.00	\$ 3,660.00	\$ 500.00	\$ 5,000.00	\$ 189.38	\$ 1,893.80
Grand Total - Bids					\$ 1,008,575.00		\$ 621,087.50		\$ 673,225.00		\$ 730,357.51

Payment Item No.	Bid Item Description	QTY	Units	Bidder: Modern Construction (4)		Bidder: Op-Tech (5)		Bidder: Titan Wrecking (6)		Bidder: Abscope Environmental (7)	
				Unit Price Cost	Bid Item Total	Unit Price Cost	Bid Item Total	Unit Price Cost	Bid Item Total	Unit Price Cost	Bid Item Total
1	Site Preparation	1	Lump Sum	\$ 183,500.00	\$ 183,500.00	\$ 122,500.00	\$ 122,500.00	\$405,000.00	\$ 405,000.00	\$163,000.00	\$ 163,000.00
2	Site Services	50	Days	\$ 800.00	\$ 40,000.00	\$ 680.00	\$ 33,000.00	\$ 2,300.00	\$ 115,000.00	\$ 240.00	\$ 12,000.00
3	Health & Safety	45	Days	\$ 1,600.00	\$ 72,000.00	\$ 1,650.00	\$ 74,250.00	\$ 2,200.00	\$ 99,000.00	\$ 990.00	\$ 44,550.00
4A	Excavation, Transportation, and Off-site Disposal of Hazardous Waste	500	Tons	\$ 136.00	\$ 68,000.00	\$ 145.75	\$ 72,875.00	\$ 120.00	\$ 60,000.00	\$ 138.00	\$ 69,000.00
4B	Excavation, Transportation, and Off-site Disposal of Non-Hazardous Waste	5750	Tons	\$ 43.30	\$ 248,975.00	\$ 46.00	\$ 264,500.00	\$ 31.00	\$ 178,250.00	\$ 85.00	\$ 488,750.00
5	Excavation, Demolition, Transportation, and Off-site Disposal of Non-Hazardous Concrete	535	Tons	\$ 47.00	\$ 25,145.00	\$ 48.00	\$ 25,680.00	\$ 47.00	\$ 25,145.00	\$ 120.00	\$ 64,200.00
6	Monitoring Well Decommissioning	1	Lump Sum	\$ 6,000.00	\$ 6,000.00	\$ 5,200.00	\$ 5,200.00	\$ 9,000.00	\$ 9,000.00	\$ 5,500.00	\$ 5,500.00
7	Infiltration Basin	1	Lump Sum	\$ 46,000.00	\$ 46,000.00	\$ 97,350.00	\$ 97,350.00	\$ 93,000.00	\$ 93,000.00	\$115,000.00	\$ 115,000.00
8	Restoration - CleanOff-site Backfill (supply, placement, compaction, and grading)	4000	Cubic Yards	\$ 13.20	\$ 52,800.00	\$ 23.00	\$ 92,000.00	\$ 23.00	\$ 92,000.00	\$ 25.50	\$ 102,000.00
9A	Analysis - SW846 - Method 8082 (PCBs in soil)	40	Each	\$ 520.00	\$ 20,800.00	\$ 530.00	\$ 21,200.00	\$ 142.00	\$ 5,680.00	\$ 200.00	\$ 8,000.00
9B	Analysis - SW846 - Method 8270C (SVOCs in soil)	40	Each	\$ 870.00	\$ 34,800.00	\$ 915.00	\$ 36,600.00	\$ 225.00	\$ 9,000.00	\$ 515.00	\$ 20,600.00
9C	Analysis - SW846 - Method 8270C (TCLP - SVOCs in soil)	10	Each	\$ 870.00	\$ 8,700.00	\$ 915.00	\$ 9,150.00	\$ 275.00	\$ 2,750.00	\$ 500.00	\$ 5,000.00
Grand Total - Bids					\$ 806,720.00		\$ 854,305.00		\$ 1,093,825.00		\$ 1,097,600.00

**B**

## **Post-Bid Meeting Minutes**



## ecology and environment engineering, p.c.

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BUFFALO CORPORATE CENTER  
368 Pleasantview Drive, Lancaster, New York 14086  
Tel: 716/684-8060, Fax: 716/684-0844

December 22, 2005

Mr. David Chiusano, Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Bureau of Construction Services,  
625 Broadway, 12<sup>th</sup> Floor  
Albany, New York 12233-7013

RE: Contract # D005660; Post Bid General Meeting Minutes  
Shenango Steel Mold Site Remedial Construction, (C) Buffalo, (C) Erie,  
Site Number 9-15-172

Dear Mr. Chiusano:

Attached for your review are the Post-bid Meeting Minutes for the Shenango Steel Mold site held at Ecology and Environment Engineer, P.C.'s (EEEPC's) offices in the Lancaster, New York on Tuesday, December 20, 2005. The meeting minutes reflect discussions resulting from a prepared agenda based on general project issues prior to the pre-construction meeting. Copies have been distributed to the meeting attendees. These minutes will be generally reviewed as part of the tentatively scheduled pre-construction meeting to be held on Tuesday, January 24, 2006 at 11:00 A.M. at EEEPC's offices in Lancaster, NY.

I can be reached at (716) 684-8060. Should you have any questions please do not hesitate to give me a call.

Sincerely,

A handwritten signature in cursive script that reads "Michael G. Steffan".

Michael G. Steffan  
Project Manager

cc: D. Miller, EEEPC - Buffalo  
J. Kohler, EEEPC- Buffalo  
D. Locey, Region 9 - NYSDEC  
S. Clary, HES  
B. Spangler, HES  
CTF- 000699.NV28.03

**Shenango Steel Mold Site – Remedial Construction**  
**Contract Number: D005660**  
**NYSDEC Site # 9-15-172**

**Date: Tuesday, December 20, 2005**

**Time: 11:00AM**

**Location: Ecology & Environment Engineering, P. C.**

## **Meeting Minutes**

Meeting was started at 11:05AM

Purpose of the meeting was to initially introduce the parties to be involved with the Shenango Steel Remedial project and to discuss the post bid submittals previously presented by Horizon.

This meeting is not to be construed as a formal pre-construction meeting. A pre-construction meeting date will be established by NYSDEC once a Notice to Proceed is issued.

Meeting Agenda is provided as Attachment A.

### **1) Introductions**

- Attending the meeting were as follows:
  - Mr. David Chiusano –Project Manager - NYSDEC
  - Mr. Scott Clary – Project Director – Horizon Environmental Services (HES)
  - Mr. Brian Spangler – Site Project Manager - HES
  - Michael Steffan - Project Manager – Ecology and Environment Eng., P. C. (EEEPC)
  - Jeff Kohler – Site Representative –EEEPC
  - Don Miller – EEEPC - Construction Manager

### **2) Status of Contract**

- Per Dave Chiusano the contract was signed on December 20, 2005. A Notice to Proceed (NTP) letter will be issued to HES by NYSDEC on January 30, 2006.
- The initial pre-construction meeting date was tentatively established to take place on January 24, 2006 at 11:00AM at the EEEPC office in Lancaster, New York. EEEPC will prepare official notification in advance to all parties affected by the scope of work.

### 3) Review of 5/14 Day Submittals

- M. Steffan reviewed the format for review of the 5 & 14 day initial project submittals. The initial project submittal includes the documents submitted by HES on September 12, 2005 with review comments submitted by EEEPC on October 19, 2005. The initial submittals included: project work plan, project schedule, health and safety plan, quality assurance / quality control plan, sampling & analysis plan.
- A written response was provided by HES to EEEPC's comments on November 20, 2005. After review of the HES response, the information was not formatted to address EEEPC's review letter of October 19, 2005.
- Pursuant to our discussions today (12/20/05), HES will prepare responses according to EEEPC's comment letter. The responses will be incorporated into the individual work plans and will be resubmitted for review.

### 4) Review of Project Schedule of Values

- EEEPC responded to HES's schedule of project values submittal on November 4, 2005. The submission was disapproved because the information did not match the bid items outlined in the measurement and payment section of the Contract Documents.
- HES will resubmit their schedule of values following the format of the measurement and payment items section of the Contract Documents.

### 5) Prepared List of Project Shop Drawings

- Table 1 of Section 01011 of Section XI of the Technical Specifications was provided to HES by EEEPC.
- Due to the project duration period, it was agreed that shop drawings of a critical nature are to be prepared and submitted before receipt of the official NTP from NYSDEC.

### 6) Other Discussions

#### a) Anticipated Project Startup

- M. Chiusano indicated that NTP will be issued on or about January 30, 2006.

#### b) Horizon Project Manager

- Brian Spangler will be the site project manager for HES.

#### c) NYSDEC & EEEPC Project Manager

- Dave Chiusano will be the project manager for NYSDEC. Mike Steffan will be the project manager for EEEPC. Jeff Kohler will be the site representative from EEEPC overseeing the remedial construction for NYSDEC.

#### d) Preliminary Discussion of Project Pre-construction

- NYSDEC and EEEPC will prepare an agenda for the pre-construction meeting tentatively to take place at 11:00AM on January 24, 2006. This agenda will be forwarded to HES in advance of the actual meeting.
- Many of the project technical details and project administrative issues will be discussed at the pre-construction meeting.

e) Remaining Contractual Submittals

- Not discussed at the meeting.

f) Final Discussions

- D. Chiusano requested that HES review the shop drawings requested in the Contract Documents and coordinate the submittal of as many items for review and approval to EEEPC prior to the pre-construction meeting as possible. Where shop drawings cannot be prepared and submitted based on the need to have a signed contract, HES should be prepared to submit as soon as the contract is signed.
- Uniform Contracting Questionnaires for subcontractors over \$10,000 are to be submitted to NYSDEC as quickly as possible.
- D. Chiusano will prepare the Dispensation Request for the project to NYSDOL directly.
- D. Chiusano will electronically transmit the new Contractor's Application for Payment form to HES.

**Meeting Adjournment at 1:00 PM and schedule for the next meeting -**

**Tuesday, January 24, 2005 at 11:00 AM.**

**These minutes shall stand as correct, unless objections are raised at the next progress meeting.**

Submitted By: Michael B. Steffan

Dated: December 22, 2005



## Attachment A

### **Shenango Steel Mold Site – Remedial Construction Contract Number: D005660 NYSDEC Site # 9-15-172**

**Scheduled Date: Tuesday, December 20, 2005**

**Time: 11:00AM**

**Location: Ecology & Environment Engineering, P. C.**

## **Agenda**

- 1) Introductions
- 2) Status of Contract
- 3) Review of 5/14 Day Submittals
- 4) Review of Project Schedule of Values
- 5) Prepared List of Project Shop Drawings
- 6) Other Discussions
  - a) Anticipated Project Startup
  - b) Horizon Project Manager
  - c) NYSDEC & EEEPC Project Manager
  - d) Preliminary Discussion of Project Pre-construction
  - e) Remaining Contractual Submittals
  - f) Final Discussions

C

# Pre-Construction Meeting Minutes



## ecology and environment engineering, p.c.

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BUFFALO CORPORATE CENTER  
368 Pleasantview Drive, Lancaster, New York 14086  
Tel: 716/684-8060, Fax: 716/684-0844

February 20, 2006

Mr. David Chiusano, Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Bureau of Construction Services  
50 Wolf Road  
Albany, New York 12233-7010

RE: Contract # D005660; Pre-Construction Meeting Minutes  
Shenango Steel Mold Site, (C) Buffalo (C) Erie

Dear Mr. Chiusano:

Attached for your review are the pre-construction meeting minutes for the Shenango Steel Mold site held at Ecology and Environment Engineering, P.C.'s offices in Lancaster, New York on Tuesday, January 24, 2006. The meeting minutes reflect discussions resulting from the prepared agenda. Copies have been distributed to the meeting attendee. The minutes will be reviewed as part of Progress Meeting #2 to be held on Wednesday, February 22, 2006 at 11:00 A.M. at the project site.

I can be reached at (716) 684-8060. Should you have any questions please do not hesitate to give me a call.

Sincerely,

Michael G. Steffan  
Project Manager

cc: D. Miller, E & E, Buffalo  
G. Harris, NYSDEC, Albany  
J. Kohler, Site Representative, EEEPC - Buffalo  
B. Spangler, HES  
S. Clary, HES  
D. Locey, Buffalo, NYSDEC - Region 9  
CTF: 000699.NV28.03

**Shenango Steel Mold Site – Remedial Construction**  
**Contract Number: D005660**  
**NYSDEC Site # 9-15-172**

**Date: January 24, 2006**

**Time: 11:00AM**

**Location: Ecology & Environment Engineering, P. C.**

## **Pre-Construction Meeting Minutes**

Meeting was started at 11:05 AM.

The purpose of this meeting was to address specific pre-construction issues for the upcoming project and as required by Section XI, Specification 01010, Article 1.5 of the Contract Documents.

Meeting Agenda is provided as **Attachment A.**

### **Introductions**

Attending the meeting was as follows:

- Mr. David Chiusano-Project Manager-NYSDEC
- Mr. David Locey-Region 9-NYSDEC
- Mr. Scott Clary-Project Director-Horizon Environmental Services (HES)
- Mr. Brian Spangler-Site Project Manager-Horizon Environmental Services (HES)
- Mr. Michael Steffan-Project Manager-Ecology and Environment Engineering, PC (EEEP)
- Mr. Donald Miller-Construction Manager-EEEP
- Mr. Daniel Milewski-Engineer-EEEP
- Mr. Jeffrey Kohler-Site Representative-EEEP

1) **Sign-In Sheet** for attendees is provided as **Attachment B.**

### **2) Representatives and Responsibilities:**

- **Scott Clary: President of HES,** Address: 590A Callery Road, Cranberry Twp, PA 16066, Tel#: 724-538-8522, Fax#: 724-538-8522, E-mail Address: [scott@horizonenviro.net](mailto:scott@horizonenviro.net)
  - Will serve as HES's Health and Safety Officer;
  - Handling logistics and acting as liaison for Horizon Environmental Services with the landfill;
  - Responsible for ensuring contractor's project manager is fulfilling requirements of the contract documents;
  - Responsible for resolving disputes between HES and NYSDEC;

- Responsible for signings all CAP prepared by HES's project manager, Change Orders (COs), Substantial Completion signoffs; and
  - Expected to attend all progress meetings.
- **Brian Spangler: HES On-Site Project Manager**, Address: 590A Callery Road, Cranberry Twp, PA 16066, Tel#: 724-538-8522, Fax#: 724-538-8522, E-mail Address: [brian@horizonenviro.net](mailto:brian@horizonenviro.net)
- Will serve as the HES project manager for day to day operations;
  - Representative to act on behalf of the contractor;
  - Must be on-site full time or designate suitable alternative to be prior approved by the department;
  - Responsible to attend all project progress meetings;
  - Responsible for preparing CAP forms, updating progress schedules, shop drawings, record drawings, PCOs, and RFIs in accordance with the contract documents during the project; and
  - Will share administrative duties with Mr. Clary.
- **Jeff Kohler: Ecology and Environment Engineering PC (EEEPC) Site Representative for NYSDEC**, Address: 368 Pleasant View Drive, Lancaster, New York 14086, Tel#: 716-684-8060, Fax # 716-684-0844, E-mail address: [jkohler@ene.com](mailto:jkohler@ene.com)
- Responsible for day to day oversight of the contractor;
  - Limited interaction with the public;
  - Assist in resolution of decisions on filed problems and issues;
  - Issuance of limited field orders after consultation with engineer/project manager;
  - Provides daily inspection reports to the engineer/project manager;
  - Reports contractor's non-compliances with any aspects of the contract documents;
  - Works with the contractor in making recommendations for project measurement and payment including CAP review;
  - Prepares event reports documenting unusual project conditions, health and safety hazards, and disputes;
  - Reporting and documenting contractor's deviation from the work specified and any instructions issued regarding such deviations;
  - Reviews shop drawings, RFIs, and PCOs on an ongoing basis with the project,
  - Reviews the contractor's request for substantial project completion; and
  - Reviews all contractor submittals on project records and updates on as-built field information.
- **Michael Steffan: EEEPC Project Engineer/Manager**, Address: 368 Pleasant View Drive, Lancaster, New York 14086, Tel#: 716-684-8060, Fax # 716-684-0844, E-mail address: [msteffan@ene.com](mailto:msteffan@ene.com)
- Responsible for providing construction inspection and management services for the Department;
  - Primary contact for contractor away from the field;

- Responsible for review of the contractor's CAP as recommended by the EEEPC site representative and contractor;
  - Chairs progress meetings and prepares meeting agendas;
  - Reviews progress meeting minutes prepared by the site representatives. Issues and distributes progress meeting minutes;
  - Prepares field orders, proposed change orders, change orders and substantial completion reviews;
  - Has authority to make all final decisions for the project on behalf of EEEPC.
- **Donald Miller: EEEPC Construction Manager/QC Manager**, Address: 368 Pleasant View Drive, Lancaster, New York 14086, Tel#: 716-684-8060, Fax # 716-684-0844, E-mail address: [dmiller@ene.conm](mailto:dmiller@ene.conm)
    - Provides QA/QC on all projects involving construction activities at EEEPC.
- **David Chiusano: Project Manager for NYSDEC**, Address: NYSDEC-Remedial Bureau E, Section A Division of Environmental Remediation, 625 Broadway, 12<sup>th</sup> Floor, Albany, New York 12233-7017, Phone # 518-402-9812, Fax#518-402-9819, E-mail address: [djchiusa@gw.dec.state.ny.us](mailto:djchiusa@gw.dec.state.ny.us)
    - Responsible for resolving disputes between the contractor and engineer;
    - Processes change orders and CAPS prepared by the contractor and reviewed and re commended by the engineer;
    - Process final project completion and closeout based upon recommendation and approval of the engineer; and
    - Responsible for all final decisions involving implementation of the contract.
- **George Harris: Chief - Remedial Bureau on Construction - NYSDEC**, Address: NYSDEC-Remedial Bureau E, Section A Division of Environmental Remediation, 625 Broadway, 12<sup>th</sup> Floor, Albany, New York 12233-7017, Phone #: 518-402-9812, Fax#: 518-402-9819, E-mail address: [gwharris@gw.dec.state.ny.us](mailto:gwharris@gw.dec.state.ny.us)
    - Responsible for resolving disputes between the contractor and NYSDEC project manager.
    - Receives substantial completion notice from contractor regarding completion of physical project t work.
- **David Locey: NYSDEC Region 9 Representative**, Address: 270 Michigan Avenue, Buffalo, New York 14203, Phone #: 716-851-7220, Fax #: 716-851-7226, E-mail Address: [dplocey@gw.dec.state.ny.us](mailto:dplocey@gw.dec.state.ny.us)
    - Will serve as liaison between NYSDEC and press or local labor unions as required.
    - The authority to make project decisions with respect to the project for the NYSDEC in the absence of Mr. Chiusano.



- **Dan Milewski: Engineer –EEEP.** Mr. Milewski was an observer at pre-construction meeting.

### 3) **Contract Times and Liquidated Damages (Section VI – Agreement of the Contract Documents:**

- Contract time for the project work to be complete and ready for final project completion payment is 120 days.
- Regarding Section VI of the Contract Documents, Mr. Chiusano stated that the actual construction duration will be 60 calendar days from:  
     Notice to Proceed: Monday, January 30 2006 to  
     Substantial Completion: Thursday March 30, 2006.
- The contractor is responsible for verifying the substantial completion date from the NTP.
- For days work is not completed after March 30, 2006, liquidated damages of \$1,150 per day can be assessed.
- Final project completion is 60 days after substantial completion. Liquidated damages can be assessed at \$600/ day for each day that expires after the contract time.
- The intent of the liquidated damages is to recover the additional expenses for inspection, engineering services, and administrative costs beyond the contract time
- Mr. Locey is to be copied on all shop drawing responses to the GC.
- Mr. Chiusano requested that photos of the existing site approach roadway off Fuhrmann Blvd. be made to document pre-construction conditions prior to mobilization.

### 4) **Progress Schedule (Section VIII, Article 1.4.1 and Section X – Standard Specification – 00001)**

- Mr. Spangler presented the schedule of work for the next two weeks. Copies were given to all persons in attendance at the meeting. The interim schedule was reviewed with comments by M. Steffan. **See Attachment C.** Attendees reviewed the project work for the next two weeks. Mr. Spangler discussed the work will consist of mobilization to the project, clearing and grubbing, setting up site trailers, infiltration basin, soil staging and decon areas, and site security.
- Mr. Steffan discussed the placement of pipe plugs in the designated manhole to prevent contaminated groundwater from moving into the existing storm sewer system. He also requested that silt fencing be installed prior to excavation activities taking place.
- HES stated that the Main Gate and project security fencing would be installed by week of February 6, 2006.
- HES will have the surveyors on site to establish project bench marks, corners of excavation areas, and grade stakes.
- Well decommissioning will be performed by SJB Drilling during the first week.
- The overall project schedule was prepared, but no formal submittal of the project schedule was made by HES. The formal submittal of the schedule for review shall be prepared for delivery by the end of the current week.

- Future schedule updates submittals will include major tasks for point of discussion at the progress meetings. The schedules will be reviewed for approval at the progress meetings the same as shop drawing submittals.
- *Unapproved schedules will delay applications for payment.* First CAP shall not be processed unless contractor has submitted acceptable schedules.
- HES is expected to submit CAP # 1 within two weeks of startup.
- Electronic copies of the CAP form were previously provided by Mr. Chiusano to HES.

## 5) **Article 5 of the General Conditions (Section VIII of the Contract Documents)**

- **Working Hours:**
  - Mr. Steffan requested details regarding the General Contractor's (GC) working hours. Mr. Clary responded that the normal schedule for the project would be an 8 hour day beginning at 7:30 AM and ending at 4:30 PM.
  - Current dispensation from NYSDOL lists the project as the potential to work 6 days per week at 12 hours per day.
  - Changes to the normal work day must be first requested and then approved prior to changing the working hours or days of work of the project.
  - EEEPC contract is currently approved for work not exceeding 40 hours per week. Where site work is required beyond the 40 hours/week without exercising the current dispensation, the HES on-site project manager and EEEPC site representative will need to discuss and agree to the overtime hours with the project. The preference would be to have EEEPC and HES sign off on the acceptance of additional hours with the project each day or by the end of the work week. The additional hours beyond the work assignments hours would be later recovered by PCO under Section 5.3 – Labor, Working Hours, Materials, and Equipment of the General Conditions.
  - All subcontractors of HES will abide by the hours of work established by HES and approved by NYSDEC.
- **Subcontractors:**
  - Mr. Chiusano outlined the financial reporting requirements for Subcontractors with contract amounts over \$10,000 (US) including submission of UCQ forms.
  - All significant subcontractors or changes in subcontractors will require prior approval of NYSDEC. Mr. Clary responded that the proper documentation for all subs in this category would be forwarded to Mr. Chiusano at NYSDEC promptly.
- **As-built (record) drawings:**
  - As Built/Record Drawings are to be regularly updated and maintained by the HES for submission at the conclusion of the project. Record or redline drawing will be reviewed at the weekly progress meetings and will be a condition of CAP requests. Unapproved project record documentation will delay applications for payment.
  - Final submission of the project closure documents will be in AutoCAD and Adobe .pdf formats.

- Contractor is responsible for the surveyor and providing updated records in a timely manner to the Engineer.
- **Emergency Contact:**
  - Off-hours emergency contact is Brian Spangler and can be reached at mobile Tel. No. (412)-303-8692. Scott Clary's mobile Tel. No. is 724-612-4237.
- **Project Shop Drawings:**
  - Shop drawing submittal status was reviewed. To date, HES Transmittals 1 through 14 (EEEEPC numbering system) have been reviewed by EEEPC and were either approved or returned to the Contractor for various corrective actions.
  - The overall project schedule will be issued by HES at the end of the week. This will be transmittal #15 per EEEPC.
  - The list of project shop drawings was provided in the contract documents as Table 1 to Supplementary Specification Section 01011. This may not be a complete list and the contractor should review the submittal list as it compares to the technical specifications of the Contract Documents. Differences should be noted to EEEPC.
- **Project Progress Meetings:**
  - Project Progress Meetings will be held bi-weekly at the site. The next meeting will be scheduled for Wednesday, February 8, 2006 at 11:00 AM.
  - Meetings will be chaired by EEEPC. An agenda will be prepared by the Engineer. Meeting minutes will be prepared and distributed by the Engineer. At a minimum, the contractor, significant subcontractors, NYSDEC project manager, Engineer and site representative are expected to attend each meeting. Other persons important to various aspects of the project will be invited on a need basis.

## 6) Article 9 of the General Conditions-Changes in the Work

- **Field Orders:** (Article 9.2 of the General Conditions)
  - Written order from engineer to contractor which orders minor changes to work that doesn't involve cost or time (clarifications).
  - Field Orders will be issued by the EEEPC Project Manager through the Site Representative.
  - If contractor disagrees with field order must make written notification to Department within three calendar days.
- **Proposed Change Orders (PCOs):** (Article 9.4 of General Conditions):
  - Contractor initiates within 3 days of knowledge, follow-up documentation (cost) due within 15 days.

- Proposed Change Orders (PCOs) initiated by the contractor must be submitted to the EEEPC Project Manager for review. These items may be presented to the Site Representative if they are of an urgent nature.
- Department initiates - cost proposal due from Contractor within 3 days of issuance.
- If Department and Contractor can not agree on price, contractor is still required to carry on with work involved and adhere to progress schedule. Contractor has 30 days from issuance to submit notice of intent to appeal to Department. After that time the Department's position becomes final.
- **Change Orders (COs): (Article 9.5 of the General Conditions)**
  - To be prepared by Engineer, they follow proposed change orders once time and cost has been agreed upon.
  - Have to be routed to the **Office of the State Comptroller (OSC)** similar to construction contracts. The execution of the CO may take up to 8 weeks for approval, potentially longer if there is anticipated NYS budget issues.
- **Request for Further Information (RFIs):**
  - These are written requests by either by HES, EEEPC, or NYSDEC where further understanding or clarification is needed in a specific aspect of the project.
  - RFI's are issued when the Contract Documents or technical specifications may not address the situations at hand or to gain further understanding where project costs may become and issue.
  - RFIs are not intended for EEEPC or NYSDEC to run the job or do HES's job.

## 7) **Article 13 of the General Conditions-Contractor Application for Payment (CAP)**

- EEEPC's Engineer will make measurements for payment in consultation with the EEEPC site representative as estimates are prepared by contractor. Brian Spangler of HES will discuss the project quantities with Jeff Kohler of EEEPC prior to submission to the EEEPC Engineer.
- HES must use Department's CAP form, and be signed by Contractor's authorized representative identified in an executed copy of the Contract Documents (Section VI). Scott Clary as President of HES will have the authority of signing CAP, and can delegate responsibility provided prior written notification is given to Department. The final CAP requests should typed.

NYSDEC will provide electronic versions of the project specific CAP for the project to HES.

- Change Order items cannot be shown until formally approved by OSC.
- HES to submit to Engineer no more frequently than monthly, at least two weeks prior to being reviewed by NYSDEC project manager.
- Engineer will review within five (5) days, and recommend payment or return to HES for revision or change.
- CAP will not be approved if as-built documents are not kept current, and have been inspected by engineer.
- CAP will not be approved until contractor has submitted and engineer has reviewed progress schedule and other submittals which are due prior to CAP submission.
- Prompt payment law requires payment by Department within 30 days of receipt of CAP by NYSDEC project manager from engineer.
- Copies of the recommended CAP after signature will be provided to HES by EEEPC.

#### **8) Article 13 of the General Conditions – Completion of Work**

- Contractor is responsible for notifying the Department in writing that in their opinion the project is substantially complete.
- Substantial completion inspection will be held and punch list developed by Engineer. Contractor to provide schedule to engineer for completion of punch list items. Contractor may invoice for up to twice the value of the work remaining at this time.
- Upon being given written notification from Contractor to NYSDEC and EEEPC that punch list items have been completed, a final inspection will be performed by the Engineer.
- Upon acceptance and recommendation by the Engineer to the Department, the Department will issue satisfactory completion letter. Contractor can then submit for final payment (retainage release must be on separate CAP). No other costs can be claimed against contract in future.
- Affidavits associated with Contractor's verification of payment to their subcontractor's will be provided to Contractor upon request for release of retainage. A list of project subcontractors utilized on the project will be developed to ensure all verifications are

received. Verifications of subcontractor payment will be submitted to EEEPC.

## **9) Article 15 of the General Conditions – Disputes**

**Claims - certification language and time constraints contractor must be aware of.**

- Claims < \$10,000 will be decided by the Department. Claims > = \$10,000 must be certified by Contractor and possibly decided by the Department's contract review committee (CRC).
- Appendix B, paragraph IX of Section VII outlines steps taken by the CRC to resolve disputes.

## **10) M/WBE – EEO Requirements**

- Contractor must document good faith efforts to meet goals identified in Contract Documents.
- The Department's M/ WBE contact, Vicente Alfonso (518-402-9259), can help in devising strategies to attain goals.
- Contractor must submit updated M/WBE work plan to Department.
- Contractor must submit signed copies of subcontracts and cancelled checks to document M/WBE usage.

## **11) Status of Project Plans**

- **Work Plan** - HES has responded to EEEPC's initial work plan comments on January 5, 2006. EEEPC will provide final comments to each project plan by January 26, 2006. M. Steffan stated that the January 5, 2006 responses to the initial comments are acceptable with some minor changes. HES should prepare final project work plans upon review of the EEEPC's final comments. The final version of the work plan document shall be prepared and transmitted officially to EEEPC.
- **Progress Schedule** -- The overall project schedule was presented during the meeting. Final copies will be transmitted for final review and acceptance. The meeting reviewed and accepted the schedule for the next two week of work to be performed.
- **Sampling and Analysis Plan** - HES has responded to EEEPC's initial sampling and analysis plan comments on January 5, 2006. EEEPC will provide final comments to each project plan by January 26, 2006. M. Steffan stated that the January 5, 2006 responses to the initial comments of the plan are acceptable with some minor changes. HES should prepare final project sampling and analysis plan upon review of the EEEPC's final comments. The final version of the sampling and analysis plan document shall be prepared and transmitted officially to EEEPC.
- **QA/QC Plan** – Same discussion as the Sampling and Analysis plan above.
- **Dewatering Plan** - No separate plan was required. Excavation dewatering and pumping are discussed in the project work plan. Once the infiltration basin is finalized (constructed) and ground water samples analyzed,



pumping systems will be installed to remove groundwater from excavated depths of the excavations.

- **Transportation and Disposal Plan** – Transportation and disposal are discussed in the project work plan. Truck and facility permits should be finalized and submitted for review and acceptance.
- **Health and Safety Plan** – including - Community Monitoring, Project Air Monitoring, and Personnel Training Certifications and Refreshers - HES has responded to EEEPC's initial health and safety plan comments on January 5, 2006. EEEPC will provide final comments to the plan by January 26, 2006. M. Steffan stated that the January 5, 2006 responses to the initial comments are acceptable. HES should prepare final project site specific health and safety plans upon review of the EEEPC's final comments. The final version of the health and safety document shall be prepared and transmitted officially to EEEPC.
- **Access Road Plan** - No separate plan was required. Site access road development is discussed in the project work plan. Once mobilization is initiated, access road and site security improvements will be provided. M. Steffan stated that the January 5, 2006 responses to the initial comments regarding the access road improvements are acceptable with some minor changes. HES should prepare final project work plan upon review of the EEEPC's final comments. The final version of the work plan document shall be prepared and transmitted officially to EEEPC.
- **Project Schedule of Values** – HES is finalizing the project schedule of values based on EEEPC's comments of 1/20/06.

## 12) Project Shop Drawings

See project shop drawing discussion in Section 5 above.

## 13) Contractor's Activities over the Next Two Weeks

HES discussed the two interim schedule for the next two weeks of work beginning at mobilization. See Attachment C.

- Week 1 (beginning on January 30, 2006) will begin the mobilization by HES to the job site. Job trailers to be on site on Wednesday, February 1, 2006. Survey work will be performed to establish bench marks and site coordinates for areas of excavation. Waste characterization and waste profiles for disposal of contaminated soils to be the critical path of the first week operations.
- Week 2 to have mobilization complete and health and safety for job site operations including excavation to be complete at both work zones.

## 14) Open Discussion

- **Schedule of remaining shop drawing submittals and approval process.** HES will use the Table 1 presented in Section 01011 of the Supplementary Specifications. Shop drawings will be submitted on a timely basis as not to be a critical schedule item for EEEPC's review.

- **Additional Contractor historical site information needed.** HES discussed the need for electronic copies (.pdf versions) of section VI-XI of the contract documents. Also electronic version of the contract drawings. These will be performed by D. Chiusano.
- **Initial site survey - existing grades.** This work will be initiated by HES upon mobilization.
- **Initial baseline sampling and analysis.** This work will be initiated by HES upon mobilization.
- **Status of Project Permits.** M. Steffan suggested the HES to review any transportation permits before mobilization.
- **Additional Contract Document/Plan Requests.** No further copies are required per HES.
- **Certified Payrolls.** M. Steffan reminded HES that since they are an out of state contractor, payrolls must be at the job site not at the home office. While the trailer may not be secure, payrolls need to be accessed by NYSDOL as necessary. A vehicle or lodging location may be possible, but need to check for acceptability with NYSDOL.
- **Off-hour emergency phone numbers for all project groups.** Contacts and phone lists will be prepared and issued during mobilization. Mobile cell numbers to be used.
- **Horizon/E&E/DEC - 40 hour training certifications with up to date refreshers for all on-site or project personnel.** These will be provided at time of mobilization by all parties.
- **Project sign.** Sign will be ready next week and was suggested to be installed on the south side of the site near the new road development.
- **Procedures for official and unofficial visitors to the site.** Per HES, visitors will be asked the nature of their business. If it relates to the project they will be asked to sign in the site visitor's log. All others will be asked to leave or escorted off the job site. Difficult situations will be called into the police.
- **Status of site utilities.** These will be installed at mobilization. Electric or power to the all operations of the job site will be performed with the use of a generator. Water will be purchased and brought on site. Water for decon and waste down will be transported on a bladder on the back of one of the project trucks.

- **Site Security - support and work zones.** Off-shift and weekend security will be handled by HES staff. Security to be performed according to the contract documents. M. Steffan mentioned that if HES security is not working alternatives such as independent security must be obtained.
- **Project Public Relation Issues.** D. Chiusano mentioned that all communications with the public must be directed to either NYSDEC Region 9 or Albany. A fact sheet will be prepared by D. Chiusano and be given out if needed.
- **Fuhrmann Blvd. transportation issues.** EEEPC mentioned the Fuhrmann Blvd. Bridge has load limitations. HES should investigate the load limitation and incorporate in to the project transportation plan. Communication should be directly performed with the transporters and the concerns at the Fuhrmann Blvd. Bridge during all waste hauling.
- **Official NTP.** – Monday, January 30, 2006
- **Overtime assessment by E&E.** Overtime should be discussed in the field with HES and EEEPC representatives. Overtime will be any time over the approved 40 hour week. HES will notify EEEPC either the day of or sooner if overtime is required on the project. Both EEEPC and HES will agree and sign a memorandum of acceptance of overtime. Overtime for EEEPC will be assessed at the NYSDEC contract rate for the individual that overtime is used. The overtime is assessed at each individual straight time rate plus contract markup. M. Steffan will provide Mr. Kohler and Mr. Jones hourly rates for future use. These rates are to be kept confidential by HES.
- **Site USEPA ID Number.** EPA ID number to be used on all haz and regulated waste disposal. EPA ID number is listed in Section 02223, 3.4 of the Supplementary Specifications.
- **Other.** Mr. Kohler of EEEPC will be overseeing the project mobilization and work performed on week 2. After that period, Mr. Jones will be replacing him as the site representative for completion of the project. Mr. Jones will have all the proper paper work and refreshers to perform the same services projected by Mr. Kohler listed in Section 1 of these meeting minutes.

## 15) Post Meeting Deliverables

The following is a summary of deliverables requested by each party from the meeting:

**HES:**

- Submit UCQ originals for all subcontractors over \$10k. (Includes – surveyor, well driller, and waste transporter.
- Full project schedule for duration of the project.
- Contact and phone numbers of site personnel
- Shop drawing responses to EEEPC transmittals
- Personnel certifications
- RFI on stone movement from entrance

**NYSDEC:**

- Issuance of the Project Fact sheet
- UCQ review and response
- .pdf copy of the contract document sections I-IX

**EEEEPC:**

- Finish up work plan comments
- Over time rates of Jeff Kohler and Greg Jones
- Review of waste profiles for the waste stream, sign and return.
- Formats for RFIs & PCOs
- CAP review if submitted

**16) Next Scheduled Progress Meeting**

Meeting was adjourned at 2:30 PM. The next scheduled meeting is scheduled for Wednesday, February 8, 2006 at 11:00 AM. The location is to be the NYSDEC Site Office at the Shenango Steel Mold Site.

**These minutes shall stand as correct unless corrections are submitted at the next scheduled meeting.**

Submitted by: Michael P. Steffan

Date: February 20, 2006

**PRECONSTRUCTION CONFERENCE AGENDA**  
**Shenango Steel Mold Site, Site Number: 9-15-172**  
**CONTRACT #D005660**  
**Tuesday, January 24, 2006; 11:00 A.M.**  
**Location: Ecology and Environment Engineering, P. C.**  
**Lancaster, New York**

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1. Sign-in sheet for attendees.
2. Representatives and responsibilities.
3. Contract times and liquidated damages.
4. Progress Schedule.
5. Article 5 of the General Conditions - Contractor Responsibilities.

*Working Hours*  
*Subcontractors*  
*As-built / Record Drawings*  
*Off hours emergency contact*  
*Shop Drawings*  
*Project progress meetings*

6. Article 9 of the General Conditions - Changes in the Work.

*Field Orders*  
*Proposed Change Order (PCOs)*  
*Change Order (CO)*

7. Article 13 of the General Conditions - Contractor Application for Payment (CAP)
8. Article 13 of the General Conditions - Completion of Work

*Substantial Completion*  
*Final Payment*

9. Article 15 of the General Conditions - Disputes

*Claims*

10. M/WBE - EEO Requirements

**11. Project Plans**

- **Work Plan**
- **Progress Schedule**
- **Sampling and Analysis Plan**
- **QA/QC Plan**
- **Dewatering Plan**
- **Transportation and Disposal Plan**
- **Health and Safety Plan**
  - **Community Monitoring**
  - **Project Air Monitoring**
  - **Personnel Training Certifications and Refreshers**
- **Access Road Plan**
- **Project Schedule of Values**

**12. Project Shop Drawings**

**13. Contractor's Activities over next two (2) weeks.**

**14. Open Discussion**

- Schedule of remaining shop drawing submittals and approval process
- Additional Contractor historical site information needed
- Initial site survey - existing grades.
- Initial baseline sampling and analysis.
- Status of Project Permits.
- Additional Contract Document/Plan Requests.
- Certified Payrolls.
- Off-hour emergency phone numbers for all project groups.
- Horizon/E&E/DEC - 40 hour training certifications with up to date refreshers for all on-site or project personnel.
- Project sign.
- Procedures for official and unofficial visitors to the site.
- Status of site utilities

**14. Open Discussion (continued)**

- Site Security - support and work zones.
- Project Public Relation Issues.
- Fuhrman Blvd. transportation issues.
- Official NTP.
- Overtime assessment by E&E.
- Site USEPA ID Number
- Additional discussions

**15. Next Scheduled Meeting (Progress Meeting #1), Location, & Time.**



Shenango Steel Mold Site  
NYSDEC Site # 9-15-173, Contract # D-005660

ATTACHMENT B

## Project Progress Meeting - Pre-construction Conference

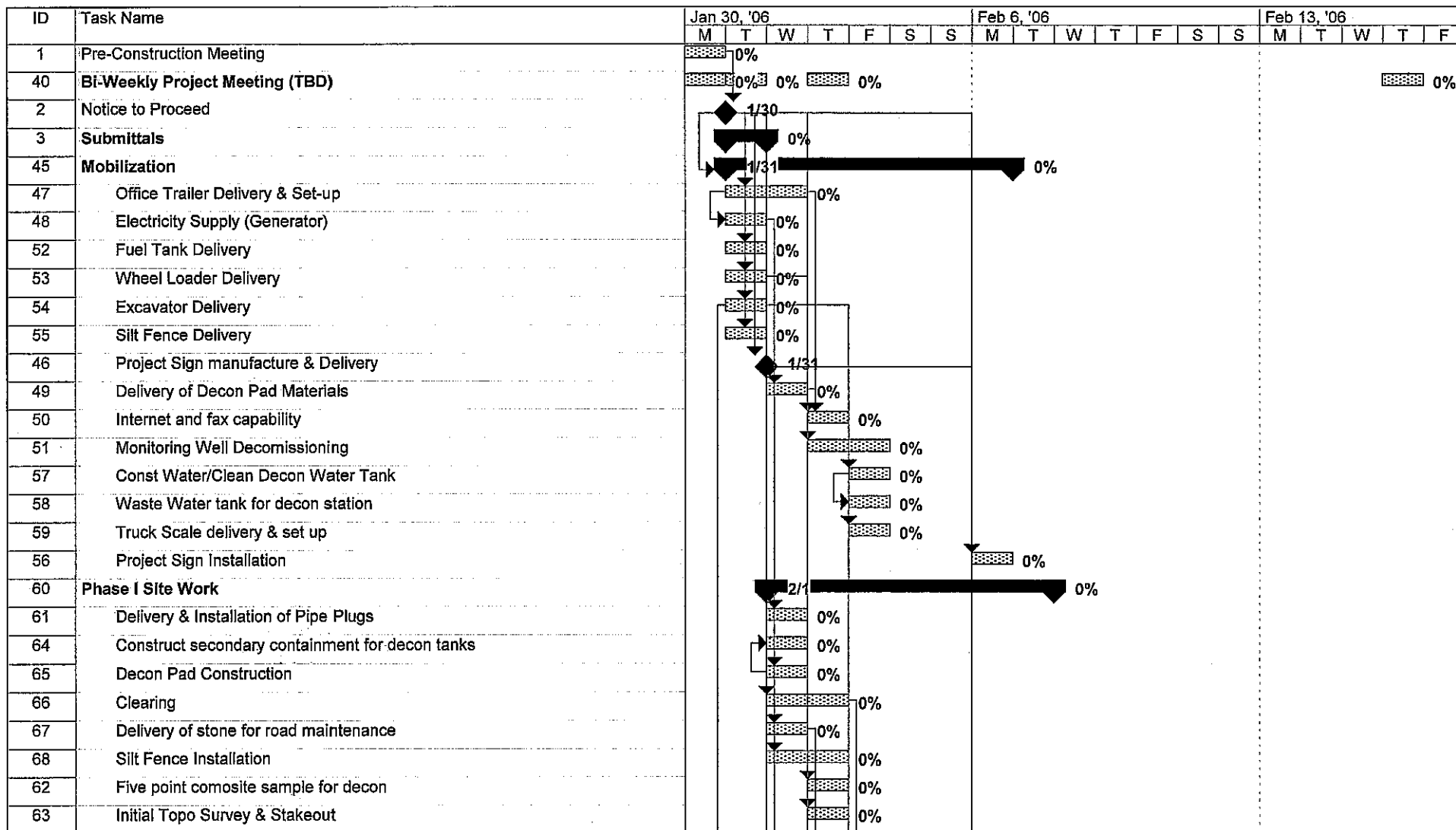
Date: Tuesday, January 24, 2006

Location: EEEPC Corporate Offices - Lancaster New York

Time: 11:00AM


### Meeting Sign-in Sheet

Name	Representing	Phone Number	Fax Number	E-mail Address
MICHAEL STEFFAN	Ecology and Environment Eng. PC	716-684-8060	716-684-0844	msteffan@ene.com
DAVID CHRISANO	NYSDEC - ALBANY	518-402-9814	518-402-9819	Djchrisa@gw.dec.state.ny.us
SCOTT CLARY	HES, Inc	724 538 8522	724 538 8523	SCOTT@HORIZONENVRO.NET
BRIAN SPANGLER	HES, INC.	724-538-8522	724-538-8523	Brian@HORIZONENVRO.NET
JEFF KOHLER	E&EPC			jkoehler@ene.com
DAVID LOCEY	NYSDEC - BUFFALO	716 851-7220	716 851-7220	dplacey@gw.dec.state.ny.us
Daniel Milewski	Ecology and Environment Eng PC	716 684-8060	716-684-0844	dmilewski@ene.com
Don Miller	"	"	"	dmiller@ene.com



Project: Shenango Steel Project  
Date: Tue 1/24/06

Critical 

Critical Split 

Critical Progress 

Task 

Split 

Task Progress 

Baseline 


Baseline Split 

Baseline Milestone 

Milestone 

Summary Progress 

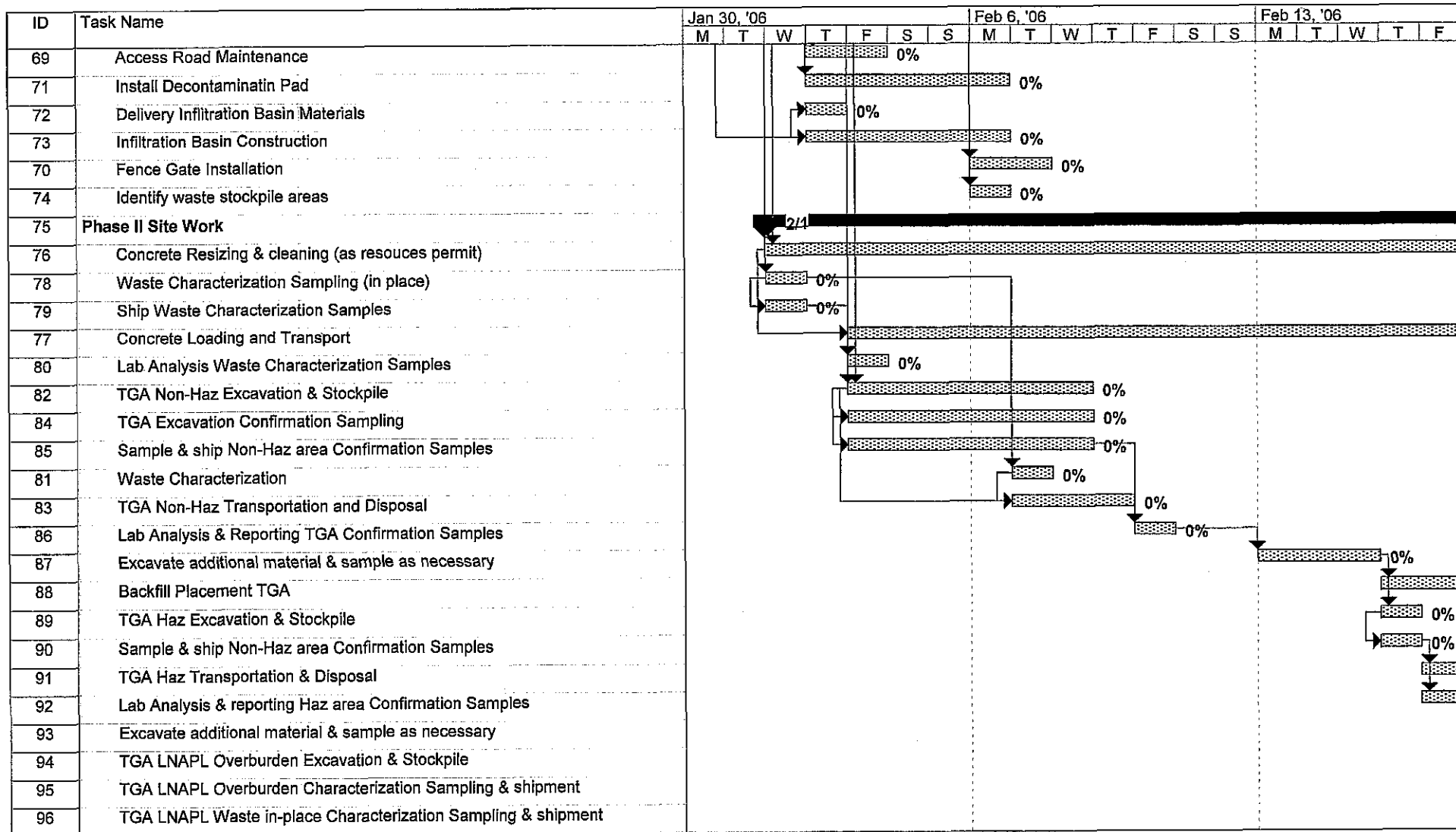
Summary 

Project Summary 


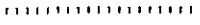




External Tasks 





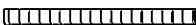

External Milestone 


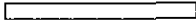


Deadline 



Project: Shenango Steel Project  
Date: Tue 1/24/06

Critical   
Critical Split   
Critical Progress   
Task   
Split   
Task Progress 

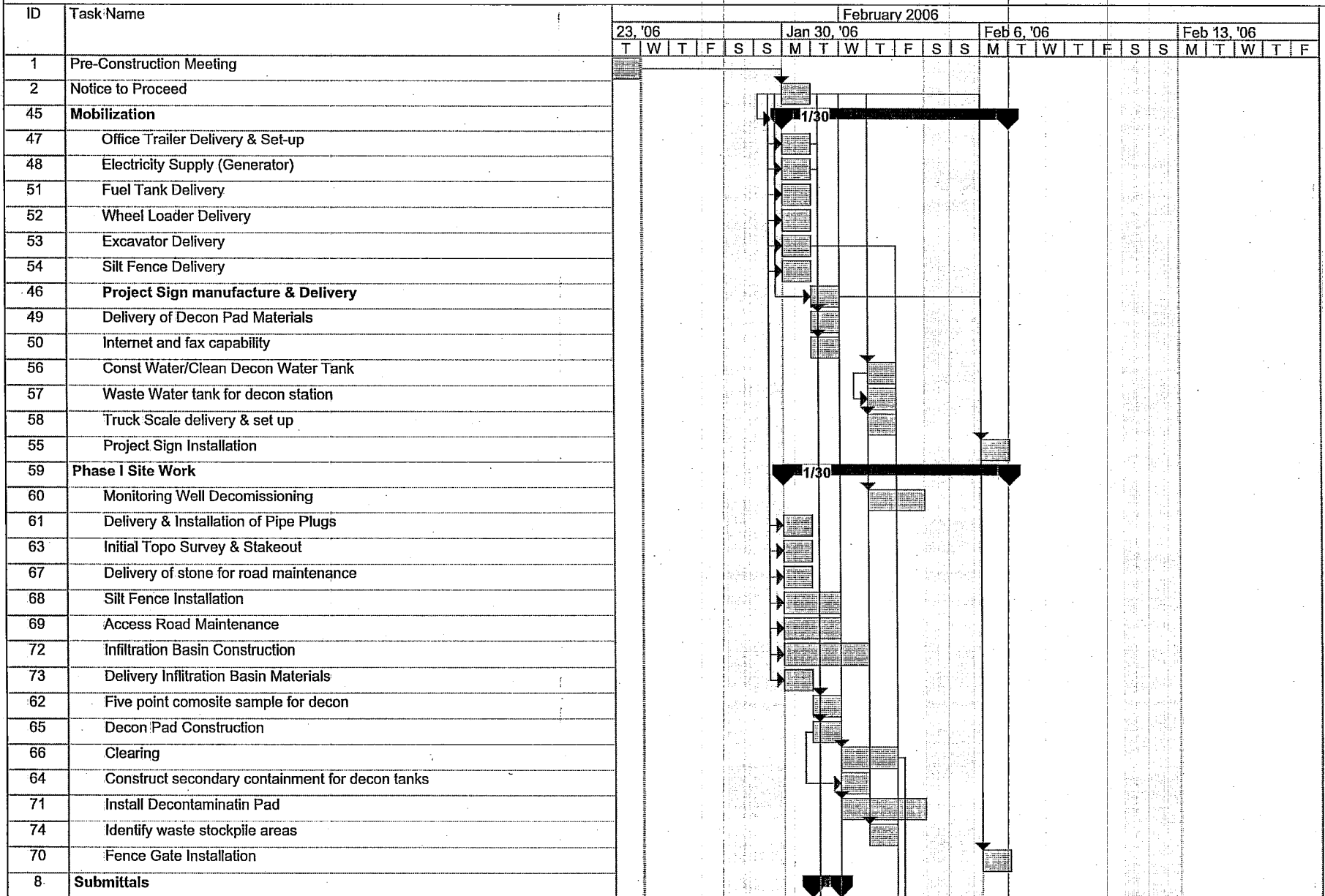
Baseline   
Baseline Split   
Baseline Milestone   
Milestone   
Summary Progress   
Summary 

Project Summary   
External Tasks   
External Milestone   
Deadline 

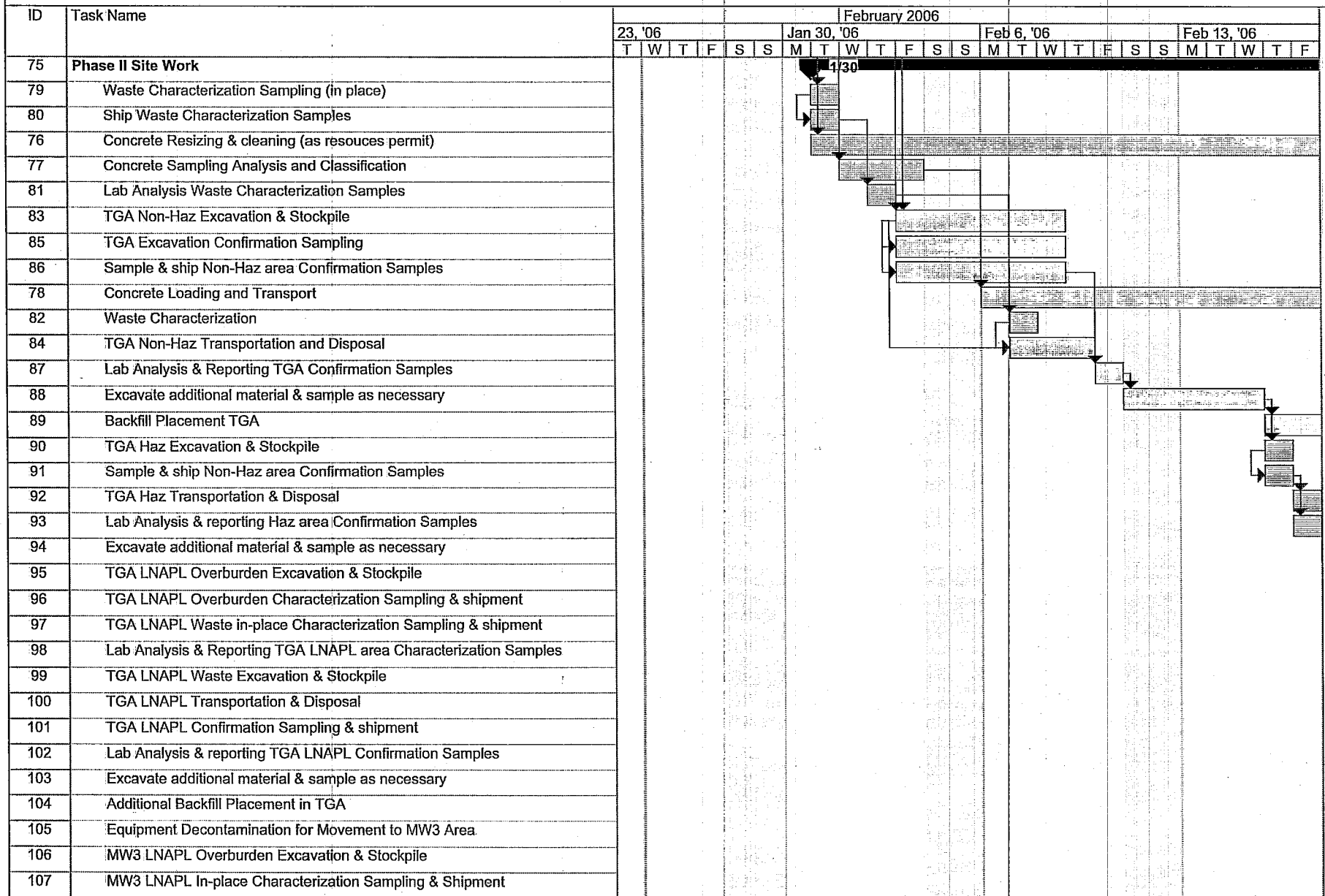
# D

## Project Schedule

Horizon Environmental Services  
NYSDEC Shenango Steel Project



Horizon Environmental Services  
NYSDEC Shenango Steel Project

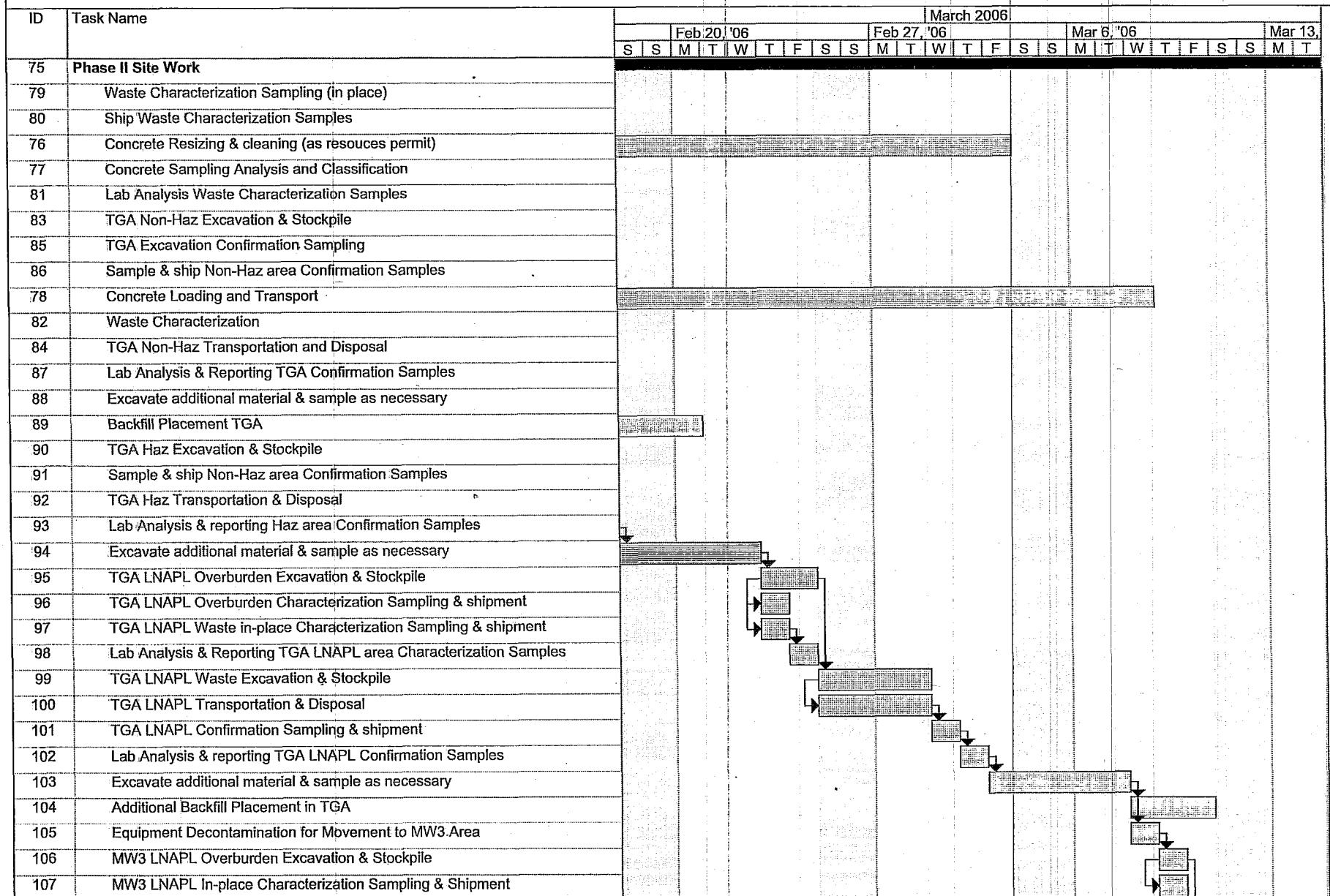


Horizon Environmental Services  
NYSDEC Shenango Steel Project

ID	Task Name	February 2006																											
		23, '06						Jan 30, '06						Feb 6, '06						Feb 13, '06									
		T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F			
108	MW3 LNAPL Waste Excavation & Stockpile																												
109	MW3 LNAPL Confirmation Sampling & Shipment																												
110	Lab Analysis & Reporting MW3 Confirmation Samples																												
111	MW3 LNAPL Transportation & Disposal																												
112	Excavate additional material & sample as necessary																												
113	Equipment Decontamination																												
114	Backfill Placement MW3 Area																												
3	Semi Weekly Progress Meeting																												
115	Phase III Site work																												
116	Remove & Dispose of Decon Pad																												
117	Sample below Decon Pad																												
118	Sample Water in Storage Tank & Sample Shipment																												
122	Additional Site Backfill Placement (as necessary)																												
123	Road Maintenance as necessary																												
119	Lab Analysis & Reporting of Water																												
120	Discharge/Dispose Water in Storage tank																												
121	Backfill infiltration basin with excavated materials																												
124	Demobilization																												
126	Truck Scale Removal																												
127	Excavator Removal																												
125	Final Site Surveys																												
128	Wheel Loader Removal																												
129	Fuel Tank Removal																												
130	Generator Removal																												
131	Office Trailer Removal																												
132	Project Closeout																												



Horizon Environmental Services  
NYSDEC Shenango Steel Project



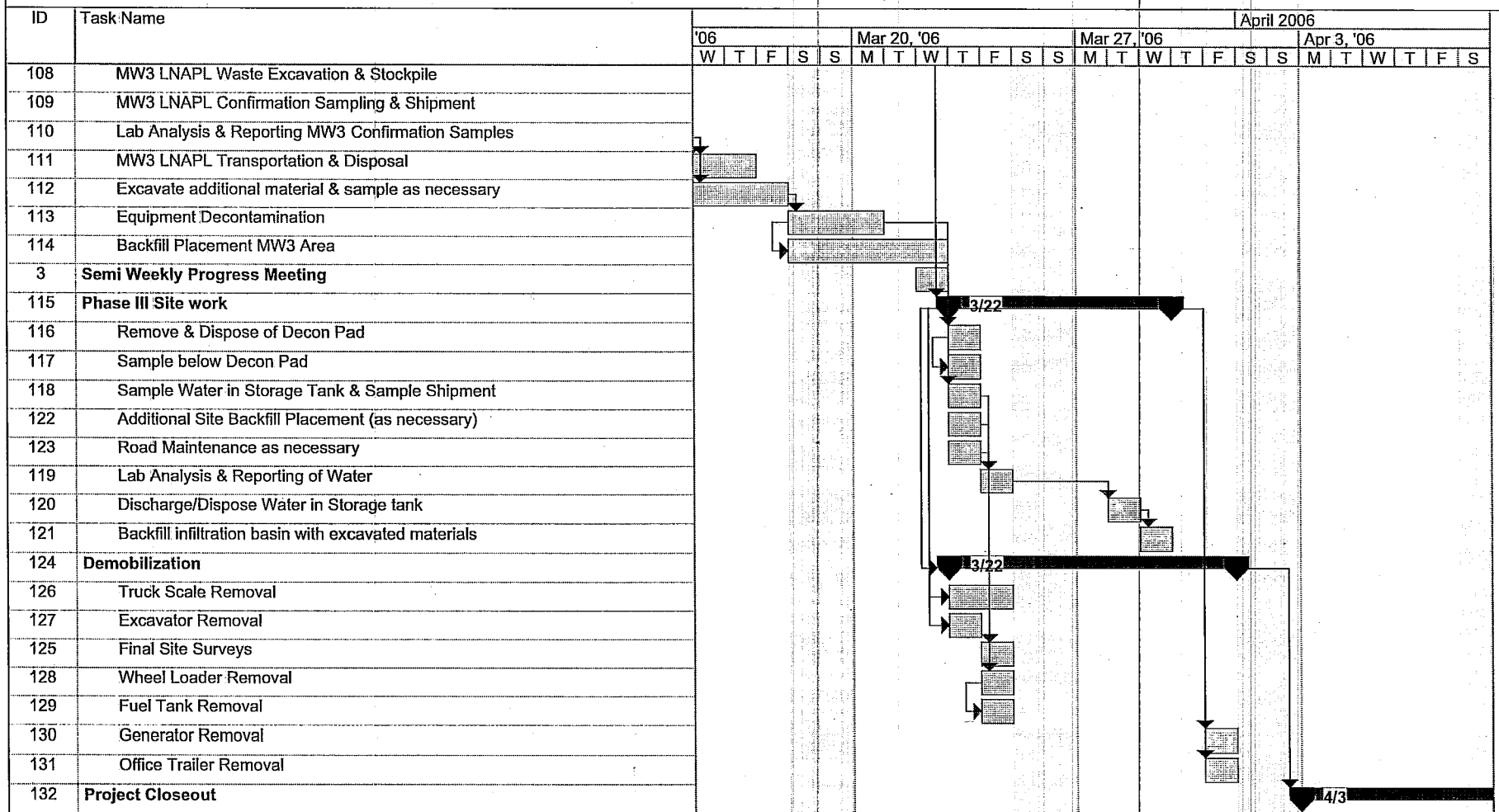
Horizon Environmental Services  
NYSDEC Shenango Steel Project

ID	Task Name	March 2006																											
		Feb 20, '06							Feb 27, '06							Mar 6, '06							Mar 13, '06						
		S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T			
108	MW3 LNAPL Waste Excavation & Stockpile																												
109	MW3 LNAPL Confirmation Sampling & Shipment																												
110	Lab Analysis & Reporting MW3 Confirmation Samples																												
111	MW3 LNAPL Transportation & Disposal																												
112	Excavate additional material & sample as necessary																												
113	Equipment Decontamination																												
114	Backfill Placement MW3 Area																												
3	Semi Weekly Progress Meeting																												
115	Phase III Site work																												
116	Remove & Dispose of Decon Pad																												
117	Sample below Decon Pad																												
118	Sample Water in Storage Tank & Sample Shipment																												
122	Additional Site Backfill Placement (as necessary)																												
123	Road Maintenance as necessary																												
119	Lab Analysis & Reporting of Water																												
120	Discharge/Dispose Water in Storage tank																												
121	Backfill infiltration basin with excavated materials																												
124	Demobilization																												
126	Truck Scale Removal																												
127	Excavator Removal																												
125	Final Site Surveys																												
128	Wheel Loader Removal																												
129	Fuel Tank Removal																												
130	Generator Removal																												
131	Office Trailer Removal																												
132	Project Closeout																												

Horizon Environmental Services  
NYSDEC Shenango Steel Project

ID	Task Name	April 2006																											
		'06					Mar 20, '06					Mar 27, '06					Apr 3, '06												
		W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S			
75	Phase II Site Work																												
79	Waste Characterization Sampling (in place)																												
80	Ship Waste Characterization Samples																												
76	Concrete Resizing & cleaning (as resouces permit)																												
77	Concrete Sampling Analysis and Classification																												
81	Lab Analysis Waste Characterization Samples																												
83	TGA Non-Haz Excavation & Stockpile																												
85	TGA Excavation Confirmation Sampling																												
86	Sample & ship Non-Haz area Confirmation Samples																												
78	Concrete Loading and Transport																												
82	Waste Characterization																												
84	TGA Non-Haz Transportation and Disposal																												
87	Lab Analysis & Reporting TGA Confirmation Samples																												
88	Excavate additional material & sample as necessary																												
89	Backfill Placement TGA																												
90	TGA Haz Excavation & Stockpile																												
91	Sample & ship Non-Haz area Confirmation Samples																												
92	TGA Haz Transportation & Disposal																												
93	Lab Analysis & reporting Haz area Confirmation Samples																												
94	Excavate additional material & sample as necessary																												
95	TGA LNAPL Overburden Excavation & Stockpile																												
96	TGA LNAPL Overburden Characterization Sampling & shipment																												
97	TGA LNAPL Waste in-place Characterization Sampling & shipment																												
98	Lab Analysis & Reporting TGA LNAPL area Characterization Samples																												
99	TGA LNAPL Waste Excavation & Stockpile																												
100	TGA LNAPL Transportation & Disposal																												
101	TGA LNAPL Confirmation Sampling & shipment																												
102	Lab Analysis & reporting TGA LNAPL Confirmation Samples																												
103	Excavate additional material & sample as necessary																												
104	Additional Backfill Placement in TGA																												
105	Equipment Decontamination for Movement to MW3 Area																												
106	MW3 LNAPL Overburden Excavation & Stockpile																												
107	MW3 LNAPL In-place Characterization Sampling & Shipment																												

Horizon Environmental Services  
NYSDEC Shenango Steel Project





## **Horizon Environmental Services, Inc. Bid Breakdown**



# ecology and environment engineering, p.c.

BUFFALO CORPORATE CENTER  
368 Pleasant View Drive, Lancaster, New York 14086  
Tel: 716/684-8060, Fax: 716/684-0844

## Memorandum

To: Brian Spangler, Project Manager  
Horizon Environmental Services, Inc.

From: M. Steffan *Signed: Michael P. Steffan*  
EEEEPC *Dated: 1/26/06*

Date: January 26, 2006

Subject: Shenango Steel Mold Site, City of Buffalo, Erie County, NY  
Contract #D005660, Site # 9-15-172  
EEEEPC Shop Drawing Submittal Review No 14A

Item Review: HES Transmittal #2, Contract Document Section VIII, Section 1.6  
Revised Project Schedule of Values / Bid Breakdown

Comments: 1) Submittal responses to comments from EEEPC transmittal of  
January 20, 2006 is accepted.

Action: **Approved.**

***Review and Approval is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication process or to techniques of construction; and for coordination of the work of all trades.***

### Submittal Response:

<input checked="" type="checkbox"/> <b>Approved</b>	<input type="checkbox"/> Not Approved	_____ Copies for Approval
<input type="checkbox"/> Approved as Noted	<input type="checkbox"/> Other (explain)	_____ Copies for Distribution
<input type="checkbox"/> Revise and Resubmit	<input type="checkbox"/> _____	_____ Corrected Prints

CC: J. Kohler, EEEPC, w/ attachment  
G. Jones, EEEPC, w/ attachment  
D. Chiusano, NYSDEC, Albany, w/ attachment  
D. Locey, NYSDEC, Region 9 - Buffalo  
D. Miller, E & E, Buffalo, w/ attachment  
CTF - 000699.NV28.03

**Horizon Environmental Services****Transmittal**

To: Mr. Michael Steffan  
Ecology and Environment  
Buffalo Corporate Center  
368 Pleasant View Drive  
Lancaster, NY 14086

January 20, 2006  
Shenango Steel Project  
NYSDEC Contract No. D005660

Transmittal No. 2  
Section VIII  
1.6  
Schedule Values/Bid Breakdown

Revised and Resubmitted per Mike Steffan letter dated Jan 20, 2006

**Shenango Steel Remediation Buffalo NY**  
**Bid Breakdown**

	Qty	Unit	Unit Price	Full Bid Price
<b>1. Site Preparation</b>	<b>1</b>	<b>LS</b>	<b>\$59,875.00</b>	<b>\$59,875.00</b>
Mobilization and Demobilization:				
Silt Fence				\$650.00
Insurance				\$2,230.00
Geo Fabric				\$1,200.00
Mobilize-Air-Monitoring				\$1,000.00
Fuel Tank				\$499.00
Excavator				\$1,500.00
Wheel loader				\$1,500.00
Cutting vegetation				\$1,000.00
Road Closure				\$500.00
Stone and or geo tech fabric				\$675.00
Decon Station (incl. pre and post sampling below pad)				\$1,330.00
Staging Areas				\$770.00
Plastic cover				\$770.00
Temporary Utilities				\$6,560.00
High Speed Installation				\$1,000.00
Generator				\$5,500.00
Decon Trailer and Personal Hygiene Facility				\$500.00
Field Offices and Support Areas				\$6,650.00
Project Signs				\$665.00
Control, Layout and As-Built Surveys				\$13,300.00
Erosion and surface water controls				\$1,330.00
Meteorological Station				\$66.00
Fence Gate Installation				\$3,000.00
Jersey Barriers				\$500.00
Temporary Manhole Plugs				\$530.00
Truck Scale				\$5,320.00
Project Plans				\$665.00
Schedules, Shop Drawings and Record Drawings				\$665.00



**Horizon Environmental Services****Transmittal**

<b>2. Site Services</b>	<b>50</b>	<b>Days</b>	<b>\$100.00</b>	<b>\$5,000.00</b>
Site Security	50		\$13.00	\$650.00
Access Roads Maintenance	50		\$13.00	\$650.00
Fencing Maintenance and Removal	50		\$6.50	\$325.00
Field Offices	50		\$16.55	\$827.50
Temporary Utilities	50		\$12.00	\$600.00
Erosion and surface water controls	50		\$6.00	\$300.00
Disposal of Contractor generated waste	50		\$3.00	\$150.00
Meteorological Station	50		\$1.00	\$50.00
Temporary Manhole Plugs	50		\$6.95	\$347.50
Jersey Barriers	50		\$10.00	\$500.00
On Site Truck Scale	50		\$12.00	\$600.00
<b>3. Health &amp; Safety Services</b>	<b>45</b>	<b>Days</b>	<b>\$75.00</b>	<b>\$3,375.00</b>
Health & Safety Officer	45		\$35.00	\$1,575.00
Decontamination Station	45		\$4.00	\$180.00
Health & Safety Equipment	45		\$10.00	\$450.00
Decontamination Station Trailer and Personal Hygiene Facility	45		\$9.00	\$405.00
Air Monitoring	45		\$15.00	\$675.00
Dust Control	45		\$2.00	\$90.00
<b>4A. Haz Waste Excavation, Transportation and Disposal</b>	<b>500</b>	<b>Tons</b>	<b>\$102.50</b>	<b>\$51,250.00</b>
Transportation and Disposal	500		\$87.70	\$43,850.00
Equipment	500		\$8.00	\$4,000.00
Labor	500		\$6.80	\$3,400.00
<b>4B. Non-Haz Excavation, Transportation and Disposal</b>	<b>5,750</b>	<b>Tons</b>	<b>\$61.45</b>	<b>\$353,337.50</b>
Transportation and Disposal	5750		\$43.55	\$250,400.00
Equipment	5750		\$9.55	\$54,937.00
Labor	5750		\$8.35	\$48,000.00
<b>5. Non-Haz Concrete Excavation, Transportation and Disposal</b>	<b>535</b>	<b>Tons</b>	<b>\$14.00</b>	<b>\$7,490.00</b>
Transportation and Disposal			\$6.54	\$3,500.00
Labor			\$1.85	\$990.00
Equipment			\$5.61	\$3,000.00
<b>6. Monitoring Well Decommissioning</b>	<b>1</b>	<b>LS</b>	<b>\$12,000.00</b>	<b>\$12,000.00</b>
<b>7. Infiltration Basin Construction</b>	<b>1</b>	<b>LS</b>	<b>\$4,500.00</b>	<b>\$4,500.00</b>
Equipment				\$700.00
Labor				\$700.00
Rip rap, geotech, piping				\$3,100.00

# Horizon Environmental Services

# Transmittal

8. Restoration - Clean Offsite Fill (supply, placement, compaction, grading)	4,000	Cubic Yds	\$26.00	\$104,000.00
Fill material and transportation			\$18.00	\$72,000.00
Equipment			\$4.00	\$16,000.00
Labor			\$4.00	\$16,000.00
9A. PCB soils - SW-846, Method 8082 Sampling	40	Samples	\$122.00	\$4,880.00
9B. SVOC soils - SW-846, Method 8270C Sampling	40	Samples	\$293.00	\$11,720.00
9C. TCLP-SVOC soils - SW-846, Method 8270C Sampling	10	Samples	\$366.00	\$3,660.00

Grand Total Project Costs

\$621,087.50

Cc: Jeffrey Kohler, Ecology and Environment  
David Chiusano, NYSDEC

- ☒ Approved  
☐ Approved as Noted  
☐ Revise and Resubmit  
☐ Not Approved  
 Other \_\_\_\_\_

Review and Approval is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor responsible for dimensions to be verified and correlated at the job site; for information that pertains solely to the construction process or to the means and methods of construction; and for coordination of the work of all trades.

Ecology and environment engineering, p.e.

By: M. H. Buffa  
 Date: 1/26/06

**Horizon Environmental Services****Transmittal**

To: Mr. Michael Steffan  
Ecology and Environment  
Buffalo Corporate Center  
368 Pleasant View Drive  
Lancaster, NY 14086

January 19, 2006  
Shenango Steel Project  
NYSDEC Contract No. D005660

Transmittal No. 1  
Section VIII  
1.6  
Schedule of Values/Bid  
Breakdown

**Shenango Steel Remediation Buffalo NY  
Bid Breakdown**

	Qty	Unit	Unit Price	Full Bid Price
<b>1. Site Preparation</b>	<b>1</b>	<b>LS</b>	<b>\$59,875.00</b>	<b>\$59,875.00</b>
Mobilization and Demobilization:				
Silt Fence				\$650.00
Insurance				\$2,230.00
Geo Fabric				\$1,200.00
Mobilize Air Monitoring				\$1,000.00
Fuel Tank				\$499.00
Excavator				\$1,500.00
Wheel loader				\$1,500.00
Cutting vegetation				\$1,000.00
Road Closure				\$500.00
Stone and or geo tech fabric				\$675.00
Decon Station (incl. pre and post sampling below pad)				\$1,330.00
Staging Areas				\$770.00
Plastic cover				\$770.00
Temporary Utilities				\$6,560.00
High Speed Installation				\$1,000.00
Generator				\$5,500.00
Decon Trailer and Personal Hygiene Facility				\$500.00
Field Offices and Support Areas				\$6,650.00
Project Signs				\$665.00
Control, Layout and As-Built Surveys				\$13,300.00
Erosion and surface water controls				\$1,330.00
Meteorological Station				\$66.00
Fence Gate Installation				\$3,000.00
Jersey Barriers				\$500.00
Temporary Manhole Plugs				\$530.00
Truck Scale				\$5,320.00
Project Plans				\$665.00
Schedules, Shop Drawings and Record Drawings				\$665.00

## Horizon Environmental Services

## Transmittal

<b>2. Site Services</b>	<b>50</b>	<b>Days</b>	<b>\$100.00</b>	<b>\$5,000.00</b>
Site Security		50	\$10.00	\$665.00
Access Roads Maintenance		50	\$10.00	\$665.00
Fencing Maintenance and Removal		50	\$5.00	\$330.00
Field Offices		50	\$12.00	\$800.00
Temporary Utilities		50	\$9.00	\$600.00
Erosion and surface water controls		50	\$5.00	\$330.00
Disposal of Contractor generated waste		50	\$2.00	\$130.00
Meteorological Station		50	\$1.00	\$20.00
Temporary Manhole Plugs		50	\$5.00	\$330.00
Jersey Barriers		50	\$8.00	\$530.00
On Site Truck Scale		50	\$9.00	\$600.00
<b>3. Health &amp; Safety Services</b>	<b>45</b>	<b>Days</b>	<b>\$75.00</b>	<b>\$3,375.00</b>
Health & Safety Officer		45	\$24.00	\$1,500.00
Decontamination Station		45	\$3.00	\$175.00
Health & Safety Equipment		45	\$9.00	\$500.00
Decontamination Station Trailer and Personal Hygiene Facility		45	\$9.00	\$500.00
Air Monitoring		45	\$9.00	\$500.00
Dust Control		45	\$2.00	\$200.00
<b>4A. Haz Waste Excavation, Transportation and Dipsosal</b>	<b>500</b>	<b>Tons</b>	<b>\$102.50</b>	<b>\$51,250.00</b>
Transportation and Disposal		500	\$87.70	\$43,850.00
Equipment		500	\$8.00	\$4,000.00
Labor		500	\$6.80	\$3,400.00
<b>4B. Non-Haz Excavation, Transportation and Dipsosal</b>	<b>5,750</b>	<b>Tons</b>	<b>\$61.45</b>	<b>\$353,337.50</b>
Transportation and Disposal		5750	\$43.55	\$250,400.00
Equipment		5750	\$9.55	\$54,937.00
Labor		5750	\$8.35	\$48,000.00
<b>5. Non-Haz Concrete Excavation, Transportation and Disposal</b>	<b>535</b>	<b>Tons</b>	<b>\$14.00</b>	<b>\$7,490.00</b>
Transportation and Disposal				\$7,490.00
<b>6. Monitoring Well Decommissioning</b>	<b>1</b>	<b>LS</b>	<b>\$12,000.00</b>	<b>\$12,000.00</b>
<b>7. Infiltration Basin Construction</b>	<b>1</b>	<b>LS</b>	<b>\$4,500.00</b>	<b>\$4,500.00</b>
Equipment				\$700.00
Labor				\$700.00
Rip rap, geotech, piping				\$3,100.00
<b>8. Restoration - Clean Offsite Fill (supply, placement, compaction, grading)</b>	<b>4,000</b>	<b>Cubic Yds</b>	<b>\$26.00</b>	<b>\$104,000.00</b>
Fill material and transportation			\$18.00	\$72,000.00
Equipment			\$4.00	\$16,000.00
Labor			\$4.00	\$16,000.00

## Horizon Environmental Services

## Transmittal

9A. PCB soils - SW-846, Method 8082 Sampling	40	Samples	\$122.00	\$4,880.00
9B SVOC soils - SW-846, Method 8270C Sampling	40	Samples	\$293.00	\$11,720.00
9C. TCLP-SVOC soils - SW-846, Method 8270C Sampling	10	Samples	\$366.00	\$3,660.00

Cc: Jeffrey Kohler, Ecology and Environment  
David Chiusano, NYSDEC

**F**

## **Shop Drawings**

# PROJECT RECORD OF SHOP DRAWINGS AND SAMPLE SUBMISSIONS

Shenango Steel Mold Site, Site # 9-15-172

EEEP Project No.: 002700.DC03

Client Project No. : D005660

Project Name: Shenango Steel Mold Site

Site # 9-15-172

Project Manager: M. Steffan

Site Representatives: J. Kohler G Jones

Contractor: Horizon Environmental Services, Inc.

UPDATE: 7/7/2006

APR - Approved

AAN- Approved as Noted

REV & RES - Revise and Resubmit

Not AP - Not Approved

Contractor		Date	Spec.	Description of	Number of Copies	Action Taken (See legend)				Date	Number of Copies	Reviewed	Remarks
Trans./Log No.	Received	Section	Equipment or Material	Received	APR	AAN	REV & RES	NOT AP	Returned	Returned	By:		
1/1	1.4.A.2	1/16/2006	01011	List of TSDFacilities	1e		x			1/20/2006	1e	MGS/JJK	
1/2	1.3.A.1	1/16/2006	01011	Water supply and Use	1e		x			1/20/2006	1e	MGS/JJK	
1/3	1.3.A.4	1/16/2006	01011	Removable MH Plugs	1e		x			1/20/2006	1e	MGS/JJK	
1/4	1.1.1	1/16/2006	01040	Subcontractor List	1e		x			1/20/2006	1e	MGS/JJK	
1/5	1.02.F	1/16/2006	02225	Site Location & Precon	1e		x			1/20/2006	1e	MGS/JJK	
1/6	1.1.2.C	1/16/2006	02223	Permits and Regs	1e		x			1/20/2006	1e	MGS/JJK	
1/7	1.04.A	1/16/2006	01600	Samples of Crush Rock	1e			x		1/20/2006	1e	MGS/JJK	
1/7a	1.04.A		01600	Samples of Crush Rock	1e	x					1e	MGS/JJK	
1/8	1.03.A*	1/16/2006	02222	Filter Fabric	1e			x		1/20/2006	1e	MGS/JJK	
1/8a	1.03.A*		02222	Filter Fabric	1e	x					1e	MGS/JJK	
1/9	1.03.A.7	1/16/2006	02222	Install Schedule	1e		x			1/20/2006	1e	MGS/JJK	
1/10	1.02.C	1/16/2006	02225	RipRap Samples	1e		x			1/20/2006	1e	MGS/JJK	
1/11	1.1.2.B	1/16/2006	01040	Sub List	1e		x			1/20/2006	1e	MGS/JJK	
1/12	3.3.B.3	1/16/2006	01520	Decon Pers Hygiene Sta	1e			x		1/20/2006	1e	MGS/JJK	
1/12a	3.3.B.3		01520	Decon Pers Hygiene Sta	1e			x			1e	MGS/JJK	
1/13	3.3.A.6	1/16/2006	01520	Staging Area	1e			x		1/20/2006	1e	MGS/JJK	
1/13a	3.3.A.6		01520	Staging Area	1e			x			1e	MGS/JJK	



1/14	1.6	1/19/2006	VIII	Schedule of Values	1e			x		1/20/2006	1e	MGS	Schedule not complete
1/14a	1.6	1/20/2006	VIII	Schedule of Values	1e	x				1/20/2006	1e	MGS	initial submittal 1/19/06
1/15	1.6	1/25/2006	00001	Full Project Schedule	1e	x				1/30/2006	1e	MGS	Adjust or update at project progresses.
1/16	1.2A	9/12/2005	01011	Draft SSHASP (5D)	1			x		10/19/2005	1e	MGS	Draft version of plan. Letter of comments to revise and resubmit issued
1/16a	1.2A	1/5/2006	01011	HES SSHASP Response (14D)	1e			x		1/26/2006	1e	MGS	HES written responses need final versions of plans
1/16b	1.2A	2/8/2006	01011	Final SSHASP	3	x				2/9/2006	1e	MGS	Provide periodic adjustments to the plan as conditions change.
1/17	1.2A	9/12/2005	01011	Project Work Plan (5D)	1			x		10/19/2005	1e	MGS	Draft version of plan. Letter of comments to revise and resubmit issued
1/17a	1.2A	1/5/2006	01011	Project Work Plan Response (14D)	1e			x		1/26/2006	1e	MGS	HES written responses need final versions of plans
1/17b	1.2A	2/8/2006	01011	Final Project Work Plan	3	x				2/22/2006	1e	MGS	
1/18	1.2A	9/12/2005	01011	Draft Sampling/Analysis Plan (5D)	1			x		10/19/2005	1e	MGS	Draft version of plan. Letter of comments to revise and resubmit issued
1/18a	1.2A	1/5/2006	01011	Sampling/Analysis Plan Response (14D)				x		1/26/2006	1e	MGS	HES written responses need final versions of plans
1/18b	1.2A	2/8/2006	01011	Final Sampling/Analysis Plan	3	x				2/22/2006	1e	MGS	
1/19		2/13/2006	02223,1.1C	Site Scale Calibrations	1e	x				2/21/2006	1e	MGS	

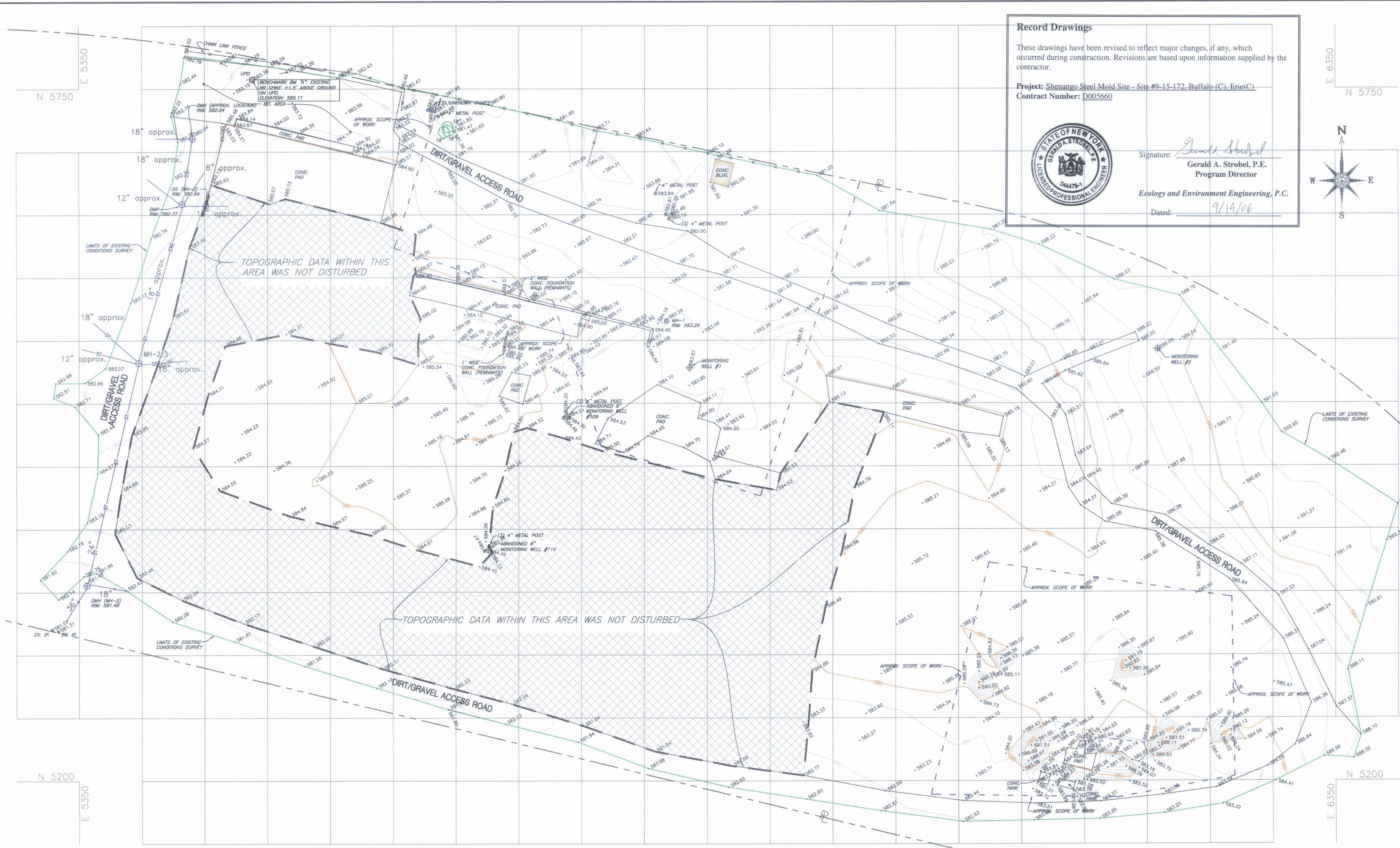
1/20	1.1.3.A	2/17/2006	2224	Grading Material	1e	x				2/21/2006	1e	MGS	Analytical not attached. Received under seaprate cover.
1/21	5.19	5/12/2006	VIII	"Red Line" Project Drawings	1e	x				5/24/2006	1e	MGS	
1/22	1.1.3.G	5/12/2006	2224	Compaction Results	1e	x				6/2/2006	1e	MGS	
1/23		6/2/2006	VIII	Certified Payrolls	1e	x				6/2/2006	1e	JJK	
1/24		5/12/2006	VIII	Sign-in Logs	1e	x				6/2/2006	1e	JJK	
1/25	1.1.J	5/13/2006	01540	Security Logs	1e	x				6/2/2006	1e	JJK	
1/26	1.3.1.A, 1.3.1.B, 1.3.1C, 1.3.2.A, 1.3.2.B, 1.3.2.C, 1.3.2.D	5/18/2006	01050	Record Drawings - Pre-Post Survey	1e	x				6/2/2006	1e	JJK	
1/27	1.1.2.B	5/12/2006	02223	Certificate of Waste Disposals	1e	x				5/31/2006	1e	MGS	
1/28	1.1.I	5/12/2006	1540	Met Station Results	1e	x				6/2/2006	1e	JJK	Incomplete -needs revisions markup returned
1/29	3.1.C	5/12/2006	1425	Analytical Results	1e			x		5/31/2006	1e	MGS	Incomplete
1/29A	3.1.C	6/24/2006	1425	Analytical Results	1e	x				6/24/2006	1e	MGS	
1/30	3.1.C	5/12/2006	1400	Category A&B Deliverables - All analytical results	1e			x		5/24/2006	1e	MGS	Incomplete
1/30A	3.1.C	6/24/2006	1400	Category A&B Deliverables - All analytical results	1e	x				6/24/2006	1e	MGS	
1/31	3.1.C	5/12/2006	1400	DUSR Reviews	1e			x		5/24/2006	1e	MGS	Incomplete
1/31A	3.1.C	6/24/2006	1400	DUSR Reviews	1e	x				6/24/2006	1e	MGS	



# Record Drawings



E:\426901 Horizon\Horizon.dwg 5/18/2006 3:42:43 PM EST



APPROX. BIT. BLDG. DS CONC. ELEV. EX. FNC. IP. UPD

APPROXIMATE BUILDING DRAINAGE STRUCTURE CONCRETE CENTERLINE ELEVATION EXISTING FENCE IRON PIN/PIPE POLE, DEAD, NO UTILITY GUYWIRE

INV. N. S. E. W.

INVERT NORTH SOUTH EAST WEST

SPOT ELEVATION MONITORING WELL LOCATION

#### LEGEND:

1' CONTOUR INTERVAL (MINOR)  
5' CONTOUR INTERVAL (MAJOR)  
PROPERTY LINES (APPROXIMATE LOCATION)  
STORM SEWER  
FENCE (TYPE NOTED)  
LIMITS OF EXISTING CONDITIONS SURVEY  
APPROXIMATE SCOPE OF WORK

#### NOTES:

- HORIZONTAL DATUM: SITE SPECIFIC (ASSUMED) AS PROVIDED BY OTHERS.
- VERTICAL DATUM: NAVD88: BASED ON NGS MONUMENT "RV 100", PID NC0384 (ELEVATION=588.20)
- UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN IN THEIR APPROXIMATE LOCATION AND MAY NOT BE SHOWN IN THEIR ENTIRETY VERIFICATION IS REQUIRED PRIOR TO CONSTRUCTION. THIS INFORMATION IS SHOWN FROM PLANS PREPARED BY ERM NORTHEAST ENGINEERS, P.C. DATED 6/29/2005.
- TOPOGRAPHIC INFORMATION SHOWN ON THIS MAP WAS SURVEYED AND PREPARED BY WENDEL DUCHSCHERER FROM FIELD DATA GATHERED JANUARY 30 THROUGH FEBRUARY 3, 2006
- THIS MAP COMPLIES WITH THE NATIONAL MAP ACCURACY STANDARDS.
- PROPERTY LINES SHOWN ON THIS MAP WERE NOT SURVEYED OR VERIFIED AND ARE SHOWN FROM PLANS PREPARED BY ERM NORTHEAST ENGINEERS, P.C. DATED 6/29/2005.

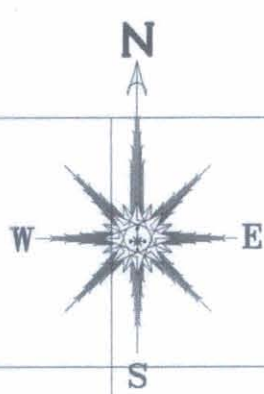
#### Record Drawings

These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information supplied by the contractor.

Project: Shenango Steel Mold Site - Site #9-15-172, Buffalo (C), Erie (C)  
Contract Number: D005660



Signature: *Gerald A. Strobel*  
Gerald A. Strobel, P.E.  
Program Director  
Ecology and Environment Engineering, P.C.  
Dated: 9/14/06



PREPARED FOR:  
HORIZON ENVIRONMENTAL SERVICES, INC.  
590A GALLERY ROAD  
CRANBERRY TWP, PA

#### SHENANGO STEEL MOLD

1750 FUHRMAN BOULEVARD  
CITY OF BUFFALO  
COUNTY OF ERIE  
STATE OF NEW YORK

#### REMEDATION PROJECT

WENDEL DUCHSCHERER  
Towne Square 6417 Dyckman Road Lockport, New York 14094  
PHONE: 716-433-5993 FAX: 716-433-7924  
WEBSITE: www.wd-ns.com



NOTES  
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Approved: *[Signature]*  
Approved as Noted: ☐  
Revised and Noted: ☐  
Not Approved: ☐  
Other: ☐

"Review" or "Approval" is only for confirmation with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for interpretation of the information that pertains solely to the fabrication process or to the means and methods of construction, and for coordination of the work with all utilities.

ecology and environment engineering, p.c.

By: *[Signature]*

Date: 9/14/06

1 AS-BUILT RECORD DRAWING

KSK 5/19/2006

0 PRELIMINARY RECORD DRAWING

ISSUED FOR OWNER REVIEW 4/27/2006

NO. REVISIONS DATE

BY

DWG. TITLE

#### TOPOGRAPHIC MAP

EXISTING SITE CONDITIONS PRIOR TO SITE DISTURBANCE

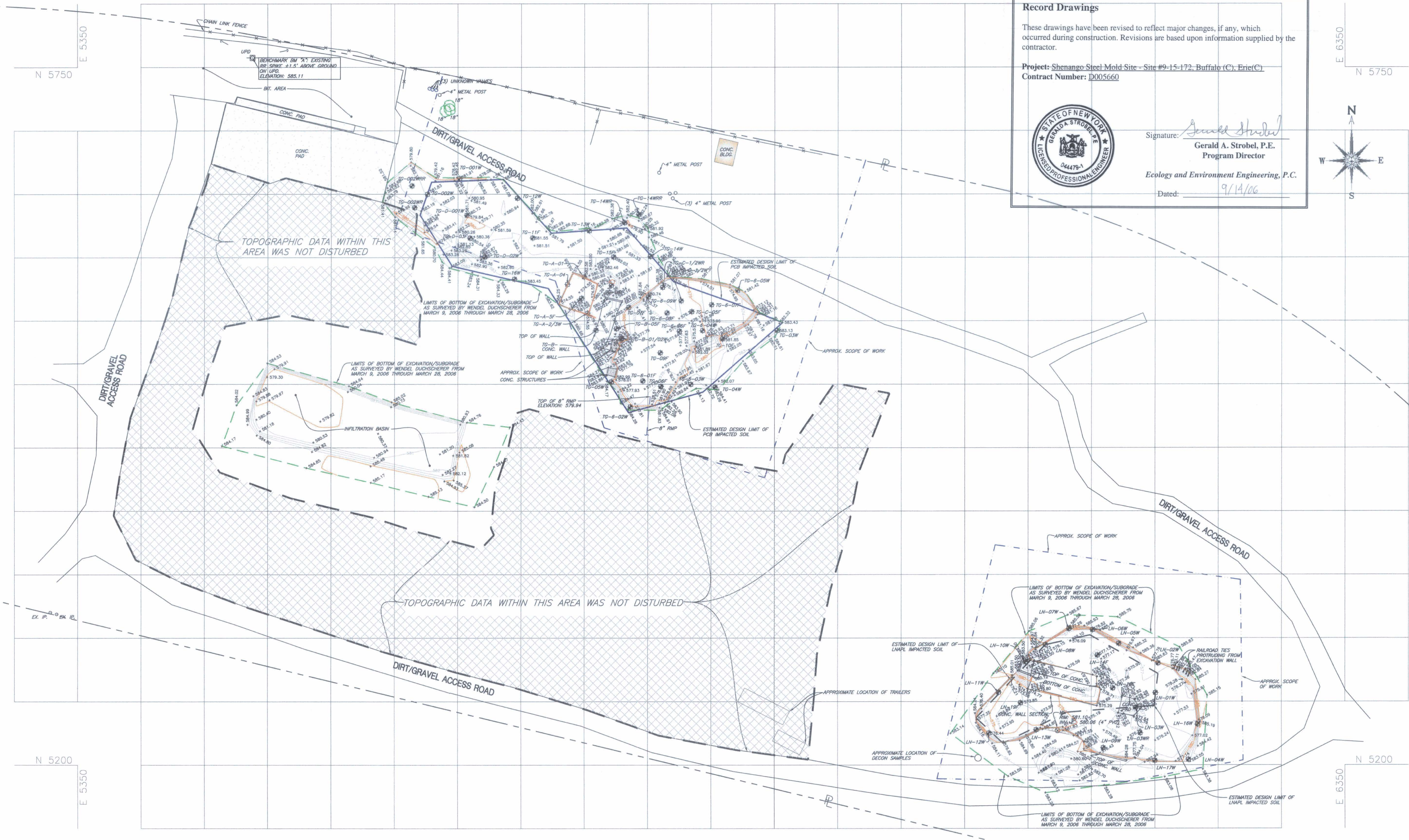
DATE 4/6/2006  
SCALE 1"=40'  
DWL KSK CHK. MDW  
PROJ. No. 426901  
DWG. No.

1 of 3

40' 0 40' 80' 120' 160' FEET  
SCALE: 1"=40'



E:\426901 Horizon\dwg\2.Bot. of Excavation\_subgrade\AB R2 subgrade map.dwg 5/18/2006 3:59:53 PM EST



APPROX. BIT. BLDG. DS CONC. ELEV. EX. FNC. IP. UPD	APPROXIMATE BITUMINOUS BUILDING DRAINAGE STRUCTURE CONCRETE CENTERLINE ELEVATION EXISTING FENCE IRON PIN/PIPE POLE, DEAD, NO UTILITY GUYWIRE	INV. N. S. E. W. 70-11F	INVERT NORTH SOUTH EAST WEST SPOT ELEVATION MONITORING WELL LOCATION SOIL SAMPLE POINTS WITH DESIGNATION
TG LN 11F 11W	TARGET GRID AREA SAMPLE LNAPL AREA SAMPLE FLOOR OR BOTTOM OF EXCAVATION SAMPLE WALL EXCAVATION SAMPLE		

#### LEGEND:

1' CONTOUR INTERVAL (MINOR)	
5' CONTOUR INTERVAL (MAJOR)	
PROPERTY LINES (APPROXIMATE LOCATION)	
STORM SEWER	
FENCE (TYPE NOTED)	
LIMITS OF BOTTOM OF EXCAVATION/SUBGRADE AS SURVEYED BY WENDEL DUCHSCHERER FROM MARCH 9, 2006 THROUGH MARCH 28, 2006	
ESTIMATED DESIGN LIMIT OF PCB IMPACTED SOIL	
ESTIMATED DESIGN LIMIT OF LNAPL IMPACTED SOIL	
APPROXIMATE SCOPE OF WORK	

#### NOTES:

- HORIZONTAL DATUM: SITE SPECIFIC (ASSUMED) AS PROVIDED BY OTHERS
- VERTICAL DATUM: NAVD88: BASED ON NGS MONUMENT "RV 100", PID NC0384 (ELEVATION=588.20)
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- TOPOGRAPHIC INFORMATION SHOWN ON THIS MAP WAS SURVEYED AND PREPARED BY WENDEL DUCHSCHERER FROM FIELD DATA GATHERED MARCH 9, 2006 THROUGH MARCH 28, 2006
- THIS MAP COMPLIES WITH THE NATIONAL MAP ACCURACY STANDARDS.
- PROPERTY LINES SHOWN ON THIS MAP WERE NOT SURVEYED OR VERIFIED AND ARE SHOWN FROM PLANS PREPARED BY ERM NORTHEAST ENGINEERS, P.C. DATED 6/29/2005.

#### CONTROL TABLE:

CONTROL POINT	NORTHING	EASTING	DESCRIPTION
1	4277.5254	3482.7642	X - CUT IN SOUTH WALL OF CANAL; 1891 FEET WEST OF POINT 2.
2	4985.8092	5235.8278	X - CUT IN SOUTH WALL OF CANAL; 12.50 FEET WEST OF POINT 3.
3	4990.4918	5247.4176	NAIL SET IN WALL AT SOUTHEAST CORNER OF CANAL

40' 0 40' 80' 120' 160' FEET  
SCALE: 1"=40'

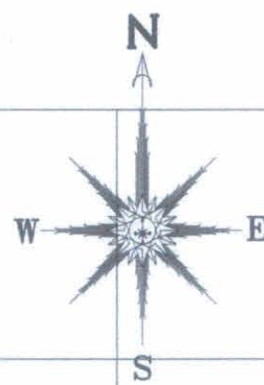
#### Record Drawings

These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information supplied by the contractor.

Project: Shenango Steel Mold Site - Site #9-15-172, Buffalo (C), Erie(C)  
Contract Number: D005660



Signature: *Gerald A. Strobel*  
Gerald A. Strobel, P.E.  
Program Director  
Ecology and Environment Engineering, P.C.  
Dated: 9/14/06



PREPARED FOR:  
HORIZON ENVIRONMENTAL SERVICES, INC.  
590A GALLERY ROAD  
CRANBERRY TWP, PA

#### SHENANGO STEEL MOLD

1750 FUHRMAN BOULEVARD  
CITY OF BUFFALO  
COUNTY OF ERIE  
STATE OF NEW YORK

#### REMEDATION PROJECT

**WENDEL DUCHSCHERER**  
Towns Square 6417 Dyckman Road Lockport, New York 14094  
PHONE: 716-433-5993 FAX: 716-433-7604  
WEBSITE: www.wd-on.com



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UNAUTHORIZED ALTERATION OF ANY PART OF ANY SURVEY DRAWING, DESIGN, CONSTRUCTION PLAN OR REPORT IS A VIOLATION OF SECTION 2205, PARAGRAPH 2 OF THE NEW YORK STATE EDUCATION LAW.

Approved  
[ ] Approved as Noted  
[ ] Revised and Resubmitted  
[ ] Not Approved  
Other

Review and Approval is only for professional use of the design concept of the project and compliance with the information shown in the Contract Documents. Contractor is responsible for determining the information that pertains solely to the information shown on the job site for the construction of the project and for the construction of the project.

Ecology and Environment Engineering, P.C.

by *John J. Wilson*  
Date: 9/14/06

1	AS-BUILT RECORD DRAWING	
KSK		5/19/2006
0	PRELIMINARY RECORD DRAWING ISSUED FOR OWNER REVIEW	
KSK		4/27/2006
NO.	REVISIONS	DATE
BY		

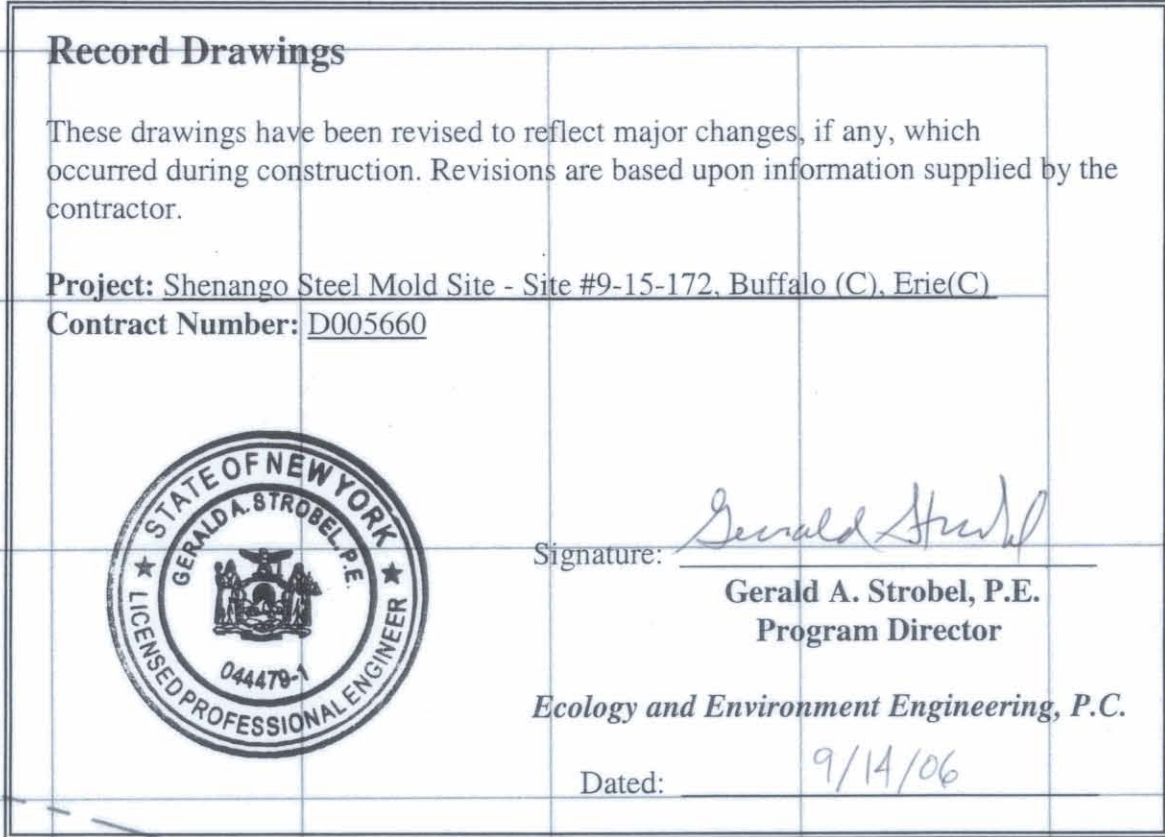
DWG. TITLE

TOPOGRAPHIC MAP

BOTTOM OF EXCAVATION/SUBGRADE

DATE	4/6/2006
SCALE	1"=40'
DRAWN	KSK CHK. MDW
PROJ. No.	426901
DWG. No.	





3 of 3





# **Substantial Completion Certification**



## **ecology and environment engineering, p.c.**

---

**BUFFALO CORPORATE CENTER**

368 Pleasant View Drive, Lancaster, New York 14086

Tel: 716/684-8060, Fax: 716/684-0844

May 30, 2006

Mr. Scott Clary, President  
Horizon Environmental Services, Inc.  
590A Callery Road  
Cranberry Twp, PA 16066

Re: Shenango Steel Mold site, NYSDEC Project No. 9-15-172, Contract No.#D005660  
Substantial Completion Certification

Dear Mr. Clary:

Ecology and Environment Engineering, P.C. (EEEPC) and the New York State Department of Environmental Conservation (NYSDEC) performed the Substantial Completion inspection on the above-mentioned project on Wednesday, March 29, 2006.

Based on that inspection, the field effort was complete, but a number of outstanding project submittal items still needed to be provided before obtaining final substantial project completion could be certified. These outstanding items included analytical project items that were critical to closure of the project. These items included all the analytical results from the field work, the Category A and B analytical deliverable for the analyses, and the Data Usability Summary Report (DUSR) for the analyses on soils for characterization and confirmation. The balance of these project deliverables were received by EEEPC on Tuesday, May 23, 2006, and are now under review by EEEPC for technical acceptability.

Per the contract, outstanding incomplete work items are normally listed with an estimated cost for completion. These costs are summarized and doubled and made a part of the certificate of approval for final project completion. These costs are held by the New York State Controller against any future payment requests by the contractor. In addition, a schedule for completion of each outstanding item is normally required to be submitted by the contractor and is made part of the final Certificate of Substantial Completion. EEEPC's Site Representative receives these completed items on a weekly basis and reviews them with the NYSDEC project manager as a means to obtain final project completion within the contract time.

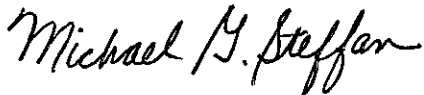
As of Wednesday, May 24, 2006, Horizon has achieved substantial completion of the project. Three (3) copies of the Certificate of Substantial Completion are attached for the signature approval by Horizon and NYSDEC. The incomplete work list will be used as the guide for release of funds held against the contract as noted on line 5 of the Contractors Application for Payment (CAP).



**Mr. Scott Clary, President**  
**May 30, 2006**  
**Page 2**

Please sign and return all copies to Mr. David Chiusano for signature and final execution of the certificate by NYSDEC. Your copy will be mailed after execution by all parties. If you have any questions, I can be reached at 716-684-8060.

Sincerely,

A handwritten signature in black ink that reads "Michael G. Steffan". The signature is written in a cursive, flowing style.

Michael G. Steffan  
Project Manager

cc: D. Chiusano, Albany - NYSDEC  
D. Locey, Buffalo - Region 9, NYSDEC  
D. Miller, Buffalo - EEEPC  
G. Jones, Site Representative, Buffalo - EEEPC  
J. Kohler, Site Representative, Buffalo - EEEPC  
CTF 002700.DC03.01

## CERTIFICATE OF SUBSTANTIAL COMPLETION

DEPARTMENT: New York State Department of Environmental Conservation

PROJECT: Shenango Steel Mold Site, City of Buffalo, Erie County, New York

ENGINEER: Ecology and Environment Engineering, P.C.  
Buffalo Corporate Center  
368 Pleasant View Drive  
Lancaster, New York 14086

CONTRACTOR: Horizon Environmental Services, Inc  
590A Callery Road  
Cranberry Township, PA 16066

CONTRACT NO.: D005660

SITE NO.: 9-15-172

Project shall include:

Final Substantial Completion of the Shenango Steel Mold Site as defined in Contract No. D005660.

Definition of Substantial Completion:

The Work, or a specified part thereof, has progressed to the point where in the opinion of the Engineer as evidenced by Engineer's definitive Certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents (with the exception of the minor items identified during inspection described in paragraph 13.6 of section VIII of the project General Conditions), so that it can be utilized continuously for the purposes for which it is intended.

Date of Final Substantial Completion: **Wednesday, May 24, 2006**

Written mutual agreements upon which the date of Substantial Completion has been mutually agreed to are as follows:

1. Agreement to Substantial Completion by the Department will in no way affect the obligations of the Contractor under the terms and provisions of the Contract with respect to punch list work.
2. The Contractor shall subsequently satisfactorily complete or correct all unfinished items in the work accepted by the Department as Substantially Satisfactorily complete.

3. The Department, Engineer, and the Contractor made an inspection of the work on **Wednesday, March 29, 2006** and, following this inspection, the Engineer, on behalf of the Department, advised the Contractor of remaining items (Punch List - Final Completion - Attachment A) to be completed or corrected and provided the Contractor with the following Estimate of Work Remaining. The Contractor shall endorse said estimate of Work Remaining as evidence of agreement and provide the Department with a mutually agreeable schedule with an estimate of Work Remaining.

**CERTIFICATE OF SUBSTANTIAL COMPLETION  
SHENANGO STEEL MOLD SITE  
SITE NO.: 9-15-172  
CONTRACT NO.: D005660**

ESTIMATE OF WORK REMAINING

Attached

SUBSTANTIAL COMPLETION

**For the Contractor: Horizon Environmental Services, Inc.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**For the Engineer: Ecology & Environment Engineering, P.C.**

By: Michael B. Steffan

Title: Project Manager / Engineer

Date: May 30, 2006

**For New York State Department of Environmental Conservation:**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment A**

**Shenango Steel Mold Site**

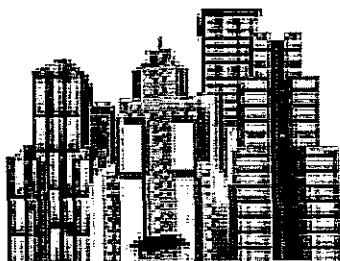
**NYSDEC Site No. 9-15-172**

**LIST OF INCOMPLETE WORK ITEMS REMAINING AND ESTIMATE OF COST  
VALUE**

**March 29, 2006**

Final Completion Punch List - 7 pages - Dated: May 30, 2006





Buffalo, New York

# ecology and environment engineering, p.c.

International Specialists in the Environment

Buffalo Corporate Center

368 Pleasant View Dr.

Lancaster, New York 14086

Phone 716.684.8060

Fax 716.684.0844

Field Office : 724-272-6991

## Project Incomplete Work List Report - Substantial Completion

Re: Shenango Steel Mold Site

Site #: 9-15-172

NYSDEC Contract: D005660

Contractor: Horizon Environmental Services, Inc.

List created as of date: March 24, 2006

Current Date: May 30, 2006 (11:48am)

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
1	3/24/6	Clean soil from asphalt access road	Complete	03/28/06	\$0.00	3/28/06
2	3/24/6	Repair site dirt access roads	Complete	03/28/06	\$0.00	3/28/06
3	3/24/6	Submit completed site security log	Transmitted by HES via e-mail on 5/13/06-12:16PM. Received by EEEPC 5/15/06. <u>Under review by EEEPC.</u>	5/24/06	\$0.00	5/12/06

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
4	3/24/6	Outstanding manifests from disposal facilities	Information hand delivered by HES after 5/2/06 conference call. Received by EEEPC on 5/2/06. Under review by <u>EEEEPC.</u>		\$0.00	5/2/06
5	3/24/6	Outstanding analytical data - Soils and Waters	Transmitted by HES via e-mail(s) on 5/12/06-8:29 & 8:59PM. <u>Received by EEEPC 5/15/06.</u>		\$0.00	5/12/06
6	3/24/6	Certificates of disposal from disposal facilities	Transmitted by HES via e-mail on 5/12/06 -9:55PM. <u>Received by EEEPC 5/15/06</u>	5/24/06	\$0.00	5/12/06

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
7	3/24/6	Outstanding certified payrolls (General and Subcontractors)	<ul style="list-style-type: none"> <li>• Transmitted by HES via e-mail (HES only) on 5/12/06-10:21PM.</li> <li>Received by EEEPC 5/15/06.</li> <li>• Wendel certified payrolls received by mail 5/15/06.</li> <li>• SJB certified payroll mailed on 5/19/06 and received by EEEPC on 5/22/06.</li> <li><u>Under review by EEEPC.</u></li> </ul>	5/24/06	\$0.00	5/12/06
8	3/24/6	Project Shop Drawings (Red Line)	<p>Transmitted by HES via e-mail on 5/12/06- 2:17PM.</p> <p><u>Received by EEEPC 5/15/06.</u></p>	5/24/06	\$0.00	5/12/06

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
9	3/24/6	Lein release letters from subcontractors - <b><u>Schedule item for Final project completion</u></b>	To be supplied at final project completion.	-	-	5/28/06
10	3/24/6	Daily site sign-in logs	Transmitted by HES via e-mail on 5/13/06- 11:08AM. <u>Received by EEEPC 5/15/06.</u>	5/24/06	\$0.00	5/12/06
11	3/24/6	Compaction Test Data - Subcontractor SJB	Transmitted by HES via e-mail on 5/12/06- 3:04PM. <u>Received by EEEPC 5/15/06.</u>	5/24/06	\$0.00	5/12/06
12	3/24/6	Complete sample log	Received by e-mail 4/20/06. Comments provided to HES on 5/2/06. <u>Still under comment and review for quantities and TAT questions.</u>	5/24/06	\$0.00	
13	3/24/6	Remove extruding re-bar in TGA	Complete	3/29/06	\$0.00	3/29/06

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion <u>Per HES</u>
14	3/29/06	Tack coat and asphaltic patch two designated areas on the access road to the site	Area paved by HES. <u>Reviewed &amp; accepted by EEEPC</u>	5/25/06	\$0.00	5/30/06
15	3/29/06	Submittal of Analytical Category A and B Deliverables -	Transmitted by HES via mail and received by EEEPC on <u>5/22/06</u> . <u>Under review by EEEPC</u>	5/24/06	\$0.00	5/5/06
16	3/29/06	Submittal of DUSR Reports on Confirmatory and Characterization Soil samples - (Independent Validation) - Section 01400-4 - Table 1	Transmitted by HES via mail and received by EEEPC on <u>5/22/06</u> . Additional correspondence received from DUSR on <u>5/23/06</u> . <u>Under review by EEEPC.</u>	5/24/06	\$0.00	5/15/06
17	3/29/06	Waste Profile Approvals - ENSOL, Allied, Waste Management, etc.	Transmitted by HES via e-mail on 5/12/06- 9:55PM. Received by EEEPC 5/15/06. <u>Under review by EEEPC.</u>	5/24/06	\$0.00	5/15/06



No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
18	3/29/06	Pre and post remedial construction surveys - including: Initial survey, Intermediate survey, Record topo, Field data including survey books and notes, Coordinate list, Volume quantity calculations, Final .pdf of survey	<ul style="list-style-type: none"> <li>•Transmitted by HES via email 4/28/06 1:57PM and received by EEEPC on <u>4/28/06</u> (Surveys mapping only).</li> <li>•Hard copies received from Wendel 5/3/06.</li> <li>•Comments provided on the maps by EEEPC and returned to Wendel on 5/15/06 for correction.</li> <li>•Survey data field books and volume calculation received 5/22/06. <u>Under review by EEEPC.</u></li> </ul>	5/24/06	\$0.00	5/12/06

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
19	3/29/06	Site Air Monitoring and Met. Station Info	<ul style="list-style-type: none"> <li>• Air Monitoring Info Transmitted by HES via e-mail(s) on 5/12/06 at 4:27PM, 5:49PM, 5:57PM, and 6:03PM. Received by EEEPC 5/15/06.</li> <li>• Met Station Info Transmitted by HES via e-mail on 5/12/06 10:48PM. Received by EEEPC 5/15/06</li> </ul> <u>Under review by EEEPC.</u>	5/24/06	\$0.00	5/12/06
		Subtotal of Estimated Cost of Incomplete Work			\$0.00	
		Subtotal of Estimated Cost of Incomplete Work Doubled			\$0.00	
		Total Estimated Costs to Complete			\$0.00	
		Net reduction in completed work as of May 24, 2006			\$0.00	



## ecology and environment engineering, p.c.

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368 Pleasant View Dr.

Lancaster, New York 14086

Phone 716.684.8060

Fax 716.684.0844

Field Office : 724-272-6991

### Project Incomplete Work List Report - Substantial Completion

Re: Shenango Steel Mold Site

Site #: 9-15-172

NYSDEC Contract: D005660

Contractor: Horizon Environmental Services, Inc.

List created as of date: March 24, 2006

Current Date: May 24, 2006 (1:26PM)

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
1	3/24/6	Clean soil from asphalt access road	Complete	03/28/06		3/28/06
2	3/24/6	Repair site dirt access roads	Complete	03/28/06		3/28/06
3	3/24/6	Submit completed site security log	Transmitted by HES via e-mail on 5/13/06-12:16PM. Received by EEEPC 5/15/06. <u>Under review by EEEPC.</u>			5/12/06

No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES
4	3/24/6	Outstanding manifests from disposal facilities	Information hand delivered by HES after 5/2/06 conference call. Received by EEEPC on 5/2/06. <u>Under review by EEEPC.</u>			5/2/06
5	3/24/6	Outstanding analytical data - Soils and Waters	Transmitted by HES via e-mail(s) on 5/12/06-8:29 & 8:59PM. Received by EEEPC 5/15/06.			5/12/06
6	3/24/6	Certificates of disposal from disposal facilities	Transmitted by HES via e-mail on 5/12/06 -9:55PM. Received by EEEPC 5/15/06			5/12/06
No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES

7	3/24/6	Outstanding certified payrolls (General and Subcontractors)	<ul style="list-style-type: none"> <li>Transmitted by HES via e-mail (HES only) on 5/12/06- 10:21PM.</li> <li>Received by EEEPC 5/15/06.</li> <li>Wendel certified payrolls received by mail 5/15/06.</li> <li>SJB certified payroll mailed on 5/19/06 and received by EEEPC on 5/22/06.</li> </ul> <u>Under review by EEEPC.</u>			5/12/06
8	3/24/6	Project Shop Drawings (Red Line)	<p>Transmitted by HES via e-mail on 5/12/06- 2:17PM.</p> <p>Received by EEEPC 5/15/06.</p>			5/12/06
No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES



9	3/24/6	Lein release letters from subcontractors - Schedule item for Final project completion				5/28/06
10	3/24/6	Daily site sign-in logs	Transmitted by HES via e-mail on 5/13/06- 11:08AM. Received by EEEPC 5/15/06.			5/12/06
11	3/24/6	Compaction Test Data - Subcontractor SJB	Transmitted by HES via e-mail on 5/12/06- 3:04PM. Received by EEEPC 5/15/06.			5/12/06
12	3/24/6	Complete sample log	Received by e-mail 4/20/06. Comments provided to HES on 5/2/06. <u>Still under comment and review for quantities and TAT questions.</u>			
13	3/24/6	Remove extruding re-bar in TGA	Complete	3/29/06		3/29/06
No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES

14	3/29/06	Tack coat and asphaltic patch two designated areas on the access road to the site	Area paved by HES. <u>To be reviewed by EEEPC</u>	3/29/06		5/30/06
15	3/29/06	Submittal of Analytical Category A and B Deliverables -	Transmitted by HES via mail and received by EEEPC on <u>5/22/06</u> . <u>Under review by EEEPC</u>			5/5/06
16	3/29/06	Submittal of DUSR Reports on Confirmatory and Characterization Soil samples - (Independent Validation) - Section 01400-4 - Table 1	Transmitted by HES via mail and received by EEEPC on <u>5/22/06</u> . Additional correspondence received from DUSR on <u>5/23/06</u> . <u>Under review by EEEPC</u> .			5/15/06
17	3/29/06	Waste Profile Approvals - ENSOL, Allied, Waste Management, etc.	Transmitted by HES via e-mail on 5/12/06- 9:55PM. Received by EEEPC 5/15/06. <u>Under review by EEEPC</u> .			5/15/06
No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES

18	3/29/06	Pre and post remedial construction surveys - including: Initial survey, Intermediate survey, Record topo, Field data including survey books and notes, Coordinate list, Volume quantity calculations, Final .pdf of survey	<ul style="list-style-type: none"> <li>Transmitted by HES via email 4/28/06 1:57PM and received by EEEPC on <u>4/28/06</u> (Surveys mapping only).</li> <li>Hard copies received from Wendel 5/3/06.</li> <li>Comments provided on the maps by EEEPC and returned to Wendel on 5/15/06 for correction.</li> <li>Survey data field books and volume calculation received 5/22/06. <u>Under review by EEEPC.</u></li> </ul>			5/12/06
No.	Date Added to List:	Description of Incomplete Work List Item:	Status of Item:	Date Inspected/ Completed:	Estimated Cost in (\$)	Schedule for Completion Per HES

19	3/29/06	Site Air Monitoring and Met. Station Info	<ul style="list-style-type: none"> <li>Air Monitoring Info Transmitted by HES via e-mail(s) on 5/12/06 at 4:27PM, 5:49PM, 5:57PM, and 6:03PM. Received by EEEPC 5/15/06.</li> <li>Met Station Info Transmitted by HES via e-mail on 5/12/06 10:48PM. Received by EEEPC 5/15/06</li> </ul> <u>Under review by EEEPC.</u>			5/12/06
		Subtotal of Estimated Cost of Incomplete Work				
		Subtotal of Estimated Cost of Incomplete Work Doubled				
		Total Estimated Costs to Complete				
		Net reduction in completed work as of May 24, 2006			\$0.00	







# Final Completion Certification

**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation**  
Remedial Bureau E, 12<sup>th</sup> Floor  
625 Broadway, Albany, New York 12233-7017  
**Phone:** (518) 402-9814 • **FAX:** (518) 402-9819  
**Website:** www.dec.state.ny.us



JUN 28 2006

Mr. Scott Clary  
President  
Horizon Environmental Services, Inc.  
590A Callery Road  
Cranberry Township, Pennsylvania 16066

RE: Contract Completion  
Shenango Steel Contract D005660, City of Buffalo

Dear Mr. Clary:

In accordance with Section 8, Article 13.10 of the subject contract, final inspection and/or required documentation received have revealed that all of the work for the above-referenced contract has been satisfactorily completed under the terms and conditions of Contract No. D005660. The date of final completion has been determined to be June 23, 2006.

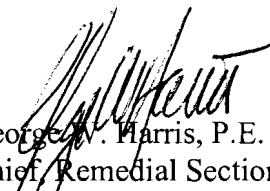
You may now submit a Payment Request (PR) for any remaining costs. Concurrently, you may now also submit a separate request for release of retainage associated with the original contract amount (currently \$31,504.10). The following forms enclosed with this letter will need to be completed and returned with your retainage release PR before the contract can be closed out:

1. Retainage Release Form (Attachment 1)
2. OSC Form, "Prime Contractor's Certification" (Attachment 2)
3. OSC Form, "Subcontractor's Certification" (Attachment 3)

Please note that since Change Order No. 1 in the amount of \$330,469.50 requires review and execution by the New York State Department of Environmental Conservation, New York State Department of Law, and the New York State Office of the State Comptroller, the contract cannot be closed at this time. Accordingly, approximately \$100 will be withheld from your retainage release request until such time the Change Order is executed and all the required documentation is submitted by Horizon. Once the change order is executed and all documentation is received and found acceptable, a final PR may be submitted requesting payment of the change order and release of the remaining retainage. Release of the final amount of retainage will constitute final closeout for this contract and no further costs can be claimed against this contract in the future.

If you have questions, please contact Mr. David Chiusano at (518) 402-9814.

Sincerely,



George W. Harris, P.E.  
Chief, Remedial Section A  
Remedial Bureau E  
Division of Environmental Remediation

Enclosures

cc: M. Steffan - E&E  
B. Spangler - Horizon Environmental  
P. Cammarata - BUDC

## Final Payment Release

For and in consideration of the receipt of final payment on the contract hereinafter identified, and in order to induce the New York State Department of Environmental Conservation (**Department**) to make such payment, the **Contractor** hereby releases the **Department** for any and all claims, of any nature whatsoever, arising under or in connection with the contract, except for the following claims:

(List any exempted claims)

For and in consideration of the receipt of final payment on the contract hereinafter identified, and in order to induce the **Department** to make such payment, the **Contractor** hereby states that it has paid all moneys due subcontractors, subconsultants, suppliers, material, men or others due payment for work or services performed in furtherance of this contract, except as follows:

\_\_\_\_\_

(List all subcontractors, subconsultants, suppliers, etc. who have outstanding claims for payment or who have not been paid in full. A complete explanation of the facts and circumstances should be set forth on a separate sheet and attached hereto)

The **Contractor** hereby indemnifies and holds the **Department** and the State of New York harmless from any losses from claims, demands, payments, suits, actions, liens, recoveries and judgments of every nature and description brought or recovered against it by reason of failure to make such payments.

Contract Number \_\_\_\_\_

\_\_\_\_\_  
Firm

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

### (CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) s.s.:

On the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_  
to me known, who being duly sworn, did depose and say that (s)he resides in \_\_\_\_\_, New York;  
that (s)he is \_\_\_\_\_ (title) of \_\_\_\_\_ (firm)  
the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that  
the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said  
corporation and that (s)he signed his(her) name thereto by like order.

Seal

\_\_\_\_\_  
Notary Public

### (CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) s.s.:

On the \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_, before me personally came \_\_\_\_\_  
to me known, who being duly sworn, did depose and say that (s)he resides in \_\_\_\_\_, New York;  
that (s)he is \_\_\_\_\_ *(title)* of \_\_\_\_\_ *(firm)*  
the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that  
the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said  
corporation and that (s)he signed his(her) name thereto by like order.

Seal

\_\_\_\_\_  
Notary Public

**(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) s.s.:

On the \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_, before me personally came \_\_\_\_\_,  
to me known, who being duly sworn, did depose and say that (s)he resides in \_\_\_\_\_, New York;  
that (s)he is an officer of \_\_\_\_\_ *(firm)*; namely, the  
\_\_\_\_\_ *(title)* of \_\_\_\_\_ *(firm)*; that (s)he is authorized  
by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of,  
and with authority to bind said corporation.

\_\_\_\_\_  
Notary Public



**ARTICLE 4(c)**

***Payment Affidavit***

**This Article 4(c) is not applicable**

*Office of the State Comptroller*  
*Division of Pre-Audit and Accounting Records*  
**BUREAU OF STATE EXPENDITURES**

New York State Labor Law, Section 220-a  
Prime Contractor's Certification

- 1) That I am an officer of \_\_\_\_\_ and am duly authorized to make this affidavit on behalf of the prime contractor on public contract No. \_\_\_\_\_.
- 2) That I fully comprehend the terms and provisions of Section 220-a of the Labor Law.
- 3) That, except as herein stated, there are no amounts due and owing to or on behalf of laborers employed on the project by the contractor. (Set forth any unpaid wages and supplements, if none, so state).

Name

Amount

- 
- 4) That the contractor hereby files every verified statement(s) required to be obtained by the contractor from the subcontractor(s).
  - 5) That, upon information and belief, except as stated herein, all laborers (exclusive of executive or supervisory employees) employed on the project have been paid and prevailing wages and supplements for their services through \_\_\_\_\_, (if more than on subcontractor list name and date separately) the last day worked on the project by their subcontractor(s), (Set forth any unpaid wages and supplements, if none, so state and utilize clause 5 (A)).

Name

Amount

- 
- 5a) That the contractor has no knowledge of amounts owing to or on behalf of any laborers of its subcontractor(s).
  - 6) In the event it is determined by the Commissioner of Labor that the wages or supplements or both of any such subcontractor(s) have not been paid or provided pursuant to the appropriate schedule of wages and supplants, then the contractor shall be responsible for payment of such wages and supplants pursuant to the provision of Section 223 of the Labor Law.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

***Acknowledgment:***

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) SS:

On the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person described in an executed for foregoing instrument and acknowledged to me that (s)he executed the same.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
County

If this affidavit is verified by an oath administered by a notary public in a foreign country other than Canada, it must be accompanied by a certificate authenticating the authority of the notary who administers the oath. (See CPLR § 2309(c); Real Property Law, § 311, 312).

**Office of the State Comptroller**  
**Division of Pre-Audit and Accounting Records**  
**BUREAU OF STATE EXPENDITURES**

**New York State Labor Law, Section 220-a, Subcontractor's Certification**

- 1) That I am an officer of \_\_\_\_\_ a subcontractor on public Contract Number \_\_\_\_\_ and I am duly authorized to make this affidavit on behalf of the firm.
- 2) That I make this affidavit in order to comply with the provisions of Section 220-a of the Labor Law.
- 3) That on \_\_\_\_\_ we received from \_\_\_\_\_ the prime contractor a copy of the initial/revised schedule of wages and supplements Prevailing Rate Schedule Case Number \_\_\_\_\_ (PRC) specified in the public improvement contract.
- 4) That I have reviewed such schedule(s), and agree to pay the applicable prevailing wages and to pay or provide the supplements specified therein.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Print Name**

\_\_\_\_\_  
**Title**

***Acknowledgment***

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) SS:

On the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person described in and who executed for foregoing instrument and acknowledged to me that (s)he executed the same.

\_\_\_\_\_  
**Notary Public**

If this affidavit is verified by an oath administered by a notary public in a foreign country other than Canada, it must be accompanied by a certificate authenticating the authority of the notary who administers the oath. (See CPLR § 2309(c); Real Property Law, § 311, 312).

**J**

## **Analytical DUSR Reviews**

**DATA USABILITY SUMMARY REPORT - PART II**  
**SHENANGO STEEL SITE**  
**HORIZON ENVIRONMENTAL SERVICES, INC.**  
**HUDSON ENVIRONMENTAL SERVICES, INC.**

***Deliverables***

The above referenced data packages for the samples collected at the Shenango Steel site contain all required deliverables consistent with the requirements of the EPA Region II guidelines. The sample specific analyses performed included Volatile Organic Compounds (VOC), TCLP Volatile Organic Compounds (VOC), TCLP Semivolatile Organic Compounds (SVOC), polychlorinated Biphenyls (PCB), Total Petroleum Hydrocarbons (TPH), and TCLP Metals. All analyses were performed by United States Environmental Protection Agency (USEPA) SW-846 Methods in accordance with "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions". Specific method references are as follows:

**Analysis**

VOC  
TCLP VOC  
TCLP SVOC  
PCB  
TPH  
TCLP Metals  
Mercury

**Method References**

USEPA SW-846 Method 8260B  
USEPA SW-846 Method 1311/8260B  
USEPA SW-846 Method 1311/8270C  
USEPA SW-846 Method 8082  
USEPA SW-846 Method 8015M  
USEPA SW-846 Method 1311/6010  
USEPA SW-846 Method 7470A

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the USEPA Region II Standard Operating Procedure SOP (HW-24 Revision 1 June 1999) for the Validation of Organic Data Acquired used SW846 Method 8260B Rev. 2, Dec. 1996, the USEPA Region II Standard Operating Procedure SOP (HW-22 Revision 2 June 2001) for the Validation of Organic Data Acquired used SW846 Method 8270C Rev. 3, Dec. 1996, USEPA Region II SOP (HW-23 Revision 0 April 1995) for the Validation of Organic Data Acquired used SW846 Method 8080A/8000, USEPA Region II SOP (HW-23B Revision 1.0 May 2002) for the Validation of Organic Data Acquired used SW846 Method 8082, USEPA Region II SOP (HW2 Revision 11 January 2002) for the Evaluation of Metals Data for the Contract Laboratory Program (CLP) based on Region II SOW 3/90, and the reviewer's professional judgment.

The validation report pertains to the samples indicated in each individual section:

### *Chains-of-Custody*

- The Chains-of-Custody (COCs) were reviewed for completeness and accuracy. There were no discrepancies observed with the samples presented on the COC, and all other tests specified on the COC were performed for the designated samples.

### *Organics*

The following items/criteria were reviewed for this report:

- SDG Narrative and deliverables compliance
- Chains-of-Custody (COC)
- Holding times
- Surrogate Compound recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recovery summary forms
- Lab Check Sample/Lab Check Duplicate (LCS/LCSD) recovery summary forms
- Positive results reported for method blanks
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning summary forms
- Initial and continuing calibration summaries
- Internal standard area and retention time summary forms

The items listed above were technically and contractually in compliance with the method and QAPP criteria, with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly. This report presents all QC outliers.

Please note that any results qualified "U" due to blank contamination may be then qualified "J" due to another action. Therefore, the results may be qualified "UJ" due to cumulative blank and actions from other exceedances of QC criteria.



## ***Volatile Organics Compounds (VOC)***

### VOC

#### Soil and Water Samples

LN-07

- The following table lists compounds that exceeded 15 percent relative standard deviation (%RSD) for relative response factors (RRF)/concentrations in the initial calibration (ICAL). Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	ICAL	Compound	Deficiency %RSD	Affected Sample(s)	Qualifier
060210C	—	More than 50% out	>50% out	LN-07	J/UJ

- The following table lists compounds that exceeded 20 percent deviation (%D) for relative response factors (RRF)/concentrations in the continuing calibration (CCAL). Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	CCAL	Compound	Deficiency %D	Affected Sample(s)	Qualifier
060210C	—	More than 50% out	>50% out	LN-07	J/UJ

- The following table lists laboratory compound spike (LCS) results that exceeded percent recovery (%R) quality control (QC) limits. Associated field samples are also listed below. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
0602110C	More than 50% out	>50% out	LN-07	J/UJ

## TCLP Volatile Organics Compounds (VOC)

### TCLP VOC

#### Soil and Water Samples

LN-04, LN-05, TG-3-2, TG-0-02, LN-01, LN-02, LN-03, TG-PCB, TG-0-03, TG-0-04, LN-08, TG-2-2-27

- The following table lists compounds that exceeded 20 percent deviation (%D) for relative response factors (RRF)/concentrations in the continuing calibration (CCAL). Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	CCAL	Compound	Deficiency %D	Affected Sample(s)	Qualifier
060204A	02/02/06	More than 50% out	>50% out	LN-04, LN-05	UJ
060131G	02/02/06	Benzene	High %D	TG-0-02	UJ
		Chlorobenzene	High %D		UJ
060201B	02/06/06	Benzene	High %D	LN-01, LN-02,	UJ
		Chlorobenzene	High %D	LN-03, TG-PCB	UJ
060228B	03/01/06	Vinyl chloride	69%	TG-2-2-27	UJ

- The following table lists laboratory compound spike (LCS) results that exceeded percent recovery (%R) quality control (QC) limits. Associated field samples are also listed below. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060204A	More than 50% out	>50% out	LN-04, LN-05	UJ
060201B	1,4-Dichlorobenzene	46%R	LN-01, LN-02,	UJ
	1,2-Dichloroethane	50%R	LN-03, TG-PCB	UJ
060303C	Benzene	50%R	TG-3-2	UJ
	Chloroform	60%R		UJ
	1,4-Dichlorobenzene	65%R		UJ
060228D	Chlorobenzene	69% R	TG-2-2-27	UJ
	1,2-Dichloroethane	67% R		UJ

- The following table includes MS/MSD with percent recoveries (%R) outside the laboratory QC limits. Low %R may indicate a potential low bias while conversely a high %R may indicate a potential high bias. Positive results are considered estimated and qualified "J" while non-detects are qualified estimated and qualified "UJ" for a low %R. Results are valid and usable, however possibly biased.

SDG	MS/MSD ID	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060131G	TG-0-02	1,4-Dichlorobenzene	46%R	TG-0-02	UJ
		1,2-Dichloroethane	50%R		UJ
060224B	LN-08	Benzene	65%R	LN-08	UJ
		1,2-Dichloroethane	65%R		UJ

### ***TCLP Semivolatile Organics Compounds (SVOC)***

#### TCLP SVOC

#### Soil and Water Samples

LN-04, LN-05, TG-3-2, TG-0-01, TG-0-02, LN-01, LN-02, LN-03, TG-PCB, TG-0-03, TG-0-04, LN-08, Basin 2-227

- The following table lists compounds that exceeded 20 percent deviation (%D) for relative response factors (RRF)/concentrations in the continuing calibration (CCAL). Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	CCAL	Compound	Deficiency %D	Affected Sample(s)	Qualifier
060204A	02/07/06	More than 50% out	>50% out	LN-04, LN-05	UJ
060204A	03/07/06	All Acid compounds	High %D	TG-3-2	UJ
606131G	02/03/06	All Acid compounds	High %D	TG-0-02, LN-01, LN-02, LN-03, TG-PCB	UJ
060215B	02/16/06	2,4,6-Trichlorophenol	34.4%D	TG-0-03,	UJ
		o-Cresol	36.9%D	TG-0-04	UJ
		2,4-Dinitrotoluene	30.1%D		UJ
		Pyridine	40.2%D		UJ

SDG	CCAL	Compound	Deficiency %D	Affected Sample(s)	Qualifier
060224B	02/27/06	m,p-Cresol	61.4%D	LN-08	UJ
		o-Cresol	41.3%D		UJ
		2,4-Dinitrotoluene	41.8%D		UJ
		Pentachlorophenol	65.5%D		UJ
		2,4,6-Trichlorophenol	36.1%D		UJ
		2,4,5-Trichlorophenol	59.6%D		UJ
		Nitrobenzene	52.4%D		UJ
060228D	03/01/06	m,p-Cresol	57.2%D	Basin 2-227	UJ
		o-Cresol	40.6%D		UJ
		2,4-Dinitrotoluene	36.9%D		UJ
		Hexachlorobutadiene	25.9%D		UJ
		2,4,6-Trichlorophenol	35.7%D		UJ

- The following table lists surrogate compounds that exceeded percent recovery (%R) quality control (QC) limits. Associated field samples are also listed below. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.
- All non-detect results for the compound of interest with a %R <10% are rejected "R" in the affected samples. The rejected results are unusable for project objectives. The associated field samples are listed

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060303C	Nitrobenzene-d5	Low %R=66%	TG-3-2	J/UJ all base/neutral compounds
	2-Fluorobiphenyl	Low %R=55%		
060131G	2-Fluorobiphenyl	Low %R=0%	TG-0-01	R all base/neutral compounds

- The following table lists laboratory compound spike (LCS) results that exceeded percent recovery (%R) quality control (QC) limits. Associated field samples are also listed below. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results qualified "J/UJ" are valid and usable, however possibly biased.

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060204A	More than 50% out	>50% out	LN-04, LN-05	UJ

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060131G	Pentachlorophenol	49%R	TG-0-02, LN-01, LN-02, LN-03, TG-PCB	UJ
060224B	Hexachlorobutadiene	38%R	LN-08	UJ

### ***Polychlorinated Biphenyls (PCBs)***

#### Soil and Water Samples

TG-PCB-216, LN-07, TG-3-2, TG-0-01, TG-0-02, LN-01, LN-02, LN-03, TG-PCB, TG-0-03, TG-0-04, LN-08, TG-2-2-27

- The following table lists laboratory compound spike (LCS) results that exceeded percent recovery (%R) quality control (QC) limits. Associated field samples are also listed below. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results are valid and usable, however possibly biased.

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060210C	Aroclor 1016	67%	LN-07	UJ

### ***Total Petroleum Hydrocarbons (TPH)***

#### Soil and Water Samples

LN-04, LN-05, TG-0-01, TG-0-02, LN-01, LN-02, LN-03, LN-08

- The following table lists compounds that exceeded 15 percent deviation (%D) for concentrations in the continuing calibration (CCAL). Associated field samples are also listed. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results are valid and usable, however possibly biased.

SDG	CCAL	Compound	Deficiency %D	Affected Sample(s)	Qualifier
060204A	02/07/06	Total TPH	19% D	LN-04, LN-05	UJ

SDG	CCAL	Compound	Deficiency %D	Affected Sample(s)	Qualifier
060131G	02/02/06	Total TPH	17% D	TG-0-01, TG-0-02, LN-01, LN-02, LN-03	UJ
060224B	02/28/06	Total TPH	32% D	LN-08	UJ

- The following table includes MS/MSD with percent recoveries (%R) outside the 70-130% QC limits. Low %R may indicate a potential low bias while conversely a high %R may indicate a potential high bias. Positive results are considered estimated and qualified "J" while non-detects are qualified estimated and qualified "UJ" for a low %R. Results are valid and usable, however possibly biased.

SDG	MS/MSD ID	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060131G	TG-0-02	Total TPH	33% MS %R	TG-0-02	UJ

- The following table lists laboratory compound spike (LCS) results that exceeded percent recovery (%R) quality control (QC) limits. Associated field samples are also listed below. Positive results for these compounds in associated samples are considered estimated and qualified "J". All non-detect results for the compound of interest in the appropriate samples are qualified "UJ". Results are valid and usable, however possibly biased.

SDG	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060204A	Total TPH	20%	LN-04, LN-05	UJ
060131G	Total TPH	56%	TG-0-01, TG-0-02, LN-01, LN-02, LN-03	UJ
060224B	Total TPH	40%	LN-08	UJ

## TCLP Metals

### Soil Samples

LN-04, LN-05, LN-07, TG-Modern LF-224, TG-3-2, TG-0-01, TG-0-02, LN-01, LN-02, LN-03, TG-PCB, LN-0-03, LN-0-04, LN-08, TG-2-2-27

- The following table includes CCV results with percent recoveries (%R) outside the 90-110% QC limits. A low %R may indicate a potential low bias while conversely a high %R may indicate a potential high bias. Positive results are considered estimated and qualified "J" while



non-detects are qualified as estimated and qualified "UJ" for a low %R.  
Results are valid and usable, however possibly biased.

SDG	CCV ID	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060224B	CCV	Chromium,	47%R	LN-08	UJ
	02/27/06	Cadmium	173%R		J

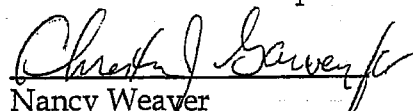
- The following table includes MS/MSD with percent recoveries (%R) outside the 75-125% QC limits. Low %R may indicate a potential low bias while conversely a high %R may indicate a potential high bias. Positive results are considered estimated and qualified "J" while non-detects are qualified estimated and qualified "UJ" for a low %R. Results are valid and usable, however possibly biased.

SDG	MS/MSD ID	Compound	Deficiency %R	Affected Sample(s)	Qualifier
060303C	TG-3-2	Mercury	27% MS %R	TG-3-2	UJ

**Package Summary:**

All data are valid and usable with qualifications as noted in this review.

Signed:

  
Nancy Weaver  
Senior Chemist

Dated: 06/19/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-PCB-216  
HES Lab I.D.#: 060217C03

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Amount For Extraction: 10ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	17	mg/kg
Total Solid	EPA 160.3	80	%

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SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060204A01

Sample Matrix: Soil

Date Sample Collected: 02/03/06

Date Received: 02/04/06

Date Prepared: 02/04/06

Date Analyzed: 02/07/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.37	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	<0.01	mg/l	NA

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SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.: LN-05 Characterization

HES Lab I.D.: 060204A02

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.30	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.026	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	<0.01	mg/l	NA

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SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060204A01

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/02/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05 Characterization

HES Lab I.D.#: 060204A02

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2

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8/16/06



SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05 Characterization

HES Lab I.D.#: 060204A02

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY</u> <u>LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/07/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/07/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/07/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/07/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/07/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/07/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/07/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/07/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	2.0

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

SAMPLE ANALYSIS DATA SHEET  
Method SW846 - 8015 (Modified)

Customer I.D.#: LN-04 Characterization  
HES Lab I.D.#: 060204A01

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<63 <i>WJ</i>	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015(Modified)

Customer I.D.#: LN-05 Characterization  
HES Lab I.D.#: 060204A02

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	2,375 J	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: <sup>07</sup>LN-04 Characterization

HES Lab I.D.#: 060210C05,060223M01,060227A01

Sample Matrix: Soil

Date Sample Collected: 02/09/06

Date Received: 02/23/06

Date Prepared: 02/23/06

Date Analyzed: 02/24/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TCLP
				REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.16	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.08	mg/l	1.0
Copper	SW846-6010B	0.13	mg/l	NA
Lead	SW846-6010B	0.30	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Nickel	SW846-6010B	0.067	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	4.7 U	mg/l	NA

U = Sample was prepared and analyzed in accordance with all NELAC requirements with the following exception: Matrix Spike recoveries were outside of control limits, due to believed matrix bias.

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SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 10gm/5ml

Sample Prep: 8260B

PARAMETER	METHOD	RESULT	MRL	UNITS
Dichlorodifluoromethane	SW846-8260B	<15 <i>uJ</i>	0.5	ug/kg
Chloromethane	SW846-8260B	<15	0.5	ug/kg
Vinyl chloride	SW846-8260B	<15	0.5	ug/kg
Bromomethane	SW846-8260B	<15	0.5	ug/kg
Chloroethane	SW846-8260B	<15	0.5	ug/kg
Trichlorofluoromethane	SW846-8260B	<15	0.5	ug/kg
1,1-Dichloroethene	SW846-8260B	<15	0.5	ug/kg
Methylene chloride	SW846-8260B	<15	0.5	ug/kg
Trans-1,2-Dichloroethene	SW846-8260B	<15	0.5	ug/kg
1,1-Dichloroethane	SW846-8260B	<15	0.5	ug/kg
2,2-Dichloropropane	SW846-8260B	<15	0.5	ug/kg
cis-1,2-Dichloroethene	SW846-8260B	<15	0.5	ug/kg
Bromochloromethane	SW846-8260B	<15	0.5	ug/kg
Chloroform	SW846-8260B	<15	0.5	ug/kg
1,1,1-Trichloroethane	SW846-8260B	<15	0.5	ug/kg
Carbon Tetrachloride	SW846-8260B	<15	0.5	ug/kg
1,1-Dichloropropene	SW846-8260B	<15	0.5	ug/kg
Benzene	SW846-8260B	<15	0.5	ug/kg
1,2-Dichloroethane	SW846-8260B	<15	0.5	ug/kg
Trichloroethene	SW846-8260B	<15	0.5	ug/kg
1,2-Dichloropropane	SW846-8260B	<15	0.5	ug/kg
Dibromomethane	SW846-8260B	<15	0.5	ug/kg
Bromodichloromethane	SW846-8260B	<15	0.5	ug/kg
cis-1,3-Dichloropropene	SW846-8260B	<15	0.5	ug/kg
Toluene	SW846-8260B	22 <i>J</i>	0.5	ug/kg
trans-1,3-Dichloropropene	SW846-8260B	<15 <i>uJ</i>	0.5	ug/kg
1,1,2-Trichloroethane	SW846-8260B	<15 <i>uJ</i>	0.5	ug/kg
Tetrachloroethene	SW846-8260B	82 <i>J</i>	0.5	ug/kg
1,3-Dichloropropane	SW846-8260B	<15 <i>uJ</i>	0.5	ug/kg
Dibromochloromethane	SW846-8260B	<15	0.5	ug/kg
1,2-Dibromoethane	SW846-8260B	<15	0.5	ug/kg

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6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 10gm/5ml

Sample Prep: 8260B

PARAMETER	METHOD	RESULT	MRL	UNITS
Chlorobenzene	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg
1,1,1,2-Tetrachloroethane	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg
Ethylbenzene	SW846-8260B	23 <u>J</u>	0.5	ug/kg
Total Xylenes	SW846-8260B	38 <u>J</u>	0.5	ug/kg
Styrene	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg
Bromoform	SW846-8260B	<15	0.5	ug/kg
Isopropylbenzene	SW846-8260B	<15	0.5	ug/kg
Bromobenzene	SW846-8260B	<15	0.5	ug/kg
1,1,2,2-Tetrachloroethane	SW846-8260B	<15	0.5	ug/kg
1,2,3-Trichloropropane	SW846-8260B	<15	0.5	ug/kg
n-Propylbenzene	SW846-8260B	<15	0.5	ug/kg
2-Chlorotoluene	SW846-8260B	<15	0.5	ug/kg
4-Chlorotoluene	SW846-8260B	<15	0.5	ug/kg
1,3,5-Trimethylbenzene	SW846-8260B	47 <u>J</u>	0.5	ug/kg
p-Isopropyltoluene	SW846-8260B	120	0.5	ug/kg
1,2,4-Trimethylbenzene	SW846-8260B	120	0.5	ug/kg
sec-Butylbenzene	SW846-8260B	22	0.5	ug/kg
1,3-Dichlorobenzene	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg
tert-Butylbenzene	SW846-8260B	<15	0.5	ug/kg
1,4-Dichlorobenzene	SW846-8260B	<15	0.5	ug/kg
1,2-Dichlorobenzene	SW846-8260B	<15	0.5	ug/kg
n-Butylbenzene	SW846-8260B	26 <u>J</u>	0.5	ug/kg
1,2-Dibromo-3-chloropropane	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg
1,2,4-Trichlorobenzene	SW846-8260B	<15	0.5	ug/kg
Hexachlorobutadiene	SW846-8260B	<15	0.5	ug/kg
Naphthalene	SW846-8260B	8,400 <u>J</u>	0.5	ug/kg
1,2,3-Trichlorobenzene	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg
MTBE	SW846-8260B	<15 <u>uJ</u>	0.5	ug/kg

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6/16/06



Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-07 Characterization Solid  
HES Lab I.D.#: 060210C05, 060223M01, 060227A01

Sample Matrix: Solid  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30.12gms

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.03 <i>UJ</i>	ug/kg
Aroclor 1221	SW846-8082	<0.03	ug/kg
Aroclor 1232	SW846-8082	<0.03	ug/kg
Aroclor 1242	SW846-8082	<0.03	ug/kg
Aroclor 1248	SW846-8082	<0.03	ug/kg
Aroclor 1254	SW846-8082	<0.03	ug/kg
Aroclor 1260	SW846-8082	<0.03	ug/kg
Total Solids	EPA 160.3	81	%

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SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-Modern LF-224

HES Lab I.D.#: 060227A02

Sample Matrix: Soil-TCLP

Date Sample Collected: 02/24/06

Date Received: 02/27/06

Date Prepared: 02/27/06

Date Analyzed: 02/28/06

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

TCLP

REGULATORY  
LEVELS (mg/l)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>REGULATORY</u> <u>LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Copper	SW846-6010B	0.006	mg/l	NA
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Nickel	SW846-6010B	<0.006	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	<0.004	mg/l	NA

*HW*  
*6/16/06*

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-3-2 Characterization

HES Lab I.D.#: 060303C05

Sample Matrix: Soil  
Date Sample Collected: 03/02/06  
Date Received: 03/03/06  
Date Prepared: 03/03/06  
Date Analyzed: 03/06/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.67	mg/l	100
Cadmium	SW846-6010B	0.006	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001 <i>uJ</i>	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.034	mg/l	NA

14 *llw*  
6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-3-2 Characterization

HES Lab I.D.#: 060303C05

Sample Wt For Extraction: 15g/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	03/07/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	03/07/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	03/07/06	100.0
Chloroform	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	03/07/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	03/07/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	03/07/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	03/07/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	03/07/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	03/07/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	03/07/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	03/07/06	0.2

*juw* 15  
6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-3-2 Characterization

HES Lab I.D.#: 060303C05

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATOR</u> <u>LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>UJ</i>	mg/l	03/07/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>UJ</i>	mg/l	03/07/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075 <i>UJ</i>	mg/l	03/07/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	03/07/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	03/07/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	03/07/06	3.0
Nitrobenzene	SW846-8270C	<0.0075 ↓	mg/l	03/07/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075 <i>UJ</i>	mg/l	03/07/06	100.0
Pyridine	SW846-8270C	<0.0075 <i>UJ</i>	mg/l	03/07/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075 <i>UJ</i>	mg/l	03/07/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 ↓	mg/l	03/07/06	2.0

*27*  
*6/16/06*

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-3-2 Characterization  
HES Lab I.D.#: 060303C05

Sample Matrix: Soil  
Date Sample Collected: 03/02/06  
Date Received: 03/03/06  
Date Prepared: 03/03/06  
Date Analyzed: 03/06/06

Sample Amount For Extraction: 10ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	0.04	mg/kg
Total Solid	EPA 160.3	78	%

39 *hw*  
6/16/06



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-01 Characterization

HES Lab I.D.#: 060131G01

Sample Matrix: Soil  
Date Sample Collected: 01/30/06  
Date Received: 01/31/06  
Date Prepared: 01/31/06  
Date Analyzed: 02/03/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.45	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.045	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.03	mg/l	NA

4 *rlw*  
6/16/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-02 Characterization

HES Lab I.D.#: 060131G02

Sample Matrix: Soil  
Date Sample Collected: 01/30/06  
Date Received: 01/31/06  
Date Prepared: 01/31/06  
Date Analyzed: 02/03/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	0.081	mg/l	5.0
Barium	SW846-6010B	0.88	mg/l	100
Cadmium	SW846-6010B	0.009	mg/l	100
Chromium	SW846-6010B	0.03	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.02	mg/l	NA

5 *mw*  
6/16/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-01 Characterization

HES Lab I.D.#: 060201B01

Sample Matrix: Soil

Date Sample Collected: 01/31/06

Date Received: 02/01/06

Date Prepared: 02/01/06

Date Analyzed: 02/03/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

TCLP

REGULATORY

LEVELS (mg/l)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.69	mg/l	100
Cadmium	SW846-6010B	0.004	mg/l	100
Chromium	SW846-6010B	0.019	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.001	mg/l	NA

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6/16/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-02 Characterization

HES Lab I.D.#: 060201B02

Sample Matrix: Soil  
Date Sample Collected: 01/31/06  
Date Received: 02/01/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/03/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)  
SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.43	mg/l	100
Cadmium	SW846-6010B	0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	<0.01	mg/l	NA

7 *luw*  
6/16/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03 Characterization

HES Lab I.D.#: 060201B03

Sample Matrix: Soil  
Date Sample Collected: 01/31/06  
Date Received: 02/01/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/03/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

TCLP

REGULATORY  
LEVELS (mg/l)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>REGULATORY</u> <u>LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.64	mg/l	100
Cadmium	SW846-6010B	0.005	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	<0.01	mg/l	NA

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-PCB Characterization

HES Lab I.D.#: 060202C03

Sample Matrix: Soil  
Date Sample Collected: 02/01/06  
Date Received: 02/02/06  
Date Prepared: 02/02/06  
Date Analyzed: 02/03/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.49	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.014	mg/l	1.0
Lead	SW846-6010B	0.21	mg/l	5.0
Mercury	SW846-7470A	<0.01	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.02	mg/l	NA

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-02 Characterization

HES Lab I.D.#: 060131G02

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY</u> <u>LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/02/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2

*gls*  
*2/16/06*



SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-01 Characterization

HES Lab I.D.#: 060201B01

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATOR</u> <u>LEVELS (mg,</u>
Benzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/06/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2

20 *SW*  
*6/16/06*

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-02 Characterization

HES Lab I.D.#: 060201B02

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCPL 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCPL)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCPL</u>
					<u>REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005 <i>uJ</i>	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/06/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2

21 *new*  
*6/16/06*

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03 Characterization

HES Lab I.D.#: 060201B03

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/06/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/06/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-01 Characterization

HES Lab I.D.#: 060131G01

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP
					REGULATORY LEVELS (mg/l)
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075 <i>R</i>	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075 <i> </i>	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075 <i> </i>	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075 <i> </i>	mg/l	02/03/06	3.0
Nitrobenzene	SW846-8270C	<0.0075 <i> </i>	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075 <i>R</i>	mg/l	02/03/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	2.0

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-02 Characterization

HES Lab I.D.#: 060131G02

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/03/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/03/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	2.0

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-01 Characterization

HES Lab I.D.#: 060201B01

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATOR</u> <u>LEVELS (mg/l)</u>
m-Cresol/p-Cresol	SW846-8270C <i>WJ</i>	<0.0075	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C <i>WJ</i>	<0.0075	mg/l	02/03/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/03/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C <i>WJ</i>	<0.0075 <i>WJ</i>	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/03/06	5.0
2,4,5-Trichlorophenol	SW846-8270C <i>WJ</i>	<0.0075	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C <i>WJ</i>	<0.0075	mg/l	02/03/06	2.0

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-02 Characterization

HES Lab I.D.#: 060201B02

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/03/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/03/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	2.0



SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03 Characterization

HES Lab I.D.#: 060201B03

Sample Wt For Extraction: 30gm/lml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATORY LEVELS (mg/L)</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/03/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/03/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/03/06	2.0

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-PCB Characterization

HES Lab I.D.#: 060202C03

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATORY LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0085 <i>uJ</i>	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0085 <i>uJ</i>	mg/l	02/03/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0085	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0085	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0085	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0085	mg/l	02/03/06	3.0
Nitrobenzene	SW846-8270C	<0.0085	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0085 <i>uJ</i>	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0085	mg/l	02/03/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0085 <i>uJ</i>	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0085 <i>uJ</i>	mg/l	02/03/06	2.0

41 *luw*  
6/18/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-0-01 Characterization  
HES Lab I.D.#: 060131G01

Sample Matrix: Soil  
Date Sample Collected: 01/30/06  
Date Received: 01/31/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/07/06

Sample Amount For Extraction: 30g/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	3.6	mg/kg
Total Solid	EPA 160.3	76	%

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-0-02 Characterization

HES Lab I.D.#: 060131G02

Sample Matrix: Soil

Date Sample Collected: 01/30/06

Date Received: 01/31/06

Date Prepared: 02/01/06

Date Analyzed: 02/07/06

Sample Amount For Extraction: 30g/ml

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	87	mg/kg
Total Solid	EPA 160.3	80	%

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: IN-01 Characterization  
HES Lab I.D.#: 060201B01

Sample Matrix: Soil  
Date Sample Collected: 01/31/06  
Date Received: 02/01/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/07/06

Sample Amount For Extraction: 30g/ml

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.02	mg/kg
Total Solid	EPA 160.3	86	%

55 *lew*  
6/16/06

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 = 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-02 Characterization

HES Lab I.D.#: 060201B02

Sample Matrix: Soil

Date Sample Collected: 01/31/06

Date Received: 02/01/06

Date Prepared: 02/01/06

Date Analyzed: 02/07/06

Sample Amount For Extraction: 30g/ml

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.02	mg/kg
Total Solid	EPA 160.3	83	%

56

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6/16/06

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-03 Characterization  
HES Lab I.D.#: 060201B03

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Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-PCB Characterization

HES Lab I.D.#: 060202C03

Sample Matrix: Soil

Date Sample Collected: 02/01/06

Date Received: 02/02/06

Date Prepared: 02/02/06

Date Analyzed: 02/07/06

Sample Amount For Extraction: 30g/ml

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	94	mg/kg
Total Solid	EPA 160.3	88	%

58

*ms*  
6/16/06

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

SAMPLE ANALYSIS DATA SHEET  
Method SW846 - 8015 (Modified)

Customer I.D.#: TG-0-01 Characterization  
HES Lab I.D.#: 060131G01

Sample Matrix: Soil  
Date Sample Collected: 01/30/06  
Date Received: 01/31/06  
Date Prepared: 01/31/06  
Date Analyzed: 02/02/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<66 <i>UJ</i>	mg/kg

*juw*  
*6/16/06*  
**66**

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015 (Modified)

Customer I.D.#: TG-0-02 Characterization  
HES Lab I.D.#: 060131G02

Sample Matrix: Soil  
Date Sample Collected: 01/30/06  
Date Received: 01/31/06  
Date Prepared: 01/31/06  
Date Analyzed: 02/02/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<66 <i>WJ</i>	mg/kg

67 *WJ*  
6/14/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015(Modified)

Customer I.D.#: LN-01 Characterization  
HES Lab I.D.#: 060201B01

Sample Matrix: Soil  
Date Sample Collected: 01/31/06  
Date Received: 02/01/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/02/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<58 <i>uJ</i>	mg/kg

*HW*  
*6/16/06*

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015(Modified)

Customer I.D.#: LN-02 Characterization  
HES Lab I.D.#: 060201B02

Sample Matrix: Soil  
Date Sample Collected: 01/31/06  
Date Received: 02/01/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/02/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<60 <i>UJ</i>	mg/kg

69 *luc*  
*6/14/06*

SAMPLE ANALYSIS/DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015(Modified)

Customer I.D.#: LN-03 Characterization  
HES Lab I.D.#: 060201B03

Sample Matrix: Soil  
Date Sample Collected: 01/31/06  
Date Received: 02/01/06  
Date Prepared: 02/01/06  
Date Analyzed: 02/02/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<60 <i>UJ</i>	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

Sample Wt. For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)  
SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.95	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.025	mg/l	NA

4 MW  
6/16/06



SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-0-04 Characterization

HES Lab I.D.#: 060215B02

Sample Matrix: Soil

Date Sample Collected: 02/14/06

Date Received: 02/15/06

Date Prepared: 02/15/06

Date Analyzed: 02/16/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	0.057	mg/l	5.0
Barium	SW846-6010B	0.74	mg/l	100
Cadmium	SW846-6010B	0.009	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.025	mg/l	NA

5  
ms  
6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/16/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/16/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.2

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6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-04 Characterization

HES Lab I.D.#: 060215B02

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATORY</u> <u>LEVELS (mg)</u>
Benzene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/16/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/16/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.2

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6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg)</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/16/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/16/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/16/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	100.0
Pyridine	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	2.0

27 *[Signature]*  
6/16/06

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-04 Characterization

HES Lab I.D.#: 060215B02

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/16/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/16/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/16/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	100.0
Pyridine	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/16/06	2.0

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Matrix: Soil

Date Sample Collected: 02/14/06

Date Received: 02/15/06

Date Prepared: 02/15/06

Date Analyzed: 02/17/06

Sample Amount For Extraction: 30gm/ml

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.03	mg/kg
Total Solid	EPA 160.3	88	%

*dw*  
*6/15/06*

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-0-04 Characterization  
HES Lab I.D.#: 060215B02

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/17/06

Sample Amount For Extraction: 30gm/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	100	mg/kg
Total Solid	EPA 160.3	82	%

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6/16/06 41



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-08 Characterization

HES Lab I.D.#: 060224B01

Sample Matrix: Soil  
Date Sample Collected: 02/23/06  
Date Received: 02/24/06  
Date Prepared: 02/24/06  
Date Analyzed: 02/27/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.50	mg/l	100
Cadmium	SW846-6010B	0.005 J	mg/l	100
Chromium	SW846-6010B	<0.007 WJ	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.023	mg/l	NA

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SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-08 Characterization

HES Lab I.D.#: 060224B01

Sample Wt For Extraction: 15gm/200ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP</u>
					<u>REGULATOR</u> <u>LEVELS (mg,</u>
Benzene	SW846-8260B	<0.0005 <i>WJ</i>	mg/l	02/27/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/27/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/27/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/27/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/27/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005 <i>WJ</i>	mg/l	02/27/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/27/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/27/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/27/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/27/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/27/06	0.2

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-08 Characterization

HES Lab I.D.#: 060224B01

Sample Wt For Extraction: 48gm/160ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP
					REGULATORY LEVELS (mg,
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	200.0
o-Cresol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/27/06	3.0
Nitrobenzene	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/27/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>uJ</i>	mg/l	02/27/06	2.0

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*lew*  
6/16/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-08 Characterization  
HES Lab I.D.#: 060224B01

Sample Matrix: Soil  
Date Sample Collected: 02/23/06  
Date Received: 02/24/06  
Date Prepared: 02/24/06  
Date Analyzed: 02/28/06

Sample Amount For Extraction: 30g/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.02	mg/kg
Total Solid	EPA 160.3	86	%

Lab Name: Hudson Environmental Services, Inc..  
Lab I.D.: N.Y.S. ELAP # 11140

SAMPLE ANALYSIS DATA SHEET  
Method SW846 - 8015(Modified)

Customer I.D.#: LN-08 Characterization  
HES Lab I.D.#: 060224B01

Sample Matrix: Soil  
Date Sample Collected: 02/23/06  
Date Received: 02/24/06  
Date Prepared: 02/24/06  
Date Analyzed: 02/28/06

Sample Amt. For Extraction: 10gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<50 <i>uJ</i>	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-2-27 Characterization

HES Lab I.D.#: 060228D02

Sample Matrix: Soil  
Date Sample Collected: 02/27/06  
Date Received: 02/28/06  
Date Prepared: 02/28/06  
Date Analyzed: 03/01/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.32	mg/l	100
Cadmium	SW846-6010B	0.005	mg/l	1.0
Chromium	SW846-6010B	0.033	mg/l	6.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.041	mg/l	5.0

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6/10/06

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-2-2-27 Characterization

HES Lab I.D.#: 060228D02

Sample Matrix: TCLP Extract

Date Sample Collected: 02/27/06

Date Received: 02/28/06

Date Prepared: 02/28/06

Date Analyzed: 03/01/06

Sample Wt For Extraction: 15gm/80ml

Sample Prep: TCLP/SW846-8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311/8260B

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005	mg/l	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	0.5
Chlorobenzene	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	100
Chloroform	SW846-8260B	<0.0005	mg/l	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	200
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	0.5
Vinyl Chloride	SW846-8260B	<0.0005 <i>UJ</i>	mg/l	0.2

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: Basin 2-227 Characterization

HES Lab I.D.#: 060228D04

Sample Matrix: TCLP Extract

Date Sample Collected: 02/27/06

Date Received: 02/28/06

Date Prepared: 02/28/06

Date Analyzed: 03/01/06

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP/SW846-8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311/8270C

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075 <i>u</i>	mg/l	200.0
o-Cresol	SW846-8270C	<0.0075 <i>u</i>	mg/l	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075 <i>u</i>	mg/l	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075 <i>u</i>	mg/l	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	100.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075 <i>u</i>	mg/l	2.0

*hw*  
*6/16/06*



SAMPLE ANALYSIS DATA SHEET

SW-846 METHOD 8082

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-2-2-27 Characterization

HES Lab I.D.#: 060228D02

Sample Matrix: Soil

Date Sample Collected: 02/27/06

Date Received: 02/28/06

Date Prepared: 03/01/06

Date Analyzed: 03/01/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB's	SW846-8082	0.11	mg/kg
Total Solid	EPA 160.3	80	%



# **EEEEPC Reviews of EDS's DUSR Documentation**



## ecology and environment engineering, p.c.

BUFFALO CORPORATE CENTER

368 Pleasant View Drive, Lancaster, New York 14086

Tel: 716/684-8060, Fax: 716/684-0844

TO: Mike Steffan

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FROM: Barb Krajewski

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DATE: May 30, 2006

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RE: Shenango Steel Site

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A random review of data points from five of the Category B deliverables generated by Hudson Environmental Services Inc. for the Shenango Steel Site Project was performed as part of a verification of the validation outliers assigned to the data by Environmental Data Services.

I concur with the EDS's qualifications. However, taking into account the use of the data, it is my judgment that the rejected data points (those qualified "R") can be considered estimated and useable.

- EDS rejected Aroclor 1016 results for samples TG-A-01 and TG-A-04 based on laboratory control sample (LCS) recovery of <10% for this compound. Aroclor 1260 recovery for this LCS was within control limits as was surrogate recovery. Associated matrix spike/matrix spike duplicate (MS/MSD) recovery of Aroclor 1016 was high. Although all chromatograms exhibited rolling, elevated baselines indicating remnants of late eluting, high mass compounds on the compounds and the source of potential interferences, the calibration standards met acceptance criteria. The poor LCS recovery of Aroclor 1016 appears to be an isolated event, not indicative of a batch extraction problem.
- Based on a response factor of 0.029, EDS rejected 2,4-dinitrophenol non-detected results for 19 samples. Although this response factor is below the control limit of 0.05, it is my opinion that a response factor of 0.029 is sufficient for detection of this compound to meet project objectives.
- Several BNA non-detected results were qualified "R" by EDS based on %D values >90% for the continuing calibration standards. EDS did not indicate that the specific response factors were insufficient for detection of the compounds. Therefore, although the high >90% is consistent with all other chromatographic indicators that the column was degrading from the severe matrix of the samples, response factors would allow detection with questionable quantitation.

- Hexachlorocyclopentadiene results for several samples were qualified "R" based on LCS recovery of <10%. This compound is prone to thermal and photochemical decomposition. It is an intermediate chemical used predominantly in the manufacture of several pesticides and also, flame retarded resins. Since the other data points do not indicate that this compound should be of concern at this site, additional action based on the rejection of this compound is not warranted.
- The base neutral compounds for the TCLP fraction of sample TG-6-02W were rejected based on surrogate recovery of <10%. This sample was also analyzed as the matrix spike. Surrogate recoveries were acceptable for the spike analysis. Recoveries of the matrix spike compounds do not indicate that any of the TCLP compounds were present in the sample at levels above the regulatory limits. EDS incorrectly stated that the surrogate recovery criteria were not met for the SVOC analysis of this sample. The surrogate criteria were not met for the TCLP SVOC fraction only.
- Non-detected values of di-n-octylphthalate, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene were qualified "R" for sample LN-05W based on low response of the final internal standard compound. The total concentration of positive SVOCs detected in this sample was 11,500 ug/Kg. It is not expected that with a better response, positive concentrations of any of these four compounds would have been detected and significantly increase that total value.

Three other points of interest were noted:

- The laboratory failed to include naphthalene on the Sample Analysis Data Sheet. This compound was included in the standards and based on the raw data provided was present in some samples. It was detected in samples that also contained several other PAH compounds.
- The laboratory incorrectly reported a TCLP reporting limit of 7.5 mg/L for the SVOC fraction. The correct reporting limit is 0.0075 mg/L.
- The laboratory did not meet all requirements for NYSDEC Category B deliverables. Mass spectra were not provided nor was all raw data for the calibrations consistently included in all reports.



## ecology and environment engineering, p.c.

BUFFALO CORPORATE CENTER

368 Pleasant View Drive, Lancaster, New York 14086

Tel: 716/684-8060, Fax: 716/684-0844

TO: Mike Steffan

FROM: Barb Krajewski

DATE: June 23, 2006

RE: Shenango Steel Site

I reviewed three of the additional Category B deliverables generated by Hudson Environmental Services Inc. (HES) for the Shenango Steel Site Project as part of a verification of the validation outliers assigned to the data by Environmental Data Services (EDS). The deliverables reviewed were SDGs 060210C, 060303C and 060224B.

I concur with EDS's qualifications of the data.

In reviewing the deliverables, the following were noted:

- For SDG 060210C, the list of TCLP metals reported was arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc. This differs from the TCLP list as described in 40 CFR 261 by the inclusion of copper, nickel and zinc, and the omission of barium and silver. The list of TCLP metals reported in all SDGs supplied was checked and except for SDGs 060210C and 060227A the list was found to conform to that in 40 CFR 261.
- Results for silver could not be found in the raw data provided.
- The laboratory lists the TCLP Regulatory Limit for silver as NA on all reports. The limit is 5.0 mg/L.

The calibration and mass spectral information, along with the revised data pages requested from HES were checked and found to be complete. Based on the mass spectral and peak profile information provided for sample LN-09W in SDG 0220B02, it appears that HES incorrectly reported the result for benzo(k)fluoranthene. From the raw data provided it appears the concentration of this compound is lower than reported. This will result in a lower total PAH value for the sample.



# Summary of Sample Analytical Results

Shenango Steel Sample Log												EEEEPC Comments: As of 6/5/06										Bid Items:						
Analysis Key: 1=TCL-PCB's; 2=SVOC's; 3=TCLP-SVOC's; 4= pH, Ignit, TPH, PCB (TCLP-Metals, VOC, SVOC; 5= TCLP Metals, TAL Metals, SVOCs																												
Date Sampled or Collected	Sample ID#	Matrix	Sample Location	Analysis	Sampling Personnel	Date Received by Lab	DUSR Required	CAP Payment Item (s)	Amount	CAP Paid	Date analysis received	COC Rec'd	Required Analyses	Required TAT (Hours) per Contract	Comments on TAT	Spec Section Ref	Level of Reporting	DUSR Rec'd & Date	EEEEPC Comments	9A	9B	9C	PCO 1(A)	PCO 1(B)	PCO 2	Comments:		
1/30/2006	TG-0-01 Characterization	soil	Tight Grid Area	4	S. Clary	T, 1/31/2006	no (yes)	9a 9b 9c	\$ 781.00	Yes CAP#1	2/8/2006	YES	9A, B, & C	24 or 48	8 Days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 280 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0	As directed by EEEPC for characterization		
1/30/2006	TG-0-02 Characterization	soil	LNAPL area (Why is this not TG?)	4	S. Clary	T, 1/31/2006	no (yes)	9a 9b 9c	\$ 781.00	Yes CAP#1	2/8/2006	YES	9A, B, & C	24 or 48	8 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 280 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
1/31/2006	LN-01 Characterization	soil	LNAPL area	4	S. Clary	W, 2/1/2006	no (yes)	9a 9b 9c	\$ 781.00	Yes CAP#1	2/7/2006	YES	9A, B, & C	24 or 48	6 Days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
1/31/2006	LN-02 Characterization	soil	LNAPL area	4	S. Clary	W, 2/1/2006	no (yes)	9a 9b 9c	\$ 781.00	Yes CAP#1	2/7/2006	YES	9A, B, & C	24 or 48	6 Days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
1/31/2006	LN-03 Characterization	soil	LNAPL area	4	S. Clary	W, 2/1/2006	no (yes)	9a 9b 9c	\$ 781.00	Yes CAP#1	2/7/2006	YES	9A, B, & C	24 or 48	6 Days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
2/1/2006	LN-Sump water	water	Test pit	4	S. Clary	Th, 2/2/2006	no	9a 9b 9c	\$ 781.00	Yes CAP#1	2/3/2006; 2/6/2006; 2/8/2006	YES	At our request	Not specific	4 days and 6 days?	Non-specific, but use infiltration basin criteria	CAT A	NO	Requested and directed by EEEPC to understand initial groundwater contamination issues	1	1	1	0	0	0	As directed by EEEPC for characterization		
2/1/2006	LN-Vault Water	water	Concrete vaults	4	S. Clary	Th, 2/2/2006	no	9a 9b 9c	\$ 781.00	Yes CAP#1	2/3/2006; 2/6/2006; 2/8/2006	YES	At our request	Not Specific	4 days and 6 days?	Non-specific, but use infiltration basin criteria	CAT A	NO	Requested and directed by EEEPC to understand initial groundwater contamination issues	1	1	1	0	0	0			
2/1/2006	TG-PCB Characterization	soil	Tight Grid Area	4	S. Clary	Th, 2/2/2006	no	9a 9b 9c	\$ 781.00	Yes CAP#1	2/6/2006; 2/8/2006	YES	9A, B, & C	24 or 48	4 days and 6 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0	As directed by EEEPC for characterization		
2/1/2006	Backfill Sand	soil	Project Requirement	4	S. Clary	Th, 2/2/2006	no	9a 9b 9c	\$ 781.00	Yes CAP#1	2/6/2006; 2/8/2006	YES		Not specific	4 days and 6 days?	02224, M&P Bid Item 7	CAT A	NO	Analysis is paid for under bid item 8 per the section on measurement and payment. Do Not Pay as a separate item.	0	0	0	0	0	0			
2/3/2006	LN-04 Characterization	soil	LNAPL area	4	S. Clary	SA, 2/4/2006	no	9a 9b 9c	\$ 781.00	Yes CAP#2	2/8/2006	YES	9A, B, & C	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0	Should be paid for under Bid Item 6.		
2/3/2006	LN-05 Characterization	soil	LNAPL area	4	S. Clary	SA, 2/4/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	2/8/2006	YES	9A, B, & C	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
2/9/2006	LN-01W Confirmation	soil	LNAPL area	1 & 2	S. Clary	FR., 2/10/2006	yes	9a 9b	\$ 415.00	Yes Cap #2	2/14/2006; 2/24/2006; 3/1/2006	YES	9A & B	24 or 48	4 Days? and 14 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A and 9B were performed per the specification.	1	1	0	0	0	0			
2/9/2006	LN-02W Confirmation	soil	LNAPL area	1 & 2	S. Clary	FR., 2/10/2006	yes	9a 9b	\$ 415.00	Yes Cap #2	2/14/2006; 2/24/2006; 3/1/2006	YES	9A & B	24 or 48	4 Days? and 14 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A and 9B were performed per the specification.	1	1	0	0	0	0			
2/9/2006	LN-03W Confirmation	soil	LNAPL area	1 & 2	S. Clary	FR., 2/10/2006	yes	9a 9b	\$ 415.00	Yes Cap #2	2/14/2006; 2/24/2006; 3/1/2006	YES	9A & B	24 or 48	4 Days? and 14 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A and 9B were performed per the specification.	1	1	0	0	0	0			
2/9/2006	LN-05 Characterization Liquid	water	LNAPL area	1,2,3	S. Clary	FR., 2/10/2006	no	9a 9b 9c	\$ 781.00	Yes Cap #2	2/14/2006; 2/24/2006; 3/1/2006	YES	In bid item	24 or 48	4 Days? 14 Days? and 19 days?	02225, Article 3.04	CAT A		Water analysis should be covered in the unit price item.	0	0	0	0	0	0	Should be Paid for under Bid Item 7.		
2/9/2006	LN-07 Characterization Solid	soil	LNAPL area	1,2,3	S. Clary	FR., 2/10/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	2/14/2006; 2/24/2006; 2/28/2006; 2/28/2006	YES	9A, B, & C	24 or 48	4 Days? 14 Days? and 19 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B, and 9C were performed per the specification.	1	1	1	0	0	0			
2/14/2006	TG-A-03 Characterization	soil	Tight Grid Area	1,2,3	S. Clary	WE., 2/15/2006	no	9a 9b 9c	\$ 781.00	Yes Cap #2	2/21/2006	YES	9A, B, & C	24 or 48	6 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
2/14/2006	TG-0-04 Characterization	soil	Tight Grid Area	1,2,3	S. Clary	WE., 2/15/2006	no	9a 9b 9c	\$ 781.00	Yes Cap #2	2/21/2006	YES	9A, B, & C	24 or 48	6 days?	01400 - Table 01400 1	CAT B	NO	No DUSR received to date. TAT is plus 144 hours. Need to check analytical results that results from 9A, 9B and 9C were performed per the specification.	1	1	1	0	0	0			
2/14/2006	TG-A-01 Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 2/15/2006	yes	9a	\$ 122.00	Yes CAP #2	2/21/2006	YES	9A only	24 or 48	6 days?	01400 - Table 01400 1	CAT B	NO	PCB only?	1	0	0	0	0	0			
2/14/2006	TG-A-04 Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 2/15/2006	yes	9a	\$ 122.00	Yes Cap #2	2/21/2006	YES	9A only	24 or 48	6 days?	01400 - Table 01400 1	CAT B	NO	PCB only?	1	0	0	0	0	0			
2/16/2006	TG-001W Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 2/17/2006	yes	9a	\$ 122.00	Yes CAP #2	2/21/2006	YES	9A only	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO	PCB only?	1	0	0	0	0	0			
2/16/2006	TG-002W Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 2/17/2006	yes	9a	\$ 122.00	Yes Cap #2	2/21/2006	YES	9A only	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO	PCB only?	1	0	0	0	0	0			
2/16/2006	TG-PCB-218	soil	Tight Grid Area	1	S. Clary	FR., 2/17/2006	no	9a	\$ 122.00	Yes Cap #2	2/21/2006	YES	9A only	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO	PCB only?	1	0	0	0	0	0			
2/16/2006	LN-04W Confirmation	soil	LNAPL area	2	S. Clary	FR., 2/17/2006	yes	9b	\$ 293.00	Yes Cap #2	2/21/2006	YES	9B	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0			

Analysis Key: 1=TCL-PCB's; 2=SVOC's; 3=TCLP-SVOC's; 4= ph, Ignit, TPH, PCB (TCLP-Metals, VOC, SVOC; 5= TCLP Metals, TAL Metals, SVOCs

Bid Items:

Date Sampled or Collected	Sample ID#	Matrix	Sample Location	Analysis	Sampling Personnel	Date Received by Lab	DUSR Required	CAP Payment Item (s)	Amount	CAP Paid	Date analysis received	COC Rec'd	Required Analyses	Required TAT (Hours) per Contract	Comments on TAT	Spec Section Ref.	Level of Reporting	DUSR Rec'd & Date	EEPC Comments	9A	9B	9C	PCO 1(A)	PCO 1(B)	PCO 2	Comments:
2/16/2006	LN-05W Confirmation	soil	LNAPL area	2	S. Clary	Fr., 2/17/2006	yes	9b	\$ 293.00	Yes Cap #2	2/21/2006	YES	9B	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	Under Mob/Demob Bid Item Requirements - Item #1
2/16/2006	TG-003F Confirmation	soil	Tight Grid Area	1	S. Clary	Fr., 2/17/2006	yes	9a	\$ 122.00	Yes Cap #2	2/21/2006	YES	9A only	24 or 48	4 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
2/16/2006	LN-Decon	soil	LNAPL area	2	S. Clary	Fr., 2/17/2006	yes	9b	\$ 293.00	Yes Cap #2	2/21/2006	YES	In bid item	24 or 48	4 Days?	01100 - Article 1.1	CAT B	NO		0	0	0	0	0	0	
2/17/2006	LN-06W Confirmation	soil	LNAPL area	2	S. Clary	MN., 2/20/2006	yes	9b	\$ 293.00	Yes Cap #2	2/21/2006; 2/22/2006	YES	9B	24 or 48	24-48 hrs	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/17/2006	LN-03WR Confirmation	soil	LNAPL area	2	S. Clary	MN., 2/20/2006	yes	9b	\$ 293.00	Yes CAP #2	2/22/2006	YES	9B	24-48 hours	24-48 hrs	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/17/2006	LN-07W Confirmation	soil	LNAPL area	2	S. Clary	MN., 2/20/2006	yes	9b	\$ 293.00	Yes CAP #2	2/22/2006	YES	9B	24-48 hours	24-48 hrs	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/17/2006	LN-08W Confirmation	soil	LNAPL area	2	S. Clary	MN., 2/20/2006	yes	9b	\$ 293.00	Yes Cap #2	2/22/2006	YES	9B	24-48 hours	24-48 hrs	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/17/2006	LN-06W Confirmation	soil	LNAPL area	2	S. Clary	MN., 2/20/2006	yes	9b	\$ 293.00	Yes Cap #2	2/22/2006	YES	9B	24-48 hours	24-48 hrs	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/21/2006	Basin 1- 2-21	soil	Infiltration Basin	1,2,3	S. Clary	WE., 2/22/2006	no	9a, 9b, & metals	\$ 622.00	Yes CAP #2	2/24/2006; 2/28/2006; 3/21/2006	YES	9A, 9B, & Metals	24-48 hours	48 hours, 6 days, and 27 days?	PCO #1	CAT B	NO		1	1	0	1	0	0	
2/21/2006	Basin 2-2-21	soil	Infiltration Basin	1,2,3	S. Clary	WE., 2/22/2006	no	9a, 9b, & metals	\$ 622.00	Yes CAP #2	2/24/2006; 2/28/2006; 3/21/2006	YES	9A, 9B, & Metals	24-48 hours	48 hours, 6 days, and 27 days?	PCO #1	CAT B	NO		1	1	0	1	0	0	
2/21/2006	Basin 3- 2-21	soil	Infiltration Basin	1,2,3	S. Clary	WE., 2/22/2006	no	9a, 9b, & metals	\$ 622.00	Yes CAP #2	2/24/2006; 2/28/2006; 3/21/2006	YES	9A, 9B, & Metals	24-48 hours	48 hours, 6 days, and 27 days?	PCO #1	CAT B	NO		1	1	0	1	0	0	
2/21/2006	Basin 4-2-21	soil	Infiltration Basin	1,2,3	S. Clary	WE., 2/22/2006	no	9a, 9b, & metals	\$ 622.00	Yes CAP #2	2/24/2006; 2/28/2006; 3/21/2006	YES	9A, 9B, & Metals	24-48 hours	48 hours, 6 days, and 27 days?	PCO #1	CAT B	NO		1	1	0	1	0	0	
2/24/2006	LN-Water-216	water	LNAPL area	1,2,3	S. Clary	WE., 2/22/2006	yes	9a 9b 9c	\$ 781.00	Yes CAP #2	2/23/2006	YES	In bid item	24 or 48	24 hours	02225 - Article 3.04	CAT A	Water analysis should be covered in the unit price item		0	0	0	0	0	0	Should be Paid for under Bid Item 7.
2/22/2006	LN-10W confirmation	soil	LNAPL area	2	S. Clary	TH., 2/23/2006	yes	9b	\$ 293.00	Yes CAP #2	2/24/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/22/2006	LN-11W Confirmation	soil	LNAPL area	2	S. Clary	TH., 2/23/2006	yes	9b	\$ 293.00	Yes Cap #2	2/24/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/22/2006	LN-12W Confirmation	soil	LNAPL area	2	S. Clary	TH., 2/23/2006	yes	9b	\$ 293.00	Yes Cap #2	2/24/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/22/2006	LN-13W Confirmation	soil	LNAPL area	2	S. Clary	TH., 2/23/2006	yes	9b	\$ 293.00	Yes Cap #2	2/24/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		0	1	0	0	0	0	
2/22/2006	2-21A PCB	soil	Tight Grid Area	1	S. Clary	TH., 2/23/2006	yes	9a	\$ 122.00	Yes Cap #2	2/24/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
2/22/2006	2-21B PCB	soil	Tight Grid Area	1	S. Clary	TH., 2/23/2006	yes	9a	\$ 122.00	Yes Cap #2	2/24/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
2/22/2006	2-21C PCB	soil	Tight Grid Area	1	S. Clary	TH., 2/23/2006	yes	9a	\$ 122.00	Yes Cap #2	2/24/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
2/22/2006	2-21D PCB	soil	Tight Grid Area	1	S. Clary	TH., 2/23/2006	yes	9a	\$ 122.00	Yes Cap #2	2/24/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
2/23/2006	LN-08 Characterization	soil	LNAPL area	1,2,3	S. Clary	FR., 2/24/2006	no	9a 9b 9c	\$ 781.00	Yes Cap #2	3/1/2006	YES	9A, 9B, & 9C	24-48 hours	5 days		CAT B	NO		1	1	1	0	0	0	
2/23/2006	TG-2-23 Concrete	concrete	Concrete Piles	1	S. Clary	FR., 2/24/2006	yes	PCO #1 - 9A only	\$ 122.00	Yes CAP #2	3/1/2006	YES	9A only	24-48 hours	5 days	PCO #1 - PCBs only	CAT B	NO		1	0	0	0	0	0	
2/24/2006	LN-07 Characterization Solid	soil	LNAPL area	ph and TPH only	S. Clary	MN., 2/27/2006	no	none	\$ -	NA	2/1/2006	YES		24-48 hours	48 hours	01400 - Table 01400 1	CAT B	NO		0	0	0	0	0	0	
2/24/2006	TG-Modern LF-224	soil	Tight Grid Area	TCLP metals only	S. Clary	MN., 2/27/2006	no	Metals Only - PCO#1	\$ 207.00	See Change Order 1	2/28/2006	YES	Metals Only	24-48 hours	24 hours	PCO #1- Metals Only	CAT B	NO		0	0	0	1	0	0	



Analysis Key: 1=TCL-PCB's; 2=SVOC's; 3=TCLP-SVOC's; 4= ph, Ignit, TPH, PCB (TCLP-Metals, VOC, SVOC; 5= TCLP Metals, TAL Metals, SVOCs												Bid Items:														
Date Sampled or Collected	Sample ID#	Matrix	Sample Location	Analysis	Sampling Personnel	Date Received by Lab	DUSR Required	CAP Payment Item (s)	Amount	CAP Paid	Date analysis received	COC Rec'd	Required Analyses	Required TAT (Hours) per Contract	Comments on TAT	Spec Section Ref.	Level of Reporting	DUSR Rec'd & Date	EEPC Comments	9A	9B	9C	PCO 1(A)	PCO 1(B)	PCO 2	Comments:
2/27/2006	TG-1-2-27 Characterization	soil	Tight Grid Area	4	S. Clary	Tu., 2/28/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	3/3/2006; 3/9/2006	YES	9A, 9B, & 9C	24-48 hours	3 days and 9 days?	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	As directed by EEPC for characterization
2/27/2006	TG-2-2-27 Characterization	soil	Tight Grid Area	4	S. Clary	Tu., 2/28/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	3/3/2006; 3/9/2006	YES	9A, 9B, & 9C	24-48 hours	3 days and 9 days?	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
2/27/2006	Basin 1-2-27 Characterization	soil	Basin Area	4	S. Clary	TU., 2/28/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	3/3/2006; 3/9/2006	YES	9A, 9B, & 9C	24-48 hours	3 days and 9 days?	PCO #1	CAT B	NO		1	1	1	0	0	0	
2/27/2006	Basin 2-2-27 Characterization	soil	Basin Area	4	S. Clary	TU., 2/28/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	3/3/2006; 3/9/2006	YES	9A, 9B, & 9C	24-48 hours	3 days and 9 days?	PCO #1	CAT B	NO		1	1	1	0	0	0	
2/27/2006	Basin 3-2-27 Characterization	soil	Basin Area	4	S. Clary	TU., 2/28/2006	no	9a 9b 9c	\$ 781.00	Yes CAP #2	3/3/2006; 3/9/2006	YES	9A, 9B, & 9C	24-48 hours	3 days and 9 days?	PCO #1	CAT B	NO		1	1	1	0	0	0	
2/28/2006	TG-002WR Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	Should be Paid for under Bid Item 7.
2/28/2006	TG-D-01W Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
2/28/2006	TG-D-02W Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
2/28/2006	TG-D-03F Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
2/28/2006	TG-03W Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
2/28/2006	TG-04W Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
2/28/2006	TG-05W Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
2/28/2006	TG-06F Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/1/2006	yes	9a	\$ 122.00	Yes CAP #2	3/3/2006	YES	9A only	24-48 hours	48 hours	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/2/2006	LN-14F Confirmation	soil	LNAPL area	2	S. Clary	FR., 3/3/2006	yes	9b	\$ 293.00	No	3/9/2006	YES	9B	24-48 hours	5 Days?	01400 - Table 01400.1	CAT B	NO		0	1	0	0	0	0	
3/2/2006	LN-15C Concrete confirmation	soil	LNAPL area	2	S. Clary	FR., 3/3/2006	yes	9b	\$ 293.00	No	3/9/2006	YES	9B	24-48 hours	5 Days?	01400 - Table 01400.1	CAT B	NO		0	1	0	0	0	0	
3/2/2006	TG-A-2/3W Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 3/3/2006	yes	9a	\$ 122.00	No	3/9/2006	YES	9A only	24-48 hours	5 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	Should be Paid for under Bid Item 7.
3/2/2006	TG-A-5F Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 3/3/2006	yes	9a	\$ 122.00	No	3/9/2006	YES	9A only	24-48 hours	5 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/2/2006	TG-3-2- Characterization	soil	Tight Grid Area	4	S. Clary	WE., 3/3/2006	no	9a 9b 9c	\$ 781.00	No	3/9/2006; 3/10/2006	YES	9A,B, & C	24-48 hours	5 Days?	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
3/2/2006	TG-A-3-23 Water	water	Tight Grid Area	4	S. Clary	WE., 3/3/2006	no	9a 9b 9c	\$ 781.00	No	3/9/2006	YES	In bid item	24 pr 48	5 Days?	02225, Article 3.04	CAT A	NO	Is this the water sample for PCB analysis requested after the Project Meeting #3?	0	0	0	0	0	0	
3/6/2006	LN-16W Confirmation	soil	LNAPL area	2	S. Clary	Tu., 3/7/2006	yes	9b	\$ 293.00	no	3/8/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		0	1	0	0	0	0	
3/6/2006	LN-17W Confirmation	soil	LNAPL area	2	S. Clary	Tu., 3/7/2006	yes	9b	\$ 293.00	no	3/8/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		0	1	0	0	0	0	
3/6/2006	LN-18F Confirmation	soil	LNAPL area	2	S. Clary	Tu., 3/7/2006	yes	9b	\$ 293.00	no	3/8/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		0	1	0	0	0	0	
3/6/2006	LN-19F Confirmation	soil	LNAPL area	2	S. Clary	Tu., 3/7/2006	yes	9b	\$ 293.00	no	3/8/2006	YES	9B	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		0	1	0	0	0	0	
3/7/2006	TG-B-05F Confirmation	soil	Tight Grid Area	1	S. Clary	We., 3/6/2006	yes	9a	\$ 122.00	no	3/21/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/7/2006	TG-B-01/02W Confirmation	soil	Tight Grid Area	1	S. Clary	We., 3/6/2006	yes	9a	\$ 122.00	no	3/21/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/7/2006	TG-07F Confirmation	soil	Tight Grid Area	1	S. Clary	We., 3/6/2006	yes	9a	\$ 122.00	no	3/21/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	

Analysis Key: 1=TCL-PCBs; 2=SVOC's; 3=TCLP-SVOC's; 4= ph, Ignit, TPH, PCB (TCLP-Metals, VOC, SVOC; 5= TCLP Metals, TAL Metals, SVOCs

Bid Items:

Date Sampled or Collected	Sample ID#	Matrix	Sample Location	Analysis	Sampling Personnel	Date Received by Lab	DUSR Required	CAP Payment Item(s)	Amount	CAP Paid	Date analysis received	COC Rec'd	Required Analyses	Required TAT (Hours) per Contract	Comments on TAT	Spec Section Ref.	Level of Reporting	DUSR Rec'd & Date	EEPC Comments	9A	9B	9C	PCO 1(A)	PCO 1(B)	PCO 2	Comments:
3/7/2006	TG-08F Confirmation	soil	Tight Grid Area	1	S. Clary	We., 3/8/2006	yes	9a	\$ 122.00	no	3/21/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/8/2006	TG-09F Confirmation	soil	Tight Grid Area	1	S. Clary	TH., 3/9/2006	yes	9a	\$ 122.00	no	3/22/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/8/2006	TG-10F Confirmation	soil	Tight Grid Area	1	S. Clary	TH., 3/9/2006	yes	9a	\$ 122.00	no	3/22/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/8/2006	TG-B-Concrete Wall	soil	Tight Grid Area	1	S. Clary	TH., 3/9/2006	yes	9a	\$ 122.00	no	3/22/2006	YES	9A only	24-48 hours	11 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/9/2006	TG-6-01F Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	FR., 3/10/2006	yes	9a 9b 9c	\$ 781.00	no	3/14/2006	YES	9A, B, & C	24-48 hours	4 Days?	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
3/9/2006	TG-6-02W Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	FR., 3/10/2006	yes	9a 9b 9c	\$ 781.00	no	3/14/2006	YES	9A, B, & C	24-48 hours	4 Days?	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
3/9/2006	TG-6-03W Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	FR., 3/10/2006	yes	9a 9b 9c	\$ 781.00	no	3/14/2006	YES	9A, B, & C	24-48 hours	4 Days?	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
3/9/2006	TG-C-05F Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 3/10/2006	yes	9a	\$ 122.00	no	3/14/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/9/2006	TG-C-1/2W Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 3/10/2006	yes	9a	\$ 122.00	no	3/14/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400.1	CAT B	NO		1	0	0	0	0	0	
3/10/2006	Basin-A	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-E	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-H	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-D	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-B	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-C	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-F	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-G	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-B1	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-B2	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-C1	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-C2	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-F1	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/10/2006	Basin-G1	soil	Infiltration Basin	5	S. Clary	SA., 3/11/2006	yes	PCO #2	\$ 896.50	no	3/15/2006; 3/16/2006	YES	PCO #2	24-48 hours	4 & 5 Days?	PCO # 2	CAT B	NO		0	0	0	0	0	1	
3/14/2006	TG-6-04W Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	We., 3/15/2006	yes	9a 9b 9c	\$ 781.00	no	3/16/2006	YES	9A, B, & C	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
3/14/2006	TG-6-05W Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	We., 3/15/2006	yes	9a 9b 9c	\$ 781.00	no	3/16/2006	YES	9A, B, & C	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	
3/14/2006	TG-6-06F Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	We., 3/15/2006	yes	9a 9b 9c	\$ 781.00	no	3/16/2006	YES	9A, B, & C	24-48 hours	24 hours	01400 - Table 01400.1	CAT B	NO		1	1	1	0	0	0	

Analysis Key: 1=TCL-PCB's; 2=SVOC's; 3=TCLP-SVOC's; 4= ph, Ignit, TPH, PCB (TCLP-Metals, VOC, SVOC; 5= TCLP Metals, TAL Metals, SVOCs													Bid Items:													
Date Sampled or Collected	Sample ID#	Matrix	Sample Location	Analysis	Sampling Personnel	Date Received by Lab	DUSR Required	CAP Payment Item(s)	Amount	CAP Paid	Date analysis received	COC Rec'd	Required Analyses	Required TAT (Hours) per Contract	Comments on TAT	Spec Section Ref.	Level of Reporting	DUSR Rec'd & Date	EEPC Comments	9A	9B	9C	PCO 1(A)	PCO 1(B)	PCO 2	Comments:
3/20/2006	TG-6-07F Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	TU., 3/21/2006	yes	9a 9b 9c	\$ 781.00	no	3/27/2006	YES	9A, B, & C	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	1	1	0	0	0	
3/20/2006	TG-6-08F Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	TU., 3/21/2006	yes	9a 9b 9c	\$ 781.00	no	3/27/2006	YES	9A, B, & C	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	1	1	0	0	0	
3/20/2006	TG-6-09W Confirmation	soil	Tight Grid Area	1,2,3	S. Clary	TU., 3/21/2006	yes	9a 9b 9c	\$ 781.00	no	3/27/2006	YES	9A, B, & C	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	1	1	0	0	0	
3/20/2006	TG-11F Confirmation	soil	Tight Grid Area	1	S. Clary	TU., 3/21/2006	yes	9a	\$ 122.00	no	3/27/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/20/2006	TG-12W Confirmation	soil	Tight Grid Area	1	S. Clary	TU., 3/21/2006	yes	9a	\$ 122.00	no	3/27/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/20/2006	TG-13W Confirmation	soil	Tight Grid Area	1	S. Clary	TU., 3/21/2006	yes	9a	\$ 122.00	no	3/27/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/20/2006	TG-002WRR Confirmation	soil	Tight Grid Area	1	S. Clary	TU., 3/21/2006	yes	9a	\$ 122.00	no	3/27/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/20/2006	TG-C-1/2WR Confirmation	soil	Tight Grid Area	1	S. Clary	TU., 3/21/2006	yes	9a	\$ 122.00	no	3/27/2006	YES	9A only	24-48 hours	4 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/21/2006	LN-Decon Demob. Confirmation	soil	LNAPL area	2	S. Clary	WE., 3/22/2006	yes	9a	\$ 293.00	no	3/23/2006	YES	In bid item	24-48 hours	24 hours	01100 - Article 1.1	CAT B	Pre and Post Samples Part of Mobilization and Demobilization LS		0	0	0	0	0	0	Under Mod/Demob Bid Item Requirements - Item #1
3/21/2006	TG-15F Confirmation	soil	Tight Grid Area	1	S. Clary	WE., 3/22/2006	yes	9a	\$ 122.00	no	3/23/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/21/2006	TG-14W Confirmation	soil	Tight Grid Area	1	S. Clary	We., 3/22/2006	yes	9a	\$ 122.00	no	3/23/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/23/2006	TG-14WR Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 3/24/2006	yes	9a	\$ 122.00	no	4/13/2006	YES	9A only	24-48 hours	24 hours	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/23/2006	TG-16W Confirmation	soil	Tight Grid Area	1	S. Clary	FR., 3/24/2006	yes	9a	\$ 122.00	no	4/13/2006	YES	9A only	24-48 hours	13 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	
3/27/2006	TG-14WRR Confirmation	soil	Tight Grid Area	1	S. Clary	Tu., 3/28/2006	yes	9a	\$ 122.00	no	3/31/2006	YES	9A only	24-48 hours	3 Days?	01400 - Table 01400 1	CAT B	NO		1	0	0	0	0	0	

									\$ 52,711.00											Totals:	76	53	29	5	0	14
Total Analyses Performed: 114									Minus \$ 3,710.00											Item Pricing:	\$122	\$293	\$366	\$207	\$122	\$896.50
									Net \$ 49,001.00											Total Cost:	\$9,272	\$15,529	\$10,614	\$1,035	\$0	\$12,551
																				Sum Total:	\$49,001					

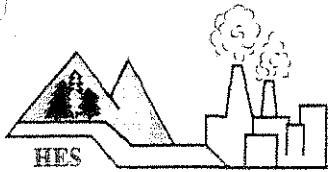
Over 48 hours  
Req'd TAT

76 analyses over the TAT

Discrepancies Between  
Sample Labels and COC  
Record?

Y N

NOTES:



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

FINAL REPORT  
ANALYTICAL TEST RESULTS  
N.Y.S.D.O.H. LAB ID#11140

CLIENT: Horizon Environmental

DATE SAMPLED: 01/30/06

SAMPLE DESCRIPTION: TG-0-01 Characterization  
NYDEC

DATE RECEIVED: 01/31/06

MATRIX: Soil

TIME SAMPLED: 3:10 pm

LOCATION: Shenango Steel Site

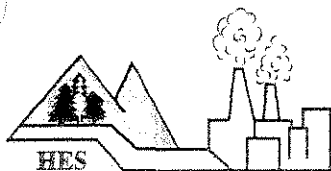
SAMPLE TYPE: Composite

H.E.S. #: 060131G01

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	6.94	su	02/01/06
mitability	SW846-1010 (Modified)	>212	°F	02/06/06
TPH	SW846-8100 (Modified)	<66	mg/kg	02/02/06
Total PCB'S	SW846-8082	3.6	mg/kg	02/07/06
Total Solids	EPA 160.3	76	%	02/06/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: TG-0-01 characterization

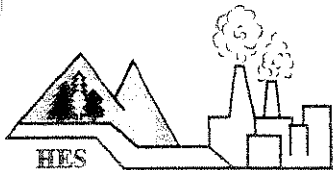
H.E.S. #: 060131G01 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.45	mg/l	02/03/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Cadmium	SW846-6010B	<0.003	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
Chromium	SW846-6010B	0.045	mg/l	02/03/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/03/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/02/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	0.03	mg/l	02/02/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 01/30/06

SAMPLE DESCRIPTION: TG-0-02 Characterization  
NYDEC

DATE RECEIVED: 01/31/06

MATRIX: Soil

TIME SAMPLED: 3:15 pm

LOCATION: Shenango Steel Site

SAMPLE TYPE: Composite

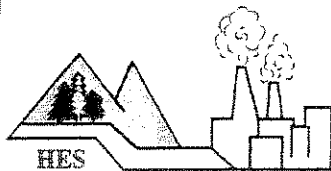
H.E.S. #: 060131G02

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	8.25	su	02/01/06
Ignitability	SW846-1010 (Modified)	>212	<sup>0</sup> F	02/06/06
TPH	SW846-8100 (Modified)	<63	mg/kg	02/02/06
Total PCB'S	SW846-8082	87	mg/kg	02/07/06
Total Solids	EPA 160.3	80	%	02/06/06

\*Results on a dry weight basis.





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 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: TG-0-02 characterization

H.E.S. #: 060131G02 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP) SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	0.081	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.88	mg/l	02/06/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Cadmium	SW846-6010B	0.009	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
Chromium	SW846-6010B	0.03	mg/l	02/03/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/03/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/02/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	0.02	mg/l	02/02/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2

Approval By:

*Mirza M. Hussain*  
 Technical Director  
 Dr. Mirza M. Hussain

Date: 02/02/06

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Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECORD/  
Lab Work Request

Client HES, Inc.

Mail Address \_\_\_\_\_

Client Contact/Person # Scott Clary

Project Location Shawangunk Steel Site

Purchase Order \_\_\_\_\_

Phone # \_\_\_\_\_

HES Contact Scott Clary

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A = a.m. P = p.m.	SAMPLE TYPE C = Composite G = Grab			# Conts.	ANALYSIS REQUIRED	
				MATRIX	C	G			
<u>060201R01</u>	<u>LN-01 Characterization</u>	<u>1-31-06</u>	<u>4:30</u>	<u>A</u>	<u>Soil</u>	<u>X</u>	<u></u>	<u>2</u>	<u>Ph, Igmm, TPH PCB</u>
<u>060202R02</u>	<u>LN-02 Characterization</u>	<u>1-31-06</u>	<u>4:40</u>	<u>A</u>	<u>Soil</u>	<u>X</u>	<u></u>	<u>2</u>	<u>Ph, Igmm, TPH PCB</u>
<u>060203R03</u>	<u>LN-03 Characterization</u>	<u>1-31-06</u>	<u>4:50</u>	<u>A</u>	<u>Soil</u>	<u>X</u>	<u></u>	<u>2</u>	<u>Ph, Igmm, TPH PCB</u>
				<u>A</u>					
				<u>P</u>					
				<u>A</u>					
				<u>P</u>					
				<u>A</u>					
				<u>P</u>					
				<u>A</u>					
				<u>P</u>					
				<u>A</u>					
				<u>P</u>					

Matrix  
S - Soil  
SE - Sediment  
SO - Solid

SL - Sludge  
O - Oil  
DW - Drinking Water  
GW - Ground Water

SW - Surface Water  
L - Leachate  
A - Air  
WI - Wipe

DS - Drum Solids  
DL - Drum Liquids  
X - Other  
WW - Waste Water

Special Instructions:

Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>1-31-06 4:30</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>1-31-06 5:30pm</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) _____	Date/Time _____	Received by: (Signature) _____	Date/Time _____
Dispatched by: (Signature) _____	Method of Shipment: _____		Date/Time _____
Received @ Laboratory: <u>[Signature]</u>	Date/Time <u>2/1/06 10:05 AM</u>	Turnaround Time: <u>2/7</u>	Lab Approval: _____

HES  
Use Only

Samples Were:  
1. Shipped or Hand Delivered  
NOTES: 139c

2. Ambient or Chilled  
NOTES: 139c

3. Received Broken/  
Leaking (Improperly  
Scaled)  
Y N  
NOTES:

4. Properly Preserved  
NOTES: Y N

5. Received Within  
Holding Times  
Y N  
NOTES:

COC Tape Was:

1. Present on Outer  
Package Y N

2. Unbroken on Outer  
Package Y N

3. Present on Sample  
Y N

4. Unbroken on Sample  
NOTES: Y N

COC Record Was:

1. Present upon Receipt of  
Samples Y N

Discrepancies Between  
Sample Labels and COC  
Record?

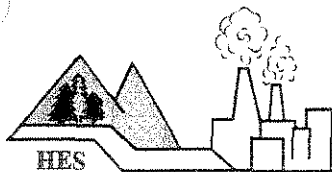
Y N

NOTES:

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy



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Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS  
N.Y.S.D.O.H. LAB ID#111140

CLIENT: Horizon Environmental

DATE SAMPLED: 01/31/06

SAMPLE DESCRIPTION: LN-01 Characterization  
NYDEC

DATE RECEIVED: 02/01/06

MATRIX: Soil

TIME SAMPLED: 4:30 pm

LOCATION: Shenango Steel Site

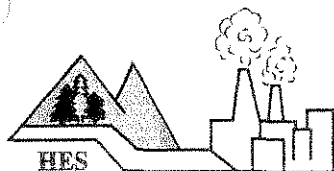
SAMPLE TYPE: Composite

H.E.S. #: 060201B01

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	6.74	su	02/03/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/06/06
TPH	SW846-8100 (Modified)	<58	mg/kg	02/02/06
Total PCB'S	SW846-8082	<0.02	mg/kg	02/07/06
Total Solids	EPA 160.3	86	%	02/06/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-01 characterization

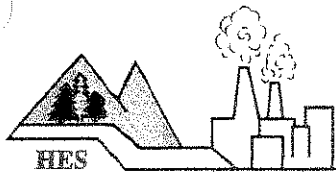
H.E.S. #: 060201B01 (Continued)

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.69	mg/l	02/03/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Cadmium	SW846-6010B	0.004	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
Chromium	SW846-6010B	0.019	mg/l	02/03/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0087	mg/l	02/03/06	200.0
m-Cresol	SW846-8270C	<0.0087	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0087	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0087	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0087	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0087	mg/l	02/03/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/03/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/06/06	200.0
Nitrobenzene	SW846-8270C	<0.0087	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0087	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0087	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	0.001	mg/l	02/03/06	5.0
Tetrachloroethylene	SW846-8260B	0.001	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0087	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0087	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2



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CLIENT: Horizon Environmental

DATE SAMPLED: 01/31/06

SAMPLE DESCRIPTION: LN-02 Characterization  
NYDEC

DATE RECEIVED: 02/01/06

MATRIX: Soil

TIME SAMPLED: 4:40 pm

LOCATION: Shenango Steel Site

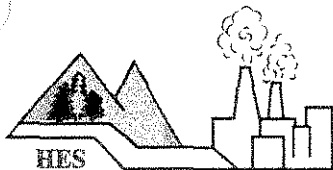
SAMPLE TYPE: Composite

H.E.S. #: 060201B02

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	5.34	su	02/03/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/06/06
TPH	SW846-8100 (Modified)	<60	mg/kg	02/02/06
Total PCB'S	SW846-8082	<0.02	mg/kg	02/07/06
Total Solids	EPA 160.3	83	%	02/06/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-02 characterization

H.E.S. #: 060201B02 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.43	mg/l	02/03/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Cadmium	SW846-6010B	0.003	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
Chromium	SW846-6010B	<0.007	mg/l	02/03/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.009	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.009	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	7.5
2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.009	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.009	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.009	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.009	mg/l	02/03/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/03/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/06/06	200.0
Nitrobenzene	SW846-8270C	<0.009	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.009	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.009	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	<0.010	mg/l	02/03/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 01/31/06

SAMPLE DESCRIPTION: LN-03 Characterization  
NYDEC

DATE RECEIVED: 02/01/06

MATRIX: Soil

TIME SAMPLED: 4:45 pm

LOCATION: Shenango Steel Site

SAMPLE TYPE: Composite

H.E.S. #: 060201B03

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	6.85	su	02/03/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/06/06
TPH	SW846-8100 (Modified)	<60	mg/kg	02/02/06
Total PCB'S	SW846-8082	<0.02	mg/kg	02/07/06
Total Solids	EPA 160.3	84	%	02/06/06

\*Results on a dry weight basis.



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-03 characterization

H.E.S. #: 060201B03(Continued)

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.64	mg/l	02/03/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Cadmium	SW846-6010B	0.005	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
Chromium	SW846-6010B	<0.007	mg/l	02/03/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.009	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.009	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.009	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.009	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.009	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.009	mg/l	02/03/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/03/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/06/06	200.0
Nitrobenzene	SW846-8270C	<0.009	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.009	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.009	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	<0.010	mg/l	02/03/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2

Approval By:

*Dr. Mirza N. Hussain*  
Technical Director

Dr. Mirza N. Hussain

Date: 02/07/06

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Phone: 518/747-1060 Fax: 518/747-1062

Client HES, Inc.

Mail Address Her. Inc.

Client Contact/Person # Scott Cloney

Project Location Stenango Steel Site - NYSDOT Cornell University

Purchase Order \_\_\_\_\_

Phone # 767538 83 22 11/20/00

HES Contact SCOTT CAGLEY

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
LAB 0020401	LN-04 Charact.	2-3	4:00	A	SOIL	X		2 (TECP Metals) VOC/SVOC
LAB 0020402	LN-05 Charact.	2-3	4:00	A	SOIL	X		2 TPH PCB
				A				
				P				
				A				
				P				
				A				
				P				
				A				
				P				
				A				
				P				

Matrix

S - Soil

SE - Sediment

SO - Solid

SL - Sludge

O - Oil

DW - Drinking Water

GW - Ground Water

SW - Surface Water

L - Leachate

A - Air

WI - Wipe



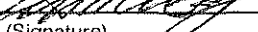
DS - Drum Solids

DL - Drum Liquids

X - Other

WW - Waste Water

Special Instructions:

Sampled by: (Signature) 	Date/Time 2-3-01 4:12 PM	Received by: (Signature)	Date/Time
Relinquished by: (Signature) 	Date/Time 2-3-01 4:45 PM	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Dispatched by: (Signature)	Method of Shipment:		Date/Time
Received @ Laboratory: 	Date/Time 2/4/01 11:16 AM	Turnaround Time: 48 Hrs	Lab Approval:

HES Use Only	
Samples Were:	
1. <del>Shipped or</del> Hand Delivered	
NOTES:	
2. Ambient or Chilled	
NOTES:	150C
3. Received Broken/ Leaking (Improperly Scaled)	
Y	N
NOTES:	
4. Properly Preserved	
NOTES:	Y N
5. Received Within Holding Times	
Y	N
NOTES:	
COC Tape Was:	
1. Present on Outer Package	Y N
2. Unbroken on Outer Package	Y N
3. Present on Sample	Y N
4. Unbroken on Sample	Y N
NOTES:	
COC Record Was:	
1. Present upon Receipt of Samples	Y N
Discrepancies Between Sample Labels and COC Record?	
Y	N
NOTES:	



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060204A01

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)  
SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.37	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	<0.01	mg/l	NA

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05 Characterization

HES Lab I.D.#: 060204A02

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)  
SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.30	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.026	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	<0.01	mg/l	NA

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060204A01

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg/l)</u>
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05 Characterization

HES Lab I.D.#: 060204A02

Sample Wt For Extraction: 15gm/300ml

Sample Prep: TCLP 8260B

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg,</u>
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06	6.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06	0.2

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060204A01

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/07/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/07/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/07/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/07/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/07/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/07/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/07/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/07/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	2.0

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05 Characterization

HES Lab I.D.#: 060204A02

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATORY LEVELS (mg,</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/07/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/07/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/07/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/07/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/07/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/07/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/07/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/07/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/07/06	2.0

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-04 Characterization  
HES Lab I.D.#: 060204A01

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/06,07/06

Sample Amount For Extraction: 30gm/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.02	mg/kg
Total Solid	EPA 160.3	88	%

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-05 Characterization  
HES Lab I.D.#: 060204A02

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/06, 07/06

Sample Amount For Extraction: 30gm/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.02	mg/kg
Total Solid	EPA 160.3	86	%



Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

SAMPLE ANALYSIS DATA SHEET  
Method SW846 - 8015(Modified)

Customer I.D.#: LN-04 Characterization  
HES Lab I.D.#: 060204A01

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<63	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015(Modified)

Customer I.D.#: LN-05 Characterization  
HES Lab I.D.#: 060204A02

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/07/06

Sample Amt. For Extraction: 1gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	2,375	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060204A01

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/06/06

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
pH	SW846-9055	6.75	NA	su

SAMPLE ANALYSIS DATA SHEET

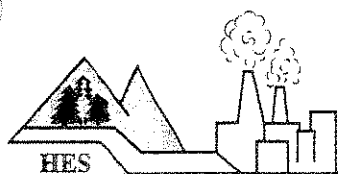
Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05 Characterization

HES Lab I.D.#: 060204A02

Sample Matrix: Soil  
Date Sample Collected: 02/03/06  
Date Received: 02/04/06  
Date Prepared: 02/04/06  
Date Analyzed: 02/06/06

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
pH	SW846-9055	7.34	NA	su



HUDSON ENVIRONMENTAL SERVICES, INC.

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REVISED REPORT  
FINAL REPORT  
ANALYTICAL TEST RESULTS  
N.Y.S.D.O.H. LAB ID#11140

CLIENT: Horizon Environmental

DATE SAMPLED: 02/01/06

SAMPLE DESCRIPTION: LN-Sump Water  
NYDEC

DATE RECEIVED: 02/02/06

MATRIX: Water

TIME SAMPLED: 4:30 pm

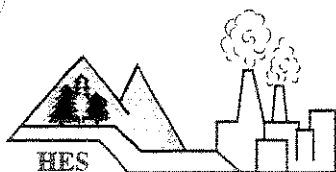
LOCATION: Shenango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060202C01

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TIME ANALYZED</u>
pH	SW846-9055	7.81	su@9.7°C	02/03/06	12:25 pm
PH	EPA 418.1	<43	mg/l	02/02/06	
Total PCB'S	SW846-8082	<0.05	mg/l	02/03/06	



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Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

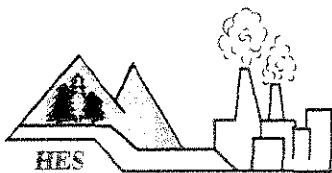
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-Sump Water

H.E.S. #: 060202C01 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Arsenic	SW846-6010B	<0.16	mg/l	02/03/06
Barium	SW846-6010B	0.021	mg/l	02/03/06
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06
Cadmium	SW846-6010B	<0.003	mg/l	02/03/06
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06
Chromium	SW846-6010B	<0.007	mg/l	02/03/06
m-Cresol/p-Cresol	SW846-8270C	<0.075	mg/l	02/02/06
o-Cresol	SW846-8270C	<0.075	mg/l	02/02/06
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06
2,4-Dinitrotoluene	SW846-8270C	<0.075	mg/l	02/02/06
Hexachlorobenzene	SW846-8270C	<0.075	mg/l	02/02/06
Hexachlorobutadiene	SW846-8270C	<0.075	mg/l	02/02/06
Hexachloroethane	SW846-8270C	<0.075	mg/l	02/02/06
Lead	SW846-6010B	<0.042	mg/l	02/03/06
Mercury	SW846-7470A	<0.001	mg/l	02/02/06
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06
Nitrobenzene	SW846-8270C	<0.075	mg/l	02/02/06
Pentachlorophenol	SW846-8270C	<0.075	mg/l	02/02/06
Pyridine	SW846-8270C	<0.075	mg/l	02/02/06
Selenium	SW846-6010B	<0.057	mg/l	02/03/06
Silver	SW846-7760A	<0.01	mg/l	02/02/06
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06
2,4,5-Trichlorophenol	SW846-8270C	<0.075	mg/l	02/02/06
2,4,6-Trichlorophenol	SW846-8270C	<0.075	mg/l	02/02/06
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06



HUDSON ENVIRONMENTAL SERVICES, INC.

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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/01/06

SAMPLE DESCRIPTION: LN-Vault  
NYDEC

DATE RECEIVED: 02/02/06

MATRIX: Water

TIME SAMPLED: 4:35 pm

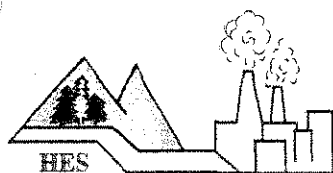
LOCATION: Shenango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060202C02

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TIME</u> <u>ANALYZED</u>
pH	SW846-9055	7.84	su@9.8°C	02/03/06	12:25 pm
TPH	EPA 418.1	<43	mg/l	02/02/06	
Total PCB'S	SW846-8082	<0.05	mg/l	02/03/06	



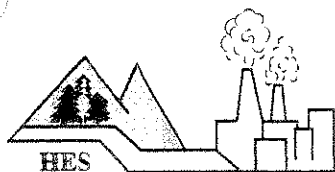
# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803  
 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803  
 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental  
 SAMPLE DESCRIPTION: LN-Vault Water  
 H.E.S. #: 060202C02 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06
Barium	SW846-6010B	0.041	mg/l	02/03/06
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06
Cadmium	SW846-6010B	<0.003	mg/l	02/03/06
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/02/06
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06
Chloroform	SW846-8260B	<0.0005	mg/l	02/02/06
Chromium	SW846-6010B	0.018	mg/l	02/03/06
m-Cresol/p-Cresol	SW846-8270C	<0.075	mg/l	02/02/06
o-Cresol	SW846-8270C	<0.075	mg/l	02/02/06
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/02/06
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/02/06
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06
1,4-Dinitrotoluene	SW846-8270C	<0.075	mg/l	02/02/06
Hexachlorobenzene	SW846-8270C	<0.075	mg/l	02/02/06
Hexachlorobutadiene	SW846-8270C	<0.075	mg/l	02/02/06
Hexachloroethane	SW846-8270C	<0.075	mg/l	02/02/06
Lead	SW846-6010B	<0.042	mg/l	02/03/06
Mercury	SW846-7470A	<0.001	mg/l	02/02/06
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06
Nitrobenzene	SW846-8270C	<0.075	mg/l	02/02/06
Pentachlorophenol	SW846-8270C	<0.075	mg/l	02/02/06
Pyridine	SW846-8270C	<0.075	mg/l	02/02/06
Selenium	SW846-6010B	<0.057	mg/l	02/03/06
Silver	SW846-7760A	<0.01	mg/l	02/02/06
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/02/06
2,4,5-Trichlorophenol	SW846-8270C	<0.075	mg/l	02/02/06
2,4,6-Trichlorophenol	SW846-8270C	<0.075	mg/l	02/02/06
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/02/06





HUDSON ENVIRONMENTAL SERVICES, INC.

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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/01/06

SAMPLE DESCRIPTION: TG-PCB Chacterization  
NYDEC

DATE RECEIVED: 02/02/06

MATRIX: Soil

TIME SAMPLED: 4:45 pm

LOCATION: Shenango Steel Site

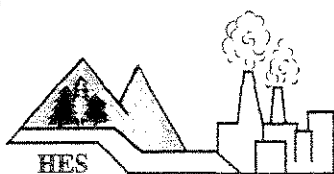
SAMPLE TYPE: Composite

H.E.S. #: 060202C03

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	7.35	su	02/03/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/06/06
pH	SW846-8100 (Modified)	<57	mg/kg	02/02/06
Total PCB'S	SW846-8082	94	mg/kg	02/07/06
Total Solids	EPA 160.3	88	%	02/06/06

\*Results on a dry weight basis.



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: TG-PCB Characterization

H.E.S. #: 060202C03 (Continued)

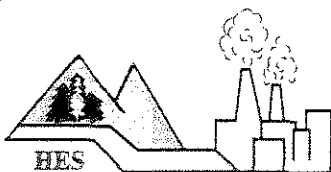
## TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.49	mg/l	02/03/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Cadmium	SW846-6010B	<0.003	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
Chromium	SW846-6010B	0.014	mg/l	02/02/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0085	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0085	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0085	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0085	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0085	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0085	mg/l	02/03/06	3.0
Lead	SW846-6010B	0.21	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/03/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Nitrobenzene	SW846-8270C	<0.0085	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0085	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0085	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	0.02	mg/l	02/03/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0085	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0085	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2





HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803  
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803  
Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS  
N.Y.S.D.O.H. LAB ID#11140

CLIENT: Horizon Environmental

DATE SAMPLED: 02/03/06

SAMPLE DESCRIPTION: LN-04 Characterization  
NYDEC

DATE RECEIVED: 02/04/06

MATRIX: Soil

TIME SAMPLED: 4:00 pm

LOCATION: Shenango Steel Site

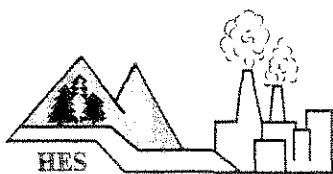
SAMPLE TYPE: Composite

H.E.S. #: 060204A01

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	6.75	su	02/06/06
Ignitability	SW846-1010 (Modified)	>212	<sup>0</sup> F	02/07/06
TPH	SW846-8100 (Modified)	<63	mg/kg	02/07/06
Total PCB'S	SW846-8082	<0.03	mg/kg	02/07/06
Total Solids	EPA 160.3	88	%	02/06/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-04 characterization

H.E.S. #: 060204A01 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP) SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/07/06	5.0
Barium	SW846-6010B	0.37	mg/l	02/07/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
Cadmium	SW846-6010B	<0.003	mg/l	02/07/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/07/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/07/06	6.0
Chromium	SW846-6010B	<0.007	mg/l	02/07/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.009	mg/l	02/07/06	200.0
o-Cresol	SW846-8270C	<0.009	mg/l	02/07/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/07/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/07/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.009	mg/l	02/07/06	0.13
Hexachlorobenzene	SW846-8270C	<0.009	mg/l	02/07/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.009	mg/l	02/07/06	0.5
Hexachloroethane	SW846-8270C	<0.009	mg/l	02/07/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/07/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/07/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/07/06	200.0
Nitrobenzene	SW846-8270C	<0.009	mg/l	02/07/06	2.0
Pentachlorophenol	SW846-8270C	<0.009	mg/l	02/07/06	100.0
Pyridine	SW846-8270C	<0.009	mg/l	02/07/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/07/06	1.0
Silver	SW846-7760A	<0.010	mg/l	02/07/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/07/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/07/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/07/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/07/06	0.2



HUDSON ENVIRONMENTAL SERVICES, INC.

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Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803  
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/03/06

SAMPLE DESCRIPTION: LN-05 Characterization  
NYDEC

DATE RECEIVED: 02/04/06

MATRIX: Soil

TIME SAMPLED: 4:00 pm

LOCATION: Shenango Steel Site

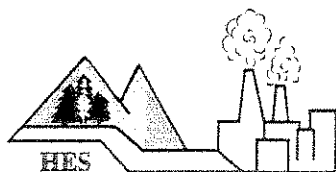
SAMPLE TYPE: Composite

H.E.S. #: 060204A02

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	7.34	su	02/06/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/07/06
PH	SW846-8100 (Modified)	2,200	mg/kg	02/07/06
Total PCB'S	SW846-8082	<0.03	mg/kg	02/07/06
Total Solids	EPA 160.3	86	%	02/06/06

\*Results on a dry weight basis.



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-05 characterization

H.E.S. #: 060204A02 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/07/06	5.0
Barium	SW846-6010B	0.30	mg/l	02/07/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
Cadmium	SW846-6010B	<0.003	mg/l	02/07/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/07/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/07/06	6.0
Chromium	SW846-6010B	0.026	mg/l	02/07/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.009	mg/l	02/07/06	200.0
o-Cresol	SW846-8270C	<0.009	mg/l	02/07/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/07/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/07/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.009	mg/l	02/07/06	0.13
Hexachlorobenzene	SW846-8270C	<0.009	mg/l	02/07/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.009	mg/l	02/07/06	0.5
Hexachloroethane	SW846-8270C	<0.009	mg/l	02/07/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/07/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/07/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/07/06	200.0
Nitrobenzene	SW846-8270C	<0.009	mg/l	02/07/06	2.0
Pentachlorophenol	SW846-8270C	<0.009	mg/l	02/07/06	100.0
Pyridine	SW846-8270C	<0.009	mg/l	02/07/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/07/06	1.0
Silver	SW846-7760A	<0.010	mg/l	02/07/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/07/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/07/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/07/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.009	mg/l	02/07/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/07/06	0.2

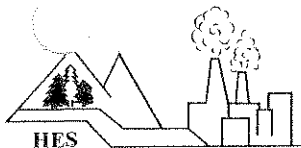
Approval By:

*Oliver L. Hussain*  
Technical Director

Dr. Mirza M. Hussain

Date: 02/08/06

Hudson Environmental Services, Inc. certifies that the services provided were performed in accordance with the New York State Department of Health, Environmental Laboratory Approval Program Certification manual. This report shall not be reproduced without written consent from HES, Inc. In the event of an error, HES sole responsibility will be to perform reanalysis at its own expense. HES, Inc. assumes no other liability for damages incurred from the interpretation or use of the analysis provided.



# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECORD/  
Lab Work Request

Client HES, Inc.  
Client Contact/Person # SCOTT CLARY  
Project Location Stewartville  
Purchase Order   
HES Contact S. Clary

Mail Address HES, Inc.  
540A COLUMBIA Rd  
Clarkstown Md 21221  
Phone # 301 538 1522

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
000210C01	LN-01W ConfIRM	2-9-06	3:30	Soil			1	TCI PCB's + SVOC's/8270
CO2	LN-02W ConfIRM							
CO3	LN-03W ConfIRM							
CO4	LN-06 Charact-Lia			High Sol				PCB, SVOC, VOC + Test for CO, B, M
CO5	LN-07 Charact-SOLID			Solid				
7000223M01								

Matrix  
S - Soil  
SE - Sediment  
SO - Solid  
SL - Sludge  
O - Oil  
DW - Drinking Water  
GW - Ground Water  
SW - Surface Water  
L - Leachate  
A - Air  
WI - Wipe  
DS - Drum Solids  
DL - Drum Liquids  
X - Other  
WW - Waste Water

Special Instructions: LN-07  
\*CS/Horizontal additional analysis  
TCI & metals PH, TGA, TTH

Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>2-9-06 3:45 PM</u>	Received by: (Signature) <u>[Signature]</u>	Date/Time <u></u>
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>2-9-06 5:30 PM</u>	Received by: (Signature) <u></u>	Date/Time <u></u>
Relinquished by: (Signature) <u></u>	Date/Time <u></u>	Received by: (Signature) <u></u>	Date/Time <u></u>
Dispatched by: (Signature) <u></u>	Method of Shipment: <u></u>	Date/Time <u></u>	
Received @ Laboratory: <u>[Signature]</u>	Date/Time <u>2/10/06 10:15 AM</u>	Turnaround Time: <u>24 hr</u>	Lab Approval: <u></u>

## HES Use Only

Samples Were:  
1. Shipped or  
Hand Delivered  
NOTES:

2. Ambient or Chilled  
NOTES:

3. Received Broken/  
Leaking (Improperly  
Scaled)  
Y N  
NOTES:

4. Properly Preserved  
NOTES: Y N

5. Received Within  
Holding Times  
Y N  
NOTES:

COC Tape Was:  
1. Present on Outer  
Package Y N

2. Unbroken on Outer  
Package Y N

3. Present on Sample  
Y N

4. Unbroken on Sample  
NOTES: Y N

COC Record Was:  
1. Present upon Receipt of  
Samples Y N

Discrepancies Between  
Sample Labels and COC  
Record?  
Y N

NOTES:

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-01W-Confirm  
 HES Lab I.D.#: 060210C01(continued)

Sample Matrix: Soil  
 Date Sample Collected: 02/09/06  
 Date Received: 02/10/06  
 Date Prepared: 02/10/06  
 Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml  
 Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<280	ug/kg
Pentachlorophenol	SW846-8270C	<280	ug/kg
Phenanthrene	SW846-8270C	<280	ug/kg
Anthracene	SW846-8270C	<280	ug/kg
Di-n-burylphthalate	SW846-8270C	<280	ug/kg
Fluoranthene	SW846-8270C	<280	ug/kg
Pyrene	SW846-8270C	<280	ug/kg
Butylbenzylphthalate	SW846-8270C	<280	ug/kg
Benzo(a)anthracene	SW846-8270C	<280	ug/kg
Chrysene	SW846-8270C	<280	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<280	ug/kg
Di-n-octylphthalate	SW846-8270C	<280	ug/kg
Benzo(b)fluoranthene	SW846-8270C	<280	ug/kg
Benzo(k)fluroanthene	SW846-8270C	<280	ug/kg
Benzo(a)pyrene	SW846-8270C	<280	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<280	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<280	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<280	ug/kg
Total Solids	EPA 160.3	87	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-02W-Confirm

HES Lab I.D.#: 060210C02

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<360	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<360	ug/kg
2-Chlorophenol	SW846-8270C	<360	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<360	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<360	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<360	ug/kg
4-Methylphenol	SW846-8270C	<360	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<360	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<360	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<360	ug/kg
Hexachloroethane	SW846-8270C	<360	ug/kg
Nitrobenze	SW846-8270C	<360	ug/kg
2-Nitrophenol	SW846-8270C	<360	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<360	ug/kg
2,4-Dichlorophenol	SW846-8270C	<360	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<360	ug/kg
Naphthalene	SW846-8270C	<360	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-02W-Confirm

HES Lab I.D.#: 060210C02(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<360	ug/kg
Hexachlorobutadiene	SW846-8270C	<360	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<360	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<360	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<360	ug/kg
2-Chloronaphthalene	SW846-8270C	<360	ug/kg
2-Nitroaniline	SW846-8270C	<360	ug/kg
3-Nitroaniline	SW846-8270C	<360	ug/kg
Pyridine	SW846-8270C	<360	ug/kg
Dimethylphthalate	SW846-8270C	<360	ug/kg
Acenaphthylene	SW846-8270C	<360	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<360	ug/kg
Acenaphthene	SW846-8270C	<360	ug/kg
2,4-Dinitrophenol	SW846-8270C	<360	ug/kg
Dibenzofuran	SW846-8270C	<360	ug/kg
4-Nitrophenol	SW846-8270C	<360	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<360	ug/kg
Fluorene	SW846-8270C	<360	ug/kg
Diethylphthalate	SW846-8270C	<360	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<360	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<360	ug/kg
4-Nitroaniline	SW846-8270C	<360	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<360	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<360	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-02W-Confirm

HES Lab I.D.#: 060210C02(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<360	ug/kg
Pentachlorophenol	SW846-8270C	<360	ug/kg
Phenanthrene	SW846-8270C	<360	ug/kg
Anthracene	SW846-8270C	<360	ug/kg
Di-n-burylphthalate	SW846-8270C	<360	ug/kg
Fluoranthene	SW846-8270C	<360	ug/kg
Pyrene	SW846-8270C	<360	ug/kg
Butylbenzylphthalate	SW846-8270C	<360	ug/kg
Benzo(a)anthracene	SW846-8270C	<360	ug/kg
Chrysene	SW846-8270C	<360	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<360	ug/kg
Di-n-octylphthalate	SW846-8270C	<360	ug/kg
Benzo(b)fluoranthene	SW846-8270C	490	ug/kg
Benzo(k)fluroanthene	SW846-8270C	490	ug/kg
Benzo(a)pyrene	SW846-8270C	<360	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<360	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<360	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<360	ug/kg
Total Solids	EPA 160.3	69	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03W-Confirm

HES Lab I.D.#: 060210C03

Sample Matrix: Soil

Date Sample Collected: 02/09/06

Date Received: 02/10/06

Date Prepared: 02/10/06

Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<330	ug/kg
bis-(2-Chloroethyl) ether	SW846-8270C	<330	ug/kg
2-Chlorophenol	SW846-8270C	<330	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<330	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<330	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<330	ug/kg
4-Methylphenol	SW846-8270C	<330	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<330	ug/kg
bis(2-chloroisopropyl) ether	SW846-8270C	<330	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<330	ug/kg
Hexachloroethane	SW846-8270C	<330	ug/kg
Nitrobenze	SW846-8270C	<330	ug/kg
2-Nitrophenol	SW846-8270C	<330	ug/kg
Bis-(2-chloroethoxy) methane	SW846-8270C	<330	ug/kg
2,4-Dichlorophenol	SW846-8270C	<330	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<330	ug/kg
Naphthalene	SW846-8270C	<330	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03W-Confirm

HES Lab I.D.#: 060210C03(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	680	ug/kg
Hexachlorobutadiene	SW846-8270C	<330	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<330	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<330	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<330	ug/kg
2-Chloronaphthalene	SW846-8270C	<330	ug/kg
2-Nitroaniline	SW846-8270C	<330	ug/kg
3-Nitroaniline	SW846-8270C	<330	ug/kg
Pyridine	SW846-8270C	<330	ug/kg
Dimethylphthalate	SW846-8270C	<330	ug/kg
Acenaphthylene	SW846-8270C	<330	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<330	ug/kg
Acenaphthene	SW846-8270C	<330	ug/kg
2,4-Dinitrophenol	SW846-8270C	<330	ug/kg
Dibenzofuran	SW846-8270C	1,100	ug/kg
4-Nitrophenol	SW846-8270C	1,300	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<330	ug/kg
Fluorene	SW846-8270C	<330	ug/kg
Diethylphthalate	SW846-8270C	<330	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<330	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<330	ug/kg
4-Nitroaniline	SW846-8270C	<330	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<330	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<330	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03W-Confirm

HES Lab I.D.#: 060210C03(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<330	ug/kg
Pentachlorophenol	SW846-8270C	<330	ug/kg
Phenanthrene	SW846-8270C	16,000	ug/kg
Anthracene	SW846-8270C	7,800	ug/kg
Di-n-burylphthalate	SW846-8270C	<330	ug/kg
Fluoranthene	SW846-8270C	22,000	ug/kg
Pyrene	SW846-8270C	21,000	ug/kg
Butylbenzylphthalate	SW846-8270C	<330	ug/kg
Benzo(a)anthracene	SW846-8270C	8,000	ug/kg
Chrysene	SW846-8270C	8,000	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<330	ug/kg
Di-n-octylphthalate	SW846-8270C	<330	ug/kg
Benzo(b)fluoranthene	SW846-8270C	9,200	ug/kg
Benzo(k)fluroanthene	SW846-8270C	2,600	ug/kg
Benzo(a)pyrene	SW846-8270C	6,600	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	3,600	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	1,200	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	2,800	ug/kg
Total Solids	EPA 160.3	79	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-PCB-216  
HES Lab I.D.#: 060217C03

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Amount For Extraction: 10ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	17	mg/kg
Total Solid	EPA 160.3	80	%





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CLIENT: Horizon Environmental

DATE SAMPLED: 02/01/06

SAMPLE DESCRIPTION: Backfill Sand  
NYDEC

DATE RECEIVED: 02/02/06

MATRIX: Soil

TIME SAMPLED: 3:30 pm

LOCATION: Shenango Steel Site

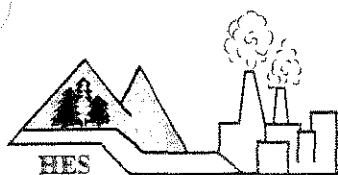
SAMPLE TYPE: Composite

H.E.S. #: 060202C04

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	7.18	su	02/03/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/06/06
TPH	SW846-8100 (Modified)	<52	mg/kg	02/02/06
Total PCB'S	SW846-8082	<0.02	mg/kg	02/07/06
Total Solids	EPA 160.3	96	%	02/06/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: Backfill Sand

H.E.S. #: 060202C04 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)  
 SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	<0.016	mg/l	02/03/06	5.0
Barium	SW846-6010B	0.37	mg/l	02/03/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/02/06	0.5
Cadmium	SW846-6010B	<0.003	mg/l	02/03/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/06/06	6.0
Chromium	SW846-6010B	<0.007	mg/l	02/02/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0078	mg/l	02/03/06	200.0
o-Cresol	SW846-8270C	<0.0078	mg/l	02/03/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/06/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0078	mg/l	02/03/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0078	mg/l	02/03/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0078	mg/l	02/03/06	0.5
Hexachloroethane	SW846-8270C	<0.0078	mg/l	02/03/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/03/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/03/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/02/06	200.0
Nitrobenzene	SW846-8270C	<0.0078	mg/l	02/03/06	2.0
Pentachlorophenol	SW846-8270C	<0.0078	mg/l	02/03/06	100.0
Pyridine	SW846-8270C	<0.0078	mg/l	02/03/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/03/06	1.0
Silver	SW846-7760A	0.02	mg/l	02/03/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/06/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0078	mg/l	02/03/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0078	mg/l	02/03/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/06/06	0.2

Approval By:

*Dr. Mirza M. Hussain*  
 Technical Director  
 Dr. Mirza M. Hussain

Date: 02/24/06

Hudson Environmental Services, Inc. certifies that the services provided were performed in accordance with the New York State Department of Health, Environmental Laboratory Approval Program certification manual. This report shall not be reproduced without written consent from HES, Inc. In the event of an error, HES's sole responsibility will be to perform reanalysis at its own expense. HES, Inc. assumes no other liability for damages incurred from the interpretation or use of the analysis provided.

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-01W-Confirm  
HES Lab I.D.#: 060210C01

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.02	mg/kg
Aroclor 1221	SW846-8082	<0.02	mg/kg
Aroclor 1232	SW846-8082	<0.02	mg/kg
Aroclor 1242	SW846-8082	<0.02	mg/kg
Aroclor 1248	SW846-8082	<0.02	mg/kg
Aroclor 1254	SW846-8082	<0.02	mg/kg
Aroclor 1260	SW846-8082	<0.02	mg/kg
Total Solids	EPA 160.3	87	%

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-01W-Confirm  
HES Lab I.D.#: 060210C02

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg
Aroclor 1221	SW846-8082	<0.03	mg/kg
Aroclor 1232	SW846-8082	<0.03	mg/kg
Aroclor 1242	SW846-8082	<0.03	mg/kg
Aroclor 1248	SW846-8082	<0.03	mg/kg
Aroclor 1254	SW846-8082	<0.03	mg/kg
Aroclor 1260	SW846-8082	<0.03	mg/kg
Total Solids	EPA 160.3	69	%

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-01W-Confirm  
HES Lab I.D.#: 060210C03

Sample Matrix: Soil  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction:

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg
Aroclor 1221	SW846-8082	<0.03	mg/kg
Aroclor 1232	SW846-8082	<0.03	mg/kg
Aroclor 1242	SW846-8082	<0.03	mg/kg
Aroclor 1248	SW846-8082	<0.03	mg/kg
Aroclor 1254	SW846-8082	<0.03	mg/kg
Aroclor 1260	SW846-8082	<0.03	mg/kg
Total Solids	EPA 160.3	79	%



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ANALYTICAL TEST RESULTS  
N.Y.S.D.O.H. LAB ID#11140

CLIENT: Horizon Environmental

DATE SAMPLED: 02/09/06

SAMPLE DESCRIPTION: LN-01W-Confirm  
NYDEC

DATE RECEIVED: 02/10/06

MATRIX: Soil

TIME SAMPLED: 3:30 pm

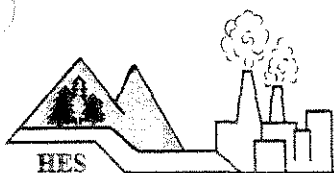
LOCATION: Shenango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060210C01

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
Aroclor 1016	SW846-8082	<0.02	ug/kg	02/13/06
Aroclor 1221	SW846-8082	<0.02	ug/kg	02/13/06
Aroclor 1232	SW846-8082	<0.02	ug/kg	02/13/06
Aroclor 1242	SW846-8082	<0.02	ug/kg	02/13/06
Aroclor 1248	SW846-8082	<0.02	ug/kg	02/13/06
Aroclor 1254	SW846-8082	<0.02	ug/kg	02/13/06
Aroclor 1260	SW846-8082	<0.02	ug/kg	02/13/06
Total Solids	EPA 160.3	87	%	02/13/06



HUDSON ENVIRONMENTAL SERVICES, INC.

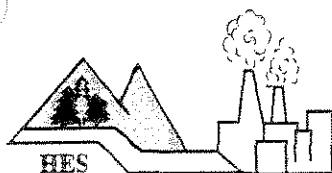
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803  
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803  
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-01W-Confirm  
NYDEC

H.E.S. #: 060210C01 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Phenol	SW846-8270C	<280	ug/kg	02/13/06
bis(2-Chloroethyl)ether	SW846-8270C	<280	ug/kg	02/13/06
2-Chlorophenol	SW846-8270C	<280	ug/kg	02/13/06
1,3-Dichlorobenzene	SW846-8270C	<280	ug/kg	02/13/06
1,4-Dichlorobenzene	SW846-8270C	<280	ug/kg	02/13/06
1,2-Dichlorobenzene	SW846-8270C	<280	ug/kg	02/13/06
4-Methylphenol	SW846-8270C	<280	ug/kg	02/13/06
2-Methylphenol/3-Methylphenol	SW846-8270C	<280	ug/kg	02/13/06
bis(2-chloroisopropyl)ether	SW846-8270C	<280	ug/kg	02/13/06
n-Nitroso-di-n-propylamine	SW846-8270C	<280	ug/kg	02/13/06
Hexachloroethane	SW846-8270C	<280	ug/kg	02/13/06
robenzene	SW846-8270C	<280	ug/kg	02/13/06
2-Nitrophenol	SW846-8270C	<280	ug/kg	02/13/06
bis(2-Chloroethoxy)methane	SW846-8270C	<280	ug/kg	02/13/06
2,4-Dichlorophenol	SW846-8270C	<280	ug/kg	02/13/06
1,2,4-Trichlorobenzene	SW846-8270C	<280	ug/kg	02/13/06
4-Chloroaniline	SW846-8270C	<280	ug/kg	02/13/06
Hexachlorobutadiene	SW846-8270C	<280	ug/kg	02/13/06
4-Chloro-3-methylphenol	SW846-8270C	<280	ug/kg	02/13/06
2,4,6-Trichlorophenol	SW846-8270C	<280	ug/kg	02/13/06
Hexachlorocyclopentadiene	SW846-8270C	<280	ug/kg	02/13/06
2-Chloronaphthalene	SW846-8270C	<280	ug/kg	02/13/06
2-Nitroaniline	SW846-8270C	<280	ug/kg	02/13/06
3-Nitroaniline	SW846-8270C	<280	ug/kg	02/13/06
Pyridine	SW846-8270C	<280	ug/kg	02/13/06



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-01W-Confirm  
 NYDEC

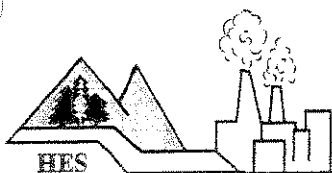
H.E.S. #: 060210C01 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Dimethylphthalate	SW846-8270C	<280	ug/kg	02/13/06
Acenaphthylene	SW846-8270C	<280	ug/kg	02/13/06
2,6-Dinitrotoluene	SW846-8270C	<280	ug/kg	02/13/06
Acenaphthene	SW846-8270C	<280	ug/kg	02/13/06
2,4-Dinitrophenol	SW846-8270C	<280	ug/kg	02/13/06
Dibenzofuran	SW846-8270C	<280	ug/kg	02/13/06
4-Nitrophenol	SW846-8270C	<280	ug/kg	02/13/06
2,4-Dinitrotoluene	SW846-8270C	<280	ug/kg	02/13/06
Fluorene	SW846-8270C	<280	ug/kg	02/13/06
Diethylphthalate	SW846-8270C	<280	ug/kg	02/13/06
4-Chlorophenyl-phenylether	SW846-8270C	<280	ug/kg	02/13/06
2,6-Dinitro-2-methylphenol	SW846-8270C	<280	ug/kg	02/13/06
4-Nitroaniline	SW846-8270C	<280	ug/kg	02/13/06
n-Nitrosodiphenylamine	SW846-8270C	<280	ug/kg	02/13/06
4-Bromophenyl-phenylether	SW846-8270C	<280	ug/kg	02/13/06
Hexachlorobenzene	SW846-8270C	<280	ug/kg	02/13/06
Pentachlorophenol	SW846-8270C	<280	ug/kg	02/13/06
Phenanthrene	SW846-8270C	<280	ug/kg	02/13/06
Anthracene	SW846-8270C	<280	ug/kg	02/13/06
Di-n-butylphthalate	SW846-8270C	<280	ug/kg	02/13/06
Fluoranthene	SW846-8270C	<280	ug/kg	02/13/06
Pyrene	SW846-8270C	<280	ug/kg	02/13/06
Butylbenzylphthalate	SW846-8270C	<280	ug/kg	02/13/06
Benzo (a) anthracene	SW846-8270C	<280	ug/kg	02/13/06
Chrysene	SW846-8270C	<280	ug/kg	02/13/06
bis (2-Ethylhexyl) phthalate	SW846-8270C	<280	ug/kg	02/13/06
Di-n-octylphthalate	SW846-8270C	<280	ug/kg	02/13/06
Benzo (b) fluoranthene	SW846-8270C	<280	ug/kg	02/13/06
Benzo (k) fluoranthene	SW846-8270C	<280	ug/kg	02/13/06
Benzo (a) pyrene	SW846-8270C	<280	ug/kg	02/13/06
Indeno (1,2,3-cd) pyrene	SW846-8270C	<280	ug/kg	02/13/06
Dibenzo (a,h) anthracene	SW846-8270C	<280	ug/kg	02/13/06
Benzo (g,h,i) perylene	SW846-8270C	<280	ug/kg	02/13/06

Non-Target Peaks

Negative





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CLIENT: Horizon Environmental

DATE SAMPLED: 02/09/06

SAMPLE DESCRIPTION: LN-02W-Confirm  
NYDEC

DATE RECEIVED: 02/10/06

MATRIX: Soil

TIME SAMPLED: 3:30 pm

LOCATION: Shenango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060210C02

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1221	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1232	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1242	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1248	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1254	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1260	SW846-8082	<0.03	mg/kg	02/13/06
Total Solids	EPA 160.3	69	%	02/13/06



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Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

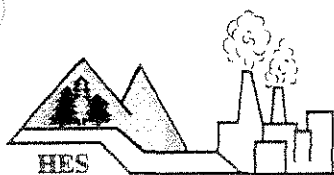
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-02W-Confirm  
NYDEC

H.E.S. #: 060210C02 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Phenol	SW846-8270C	<360	ug/kg	02/13/06
bis(2-Chloroethyl)ether	SW846-8270C	<360	ug/kg	02/13/06
2-Chlorophenol	SW846-8270C	<360	ug/kg	02/13/06
1,3-Dichlorobenzene	SW846-8270C	<360	ug/kg	02/13/06
1,4-Dichlorobenzene	SW846-8270C	<360	ug/kg	02/13/06
1,2-Dichlorobenzene	SW846-8270C	<360	ug/kg	02/13/06
4-Methylphenol	SW846-8270C	<360	ug/kg	02/13/06
2-Methylphenol/3-Methylphenol	SW846-8270C	<360	ug/kg	02/13/06
bis(2-chloroisopropyl)ether	SW846-8270C	<360	ug/kg	02/13/06
n-Nitroso-di-n-propylamine	SW846-8270C	<360	ug/kg	02/13/06
Hexachloroethane	SW846-8270C	<360	ug/kg	02/13/06
Nitrobenzene	SW846-8270C	<360	ug/kg	02/13/06
2-Nitrophenol	SW846-8270C	<360	ug/kg	02/13/06
bis(2-Chloroethoxy)methane	SW846-8270C	<360	ug/kg	02/13/06
2,4-Dichlorophenol	SW846-8270C	<360	ug/kg	02/13/06
1,2,4-Trichlorobenzene	SW846-8270C	<360	ug/kg	02/13/06
4-Chloroaniline	SW846-8270C	<360	ug/kg	02/13/06
Hexachlorobutadiene	SW846-8270C	<360	ug/kg	02/13/06
4-Chloro-3-methylphenol	SW846-8270C	<360	ug/kg	02/13/06
2,4,6-Trichlorophenol	SW846-8270C	<360	ug/kg	02/13/06
Hexachlorocyclopentadiene	SW846-8270C	<360	ug/kg	02/13/06
2-Chloronaphthalene	SW846-8270C	<360	ug/kg	02/13/06
2-Nitroaniline	SW846-8270C	<360	ug/kg	02/13/06
3-Nitroaniline	SW846-8270C	<360	ug/kg	02/13/06
Pyridine	SW846-8270C	<360	ug/kg	02/13/06



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 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

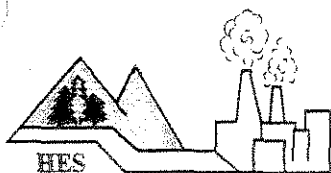
SAMPLE DESCRIPTION: LN-02W-Confirm  
 NYDEC

H.E.S. #: 060210C02 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Dimethylphthalate	SW846-8270C	<360	ug/kg	02/13/06
Acenaphthylene	SW846-8270C	<360	ug/kg	02/13/06
2,6-Dinitrotoluene	SW846-8270C	<360	ug/kg	02/13/06
Acenaphthene	SW846-8270C	<360	ug/kg	02/13/06
2,4-Dinitrophenol	SW846-8270C	<360	ug/kg	02/13/06
Dibenzofuran	SW846-8270C	<360	ug/kg	02/13/06
4-Nitrophenol	SW846-8270C	<360	ug/kg	02/13/06
2,4-Dinitrotoluene	SW846-8270C	<360	ug/kg	02/13/06
Fluorene	SW846-8270C	<360	ug/kg	02/13/06
Diethylphthalate	SW846-8270C	<360	ug/kg	02/13/06
4-Chlorophenyl-phenylether	SW846-8270C	<360	ug/kg	02/13/06
2,6-Dinitro-2-methylphenol	SW846-8270C	<360	ug/kg	02/13/06
4-Nitroaniline	SW846-8270C	<360	ug/kg	02/13/06
n-Nitrosodiphenylamine	SW846-8270C	<360	ug/kg	02/13/06
4-Bromophenyl-phenylether	SW846-8270C	<360	ug/kg	02/13/06
Hexachlorobenzene	SW846-8270C	<360	ug/kg	02/13/06
Pentachlorophenol	SW846-8270C	<360	ug/kg	02/13/06
Phenanthrene	SW846-8270C	<360	ug/kg	02/13/06
Anthracene	SW846-8270C	<360	ug/kg	02/13/06
Di-n-butylphthalate	SW846-8270C	<360	ug/kg	02/13/06
Fluoranthene	SW846-8270C	<360	ug/kg	02/13/06
Pyrene	SW846-8270C	<360	ug/kg	02/13/06
Butylbenzylphthalate	SW846-8270C	<360	ug/kg	02/13/06
Benzo(a)anthracene	SW846-8270C	<360	ug/kg	02/13/06
Chrysene	SW846-8270C	<360	ug/kg	02/13/06
bis(2-Ethylhexyl)phthalate	SW846-8270C	<360	ug/kg	02/13/06
Di-n-octylphthalate	SW846-8270C	<360	ug/kg	02/13/06
Benzo(b)fluoranthene	SW846-8270C	490	ug/kg	02/13/06
Benzo(k)fluoranthene	SW846-8270C	490	ug/kg	02/13/06
Benzo(a)pyrene	SW846-8270C	<360	ug/kg	02/13/06
Indeno(1,2,3-cd)pyrene	SW846-8270C	<360	ug/kg	02/13/06
Dibenzo(a,h)anthracene	SW846-8270C	<360	ug/kg	02/13/06
Benzo(g,h,i)perylene	SW846-8270C	<360	ug/kg	02/13/06

Non-Target Peaks

Negative



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/09/06

SAMPLE DESCRIPTION: LN-03W-Confirm  
NYDEC

DATE RECEIVED: 02/10/06

MATRIX: Soil

TIME SAMPLED: 3:30 pm

LOCATION: Shenango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060210C03

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1221	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1232	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1242	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1248	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1254	SW846-8082	<0.03	mg/kg	02/13/06
Aroclor 1260	SW846-8082	<0.03	mg/kg	02/13/06
Total Solids	EPA 160.3	79	%	02/13/06



HUDSON ENVIRONMENTAL SERVICES, INC.

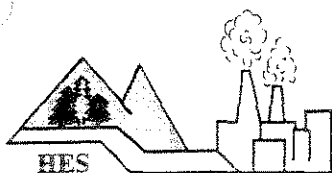
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803  
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803  
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: LN-03W-Confirm  
NYDEC

H.E.S. #: 060210C03 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Phenol	SW846-8270C	<330	ug/kg	02/13/06
bis(2-Chloroethyl)ether	SW846-8270C	<330	ug/kg	02/13/06
2-Chlorophenol	SW846-8270C	<330	ug/kg	02/13/06
1,3-Dichlorobenzene	SW846-8270C	<330	ug/kg	02/13/06
1,4-Dichlorobenzene	SW846-8270C	<330	ug/kg	02/13/06
1,2-Dichlorobenzene	SW846-8270C	<330	ug/kg	02/13/06
4-Methylphenol	SW846-8270C	<330	ug/kg	02/13/06
2-Methylphenol/3-Methylphenol	SW846-8270C	<330	ug/kg	02/13/06
bis(2-chloroisopropyl)ether	SW846-8270C	<330	ug/kg	02/13/06
n-Nitroso-di-n-propylamine	SW846-8270C	<330	ug/kg	02/13/06
hexachloroethane	SW846-8270C	<330	ug/kg	02/13/06
Nitrobenzene	SW846-8270C	<330	ug/kg	02/13/06
2-Nitrophenol	SW846-8270C	<330	ug/kg	02/13/06
bis(2-Chloroethoxy)methane	SW846-8270C	<330	ug/kg	02/13/06
2,4-Dichlorophenol	SW846-8270C	<330	ug/kg	02/13/06
1,2,4-Trichlorobenzene	SW846-8270C	<330	ug/kg	02/13/06
4-Chloroaniline	SW846-8270C	680	ug/kg	02/13/06
Hexachlorobutadiene	SW846-8270C	<330	ug/kg	02/13/06
4-Chloro-3-methylphenol	SW846-8270C	<330	ug/kg	02/13/06
2,4,6-Trichlorophenol	SW846-8270C	<330	ug/kg	02/13/06
Hexachlorocyclopentadiene	SW846-8270C	<330	ug/kg	02/13/06
2-Chloronaphthalene	SW846-8270C	<330	ug/kg	02/13/06
2-Nitroaniline	SW846-8270C	<330	ug/kg	02/13/06
3-Nitroaniline	SW846-8270C	<330	ug/kg	02/13/06
Pyridine	SW846-8270C	<330	ug/kg	02/13/06



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CLIENT: Horizon Environmental

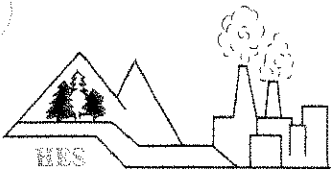
SAMPLE DESCRIPTION: LN-03W-Confirm  
 NYDEC

H.E.S. #: 060210C03 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Dimethylphthalate	SW846-8270C	<330	ug/kg	02/13/06
Acenaphthylene	SW846-8270C	<330	ug/kg	02/13/06
2,6-Dinitrotoluene	SW846-8270C	<330	ug/kg	02/13/06
Acenaphthene	SW846-8270C	<330	ug/kg	02/13/06
2,4-Dinitrophenol	SW846-8270C	<330	ug/kg	02/13/06
Dibenzofuran	SW846-8270C	1,100	ug/kg	02/13/06
4-Nitrophenol	SW846-8270C	1,300	ug/kg	02/13/06
2,4-Dinitrotoluene	SW846-8270C	<330	ug/kg	02/13/06
Fluorene	SW846-8270C	<330	ug/kg	02/13/06
Diethylphthalate	SW846-8270C	<330	ug/kg	02/13/06
4-Chlorophenyl-phenylether	SW846-8270C	<330	ug/kg	02/13/06
2,6-Dinitro-2-methylphenol	SW846-8270C	<330	ug/kg	02/13/06
4-Nitroaniline	SW846-8270C	<330	ug/kg	02/13/06
n-Nitrosodiphenylamine	SW846-8270C	<330	ug/kg	02/13/06
4-Bromophenyl-phenylether	SW846-8270C	<330	ug/kg	02/13/06
Hexachlorobenzene	SW846-8270C	<330	ug/kg	02/13/06
Pentachlorophenol	SW846-8270C	<330	ug/kg	02/13/06
Phenanthrene	SW846-8270C	16,000	ug/kg	02/13/06
Anthracene	SW846-8270C	7,800	ug/kg	02/13/06
Di-n-butylphthalate	SW846-8270C	<330	ug/kg	02/13/06
Fluoranthene	SW846-8270C	22,000	ug/kg	02/13/06
Pyrene	SW846-8270C	21,000	ug/kg	02/13/06
Butylbenzylphthalate	SW846-8270C	<330	ug/kg	02/13/06
Benzo (a) anthracene	SW846-8270C	8,000	ug/kg	02/13/06
Chrysene	SW846-8270C	8,000	ug/kg	02/13/06
bis (2-Ethylhexyl) phthalate	SW846-8270C	<330	ug/kg	02/13/06
Di-n-octylphthalate	SW846-8270C	<330	ug/kg	02/13/06
Benzo (b) fluoranthene	SW846-8270C	9,200	ug/kg	02/13/06
Benzo (k) fluoranthene	SW846-8270C	2,600	ug/kg	02/13/06
Benzo (a) pyrene	SW846-8270C	6,600	ug/kg	02/13/06
Indeno (1,2,3-cd) pyrene	SW846-8270C	3,600	ug/kg	02/13/06
Dibenzo (a,h) anthracene	SW846-8270C	1,200	ug/kg	02/13/06
Benzo (g,h,i) perylene	SW846-8270C	2,800	ug/kg	02/13/06

Non-Target Peaks

Negative



HUDSON ENVIRONMENTAL SERVICES, INC.

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ANALYTICAL TEST RESULTS  
N.Y.S.D.O.H. LAB ID#11140

CLIENT: Horizon Environmental

DATE SAMPLED: 02/14/06

SAMPLE DESCRIPTION: TG-0-03 Characterization  
NYDEC

DATE RECEIVED: 02/15/06

MATRIX: Soil

TIME SAMPLED: 4:15 pm

LOCATION: Shenango Steel Site

SAMPLE TYPE: Composite

H.E.S. #: 060215B01

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	9.89	su	02/16/06
Ignitability	SW846-1010 (Modified)	>212	<sup>0</sup> F	02/16/06
H	SW846-8100 (Modified)	<63	mg/kg	02/16/06
Total PCB'S	SW846-8082	<0.03	mg/kg	02/17/06
Total Solids	EPA 160.3	80	%	02/16/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

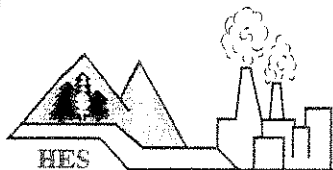
SAMPLE DESCRIPTION: TG-0-03 characterization

H.E.S. #: 060215B01 (Continued)

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)  
SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	02/16/06	5.0
Barium	SW846-6010B	0.95	mg/l	02/16/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Cadmium	SW846-6010B	<0.003	mg/l	02/16/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	100.0
Chloroform	SW846-8260B	0.0007	mg/l	02/16/06	6.0
Chromium	SW846-6010B	<0.007	mg/l	02/16/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0093	mg/l	02/16/06	200.0
o-Cresol	SW846-8270C	<0.0093	mg/l	02/16/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0093	mg/l	02/16/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0093	mg/l	02/16/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0093	mg/l	02/16/06	0.5
Hexachloroethane	SW846-8270C	<0.0093	mg/l	02/16/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/16/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/16/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/16/06	200.0
Nitrobenzene	SW846-8270C	<0.0093	mg/l	02/16/06	2.0
Pentachlorophenol	SW846-8270C	<0.0093	mg/l	02/16/06	100.0
Pyridine	SW846-8270C	<0.0093	mg/l	02/16/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/16/06	1.0
Silver	SW846-7760A	0.025	mg/l	02/16/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0093	mg/l	02/16/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0093	mg/l	02/16/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.2





HUDSON ENVIRONMENTAL SERVICES, INC.

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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/14/06

SAMPLE DESCRIPTION: TG-0-04 Characterization  
NYDEC

DATE RECEIVED: 02/15/06

MATRIX: Soil

TIME SAMPLED: 4:15 pm

LOCATION: Shenango Steel Site

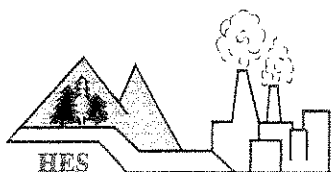
SAMPLE TYPE: Composite

H.E.S. #: 060215B02

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
pH	SW846-9055	9.11	su	02/16/06
Ignitability	SW846-1010 (Modified)	>212	°F	02/16/06
TPH	SW846-8100 (Modified)	<61	mg/kg	02/16/06
Total PCB'S	SW846-8082	100	mg/kg	02/17/06
Total Solids	EPA 160.3	82	%	02/16/06

\*Results on a dry weight basis.



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CLIENT: Horizon Environmental

SAMPLE DESCRIPTION: TG-0-04 characterization

H.E.S. #: 060215B02 (Continued)

## TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	TCLP REGULATORY LEVELS (mg/l)
Arsenic	SW846-6010B	0.057	mg/l	02/16/06	5.0
Barium	SW846-6010B	0.74	mg/l	02/16/06	100.0
Benzene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Cadmium	SW846-6010B	0.009	mg/l	02/16/06	1.0
Carbon Tetrachloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
Chlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	100.0
Chloroform	SW846-8260B	<0.0005	mg/l	02/16/06	6.0
Chromium	SW846-6010B	<0.007	mg/l	02/16/06	5.0
m-Cresol/p-Cresol	SW846-8270C	<0.0091	mg/l	02/16/06	200.0
o-Cresol	SW846-8270C	<0.0091	mg/l	02/16/06	200.0
1,4-Dichlorobenzene	SW846-8260B	<0.0005	mg/l	02/16/06	7.5
1,2-Dichloroethane	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
1,1-Dichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
2,4-Dinitrotoluene	SW846-8270C	<0.0091	mg/l	02/16/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0091	mg/l	02/16/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0091	mg/l	02/16/06	0.5
Hexachloroethane	SW846-8270C	<0.0091	mg/l	02/16/06	3.0
Lead	SW846-6010B	<0.042	mg/l	02/16/06	5.0
Mercury	SW846-7470A	<0.001	mg/l	02/16/06	0.2
Methyl Ethyl Ketone	SW846-8260B	<0.010	mg/l	02/16/06	200.0
Nitrobenzene	SW846-8270C	<0.0091	mg/l	02/16/06	2.0
Pentachlorophenol	SW846-8270C	<0.0091	mg/l	02/16/06	100.0
Pyridine	SW846-8270C	<0.0091	mg/l	02/16/06	5.0
Selenium	SW846-6010B	<0.057	mg/l	02/16/06	1.0
Silver	SW846-7760A	0.025	mg/l	02/16/06	5.0
Tetrachloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.7
Trichloroethylene	SW846-8260B	<0.0005	mg/l	02/16/06	0.5
2,4,5-Trichlorophenol	SW846-8270C	<0.0091	mg/l	02/16/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0091	mg/l	02/16/06	2.0
Vinyl Chloride	SW846-8260B	<0.0005	mg/l	02/16/06	0.2



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Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/14/06

SAMPLE DESCRIPTION: TG-A-01-Confirm  
NYDEC

DATE RECEIVED: 02/15/06

MATRIX: Soil

TIME SAMPLED: 3:00 pm

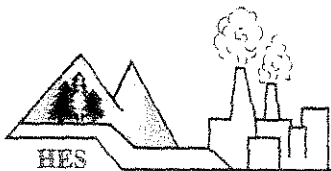
LOCATION: Shenango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060215B03

SAMPLER: S.Clary/Horizon Env.

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>	<u>TEST DATE</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1221	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1232	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1242	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1248	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1254	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1260	SW846-8082	<0.03	mg/kg	02/15/06
Total Solids	EPA 160.3	74	%	02/16/06



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Horizon Environmental

DATE SAMPLED: 02/14/06

SAMPLE DESCRIPTION: TG-A-04-Confirm  
NYDEC

DATE RECEIVED: 02/15/06

MATRIX: Soil

TIME SAMPLED: 3:00 pm

LOCATION: Sherango Steel Site

SAMPLE TYPE: Grab

H.E.S. #: 060215B04

SAMPLER: S.Clary/Horizon Env.

PARAMETER	METHOD	RESULT*	UNITS	TEST DATE
Aroclor 1016	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1221	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1232	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1242	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1248	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1254	SW846-8082	<0.03	mg/kg	02/15/06
Aroclor 1260	SW846-8082	0.03	mg/kg	02/15/06
Total Solids	EPA 160.3	76	%	02/16/06

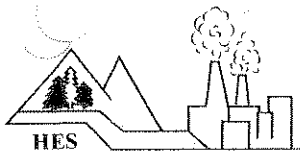
Approval By:

*Mirza M. Hussain*

Technical Director  
Dr. Mirza M. Hussain

Date: February 21, 2006

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# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803  
 Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803  
 Phone: 518/747-1060 Fax: 518/747-1062

## CHAIN OF CUSTODY RECORD/ Lab Work Request

Client HES Inc  
 Client Contact/Person # Scott Clary  
 Project Location Shenandoah Steel  
 Purchase Order \_\_\_\_\_  
 HES Contact Scott Clary

Mail Address HES, Inc.  
590A Cullen Rd.  
Chickadee Twp. PA  
 Phone # 717 538 8522 10064

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
06022060	LN-06W	2/17	3:00	A	Soil	X	1	SVOC <sup>3</sup> (Cat. B) *
B02	LN-03WR	2/17	3:00	A	Soil	X	1	SVOC <sup>3</sup> ↓
B03	LN-07W	2/17	4:00	A	Soil	X	1	SVOC <sup>3</sup> ↓
B04	LN-08W	2/17	4:00	A	Soil	✓	1	SVOC <sup>3</sup> ↓
B05	LN-09W	2/17	4:00	A	Soil	✓	1	SVOC <sup>3</sup> ↓
				A				
				P				
				A				
				P				
				A				
				P				

Matrix  
S - Soil  
SE - Sediment  
SO - Solid

SL - Sludge  
O - Oil  
DW - Drinking Water  
GW - Ground Water

SW - Surface Water  
L - Leachate  
A - Air  
WI - Wipe

DS - Drum Solids  
DL - Drum Liquids  
X - Other  
WW - Waste Water

Special Instructions: PHB 2/20/06 11:30 AM as per  
\* LN-06W broken scales all SVOC  
Cat B

Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>2/17/06 3:00pm</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>2/17 4:30pm</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) _____	Date/Time _____	Received by: (Signature) _____	Date/Time _____
Dispatched by: (Signature) _____	Method of Shipment: _____		Date/Time _____
Received @ Laboratory: <u>[Signature]</u>	Date/Time <u>2/20/06 10:30 AM</u>	Turnaround Time: <u>[Signature]</u>	Lab Approval: _____

HES Use Only	
Samples Were: <input checked="" type="checkbox"/> Shipped or <input type="checkbox"/> Hand Delivered NOTES:	
2. Ambient or Chilled NOTES: <u>IDTC</u>	
3. Received Broken/ Leaking (Improperly Sealed) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NOTES:	
4. Properly Preserved NOTES: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
5. Received Within Holding Times <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NOTES:	
COC Tape Was: 1. Present on Outer Package <input checked="" type="checkbox"/> Y <input type="checkbox"/> N 2. Unbroken on Outer Package <input checked="" type="checkbox"/> Y <input type="checkbox"/> N 3. Present on Sample <input checked="" type="checkbox"/> Y <input type="checkbox"/> N 4. Unbroken on Sample NOTES: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
COC Record Was: 1. Present upon Receipt of Samples <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Discrepancies Between Sample Labels and COC Record? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NOTES:	

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-06W

HES Lab I.D.#: 060220B01

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/21/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<300	ug/kg
bis-(2-Chloroethyl) ether	SW846-8270C	<300	ug/kg
2-Chlorophenol	SW846-8270C	<300	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<300	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<300	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<300	ug/kg
4-Methylphenol	SW846-8270C	<300	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<300	ug/kg
bis(2-chloroisopropyl) ether	SW846-8270C	<300	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<300	ug/kg
Hexachloroethane	SW846-8270C	<300	ug/kg
Nitrobenze	SW846-8270C	<300	ug/kg
2-Nitrophenol	SW846-8270C	<300	ug/kg
Bis-(2-chloroethoxy) methane	SW846-8270C	<300	ug/kg
2,4-Dichlorophenol	SW846-8270C	<300	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<300	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-06W

HES Lab I.D.#: 060220B01 (Continued)

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/21/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<300	ug/kg
Hexachlorobutadiene	SW846-8270C	<300	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<300	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<300	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<300	ug/kg
2-Chloronaphthalene	SW846-8270C	<300	ug/kg
2-Nitroaniline	SW846-8270C	<300	ug/kg
3-Nitroaniline	SW846-8270C	<300	ug/kg
Pyridine	SW846-8270C	<300	ug/kg
Dimethylphthalate	SW846-8270C	<300	ug/kg
Acenaphthylene	SW846-8270C	<300	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<300	ug/kg
Acenaphthene	SW846-8270C	<300	ug/kg
2,4-Dinitrophenol	SW846-8270C	<300	ug/kg
Dibenzofuran	SW846-8270C	<300	ug/kg
4-Nitrophenol	SW846-8270C	<300	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<300	ug/kg
Fluorene	SW846-8270C	<300	ug/kg
Diethylphthalate	SW846-8270C	<300	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<300	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<300	ug/kg
4-Nitroaniline	SW846-8270C	<300	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<300	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<300	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-06W

HES Lab I.D.#: 060220B01(continued)

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/21/06

Sample Wt. For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<300	ug/kg
Pentachlorophenol	SW846-8270C	<300	ug/kg
Phenanthrene	SW846-8270C	420	ug/kg
Anthracene	SW846-8270C	<300	ug/kg
Di-n-burylphthalate	SW846-8270C	<300	ug/kg
Fluoranthene	SW846-8270C	440	ug/kg
Pyrene	SW846-8270C	570	ug/kg
Butylbenzylphthalate	SW846-8270C	<300	ug/kg
Benzo(a)anthracene	SW846-8270C	<300	ug/kg
Chrysene	SW846-8270C	340	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<300	ug/kg
Di-n-octylphthalate	SW846-8270C	<300	ug/kg
Benzo(b)fluoranthene	SW846-8270C	<300	ug/kg
Benzo(k)fluroanthene	SW846-8270C	<300	ug/kg
Benzo(a)pyrene	SW846-8270C	<300	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<300	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<300	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<300	ug/kg
Total Solids	EPA 160.3	82	%



Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03WRHES Lab I.D.#: 060220B02Sample Matrix: SoilDate Sample Collected: 02/17/06Date Received: 02/20/06Date Prepared: 02/20/06Date Analyzed: 02/21/06Sample Wt For Extraction: 30gm/1mlSample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<320	ug/kg
bis-(2-Chloroethyl) ether	SW846-8270C	<320	ug/kg
2-Chlorophenol	SW846-8270C	<320	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<320	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<320	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<320	ug/kg
4-Methylphenol	SW846-8270C	<320	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<320	ug/kg
bis(2-chloroisopropyl) ether	SW846-8270C	<320	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<320	ug/kg
Hexachloroethane	SW846-8270C	<320	ug/kg
Nitrobenze	SW846-8270C	<320	ug/kg
2-Nitrophenol	SW846-8270C	<320	ug/kg
Bis-(2-chloroethoxy) methane	SW846-8270C	<320	ug/kg
2,4-Dichlorophenol	SW846-8270C	<320	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<320	ug/kg

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03WR

HES Lab I.D.#: 060220B02 (continued)

Sample Matrix: Soil  
 Date Sample Collected: 02/17/06  
 Date Received: 02/20/06  
 Date Prepared: 02/20/06  
 Date Analyzed: 02/21/06

Sample Wt For Extraction: 30gm/1ml  
 Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<320	ug/kg
Hexachlorobutadiene	SW846-8270C	<320	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<320	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<320	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<320	ug/kg
2-Chloronaphthalene	SW846-8270C	<320	ug/kg
2-Nitroaniline	SW846-8270C	<320	ug/kg
3-Nitroaniline	SW846-8270C	<320	ug/kg
Pyridine	SW846-8270C	<320	ug/kg
Dimethylphthalate	SW846-8270C	<320	ug/kg
Acenaphthylene	SW846-8270C	<320	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<320	ug/kg
Acenaphthene	SW846-8270C	740	ug/kg
2,4-Dinitrophenol	SW846-8270C	<320	ug/kg
Dibenzofuran	SW846-8270C	480	ug/kg
4-Nitrophenol	SW846-8270C	350	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<320	ug/kg
Fluorene	SW846-8270C	1,100	ug/kg
Diethylphthalate	SW846-8270C	<320	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<320	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<320	ug/kg
4-Nitroaniline	SW846-8270C	<320	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<320	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<320	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-03WR

HES Lab I.D.#: 060220B02 (continued)

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/21/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<320	ug/kg
Pentachlorophenol	SW846-8270C	<320	ug/kg
Phenanthrene	SW846-8270C	7,500	ug/kg
Anthracene	SW846-8270C	3,500	ug/kg
Di-n-burylphthalate	SW846-8270C	<320	ug/kg
Fluoranthene	SW846-8270C	9,100	ug/kg
Pyrene	SW846-8270C	10,000	ug/kg
Butylbenzylphthalate	SW846-8270C	<320	ug/kg
Benzo (a) anthracene	SW846-8270C	4,600	ug/kg
Chrysene	SW846-8270C	4,200	ug/kg
Bis (2-ethylhexyl) phthalate	SW846-8270C	<320	ug/kg
Di-n-octylphthalate	SW846-8270C	<320	ug/kg
Benzo (b) fluoranthene	SW846-8270C	4,900	ug/kg
Benzo (k) fluroanthene	SW846-8270C	1,500	ug/kg
Benzo (a) pyrene	SW846-8270C	3,100	ug/kg
Indeno (1,2,3-cd) pyrene	SW846-8270C	1,700	ug/kg
Dibenzo (a,h) anthracene	SW846-8270C	<320	ug/kg
Benzo (g,h,i) perylene	SW846-8270C	1,500	ug/kg
Total Solids	EPA 160.3	77	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07W

HES Lab I.D.#: 060220B03

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<320	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<320	ug/kg
2-Chlorophenol	SW846-8270C	<320	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<320	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<320	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<320	ug/kg
4-Methylphenol	SW846-8270C	<320	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<320	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<320	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<320	ug/kg
Hexachloroethane	SW846-8270C	<320	ug/kg
Nitrobenze	SW846-8270C	<320	ug/kg
2-Nitrophenol	SW846-8270C	<320	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<320	ug/kg
2,4-Dichlorophenol	SW846-8270C	<320	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<320	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07W

HES Lab I.D.#: 060220B03(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/17/06  
Date Received: 02/20/06  
Date Prepared: 02/20/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<320	ug/kg
Hexachlorobutadiene	SW846-8270C	<320	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<320	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<320	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<320	ug/kg
2-Chloronaphthalene	SW846-8270C	<320	ug/kg
2-Nitroaniline	SW846-8270C	<320	ug/kg
3-Nitroaniline	SW846-8270C	<320	ug/kg
Pyridine	SW846-8270C	<320	ug/kg
Dimethylphthalate	SW846-8270C	<320	ug/kg
Acenaphthylene	SW846-8270C	<320	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<320	ug/kg
Acenaphthene	SW846-8270C	<320	ug/kg
2,4-Dinitrophenol	SW846-8270C	<320	ug/kg
Dibenzofuran	SW846-8270C	<320	ug/kg
4-Nitrophenol	SW846-8270C	<320	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<320	ug/kg
Fluorene	SW846-8270C	<320	ug/kg
Diethylphthalate	SW846-8270C	<320	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<320	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<320	ug/kg
4-Nitroaniline	SW846-8270C	<320	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<320	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<320	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07W

HES Lab I.D.#: 060220B03 (continued)

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<320	ug/kg
Pentachlorophenol	SW846-8270C	<320	ug/kg
Phenanthrene	SW846-8270C	490	ug/kg
Anthracene	SW846-8270C	<320	ug/kg
Di-n-burylphthalate	SW846-8270C	<320	ug/kg
Fluoranthene	SW846-8270C	590	ug/kg
Pyrene	SW846-8270C	590	ug/kg
Butylbenzylphthalate	SW846-8270C	<320	ug/kg
Benzo(a)anthracene	SW846-8270C	<320	ug/kg
Chrysene	SW846-8270C	380	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<320	ug/kg
Di-n-octylphthalate	SW846-8270C	<320	ug/kg
Benzo(b)fluoranthene	SW846-8270C	400	ug/kg
Benzo(k)fluroanthene	SW846-8270C	<320	ug/kg
Benzo(a)pyrene	SW846-8270C	<320	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<320	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<320	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<320	ug/kg
Total Solids	EPA 160.3	77	%

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-08W  
 HES Lab I.D.#: 060220B04

Sample Matrix: Soil  
 Date Sample Collected: 02/17/06  
 Date Received: 02/20/06  
 Date Prepared: 02/20/06  
 Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/lml  
 Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<310	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<310	ug/kg
2-Chlorophenol	SW846-8270C	<310	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<310	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<310	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<310	ug/kg
4-Methylphenol	SW846-8270C	<310	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<310	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<310	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<310	ug/kg
Hexachloroethane	SW846-8270C	<310	ug/kg
Nitrobenze	SW846-8270C	<310	ug/kg
2-Nitrophenol	SW846-8270C	<310	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<310	ug/kg
2,4-Dichlorophenol	SW846-8270C	<310	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<310	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-08W

HES Lab I.D.#: 060220B04 (continued)

Sample Matrix: Soil

Date Sample Collected: 02/17/06

Date Received: 02/20/06

Date Prepared: 02/20/06

Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<310	ug/kg
Hexachlorobutadiene	SW846-8270C	<310	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<310	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<310	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<310	ug/kg
2-Chloronaphthalene	SW846-8270C	<310	ug/kg
2-Nitroaniline	SW846-8270C	<310	ug/kg
3-Nitroaniline	SW846-8270C	<310	ug/kg
Pyridine	SW846-8270C	<310	ug/kg
Dimethylphthalate	SW846-8270C	<310	ug/kg
Acenaphthylene	SW846-8270C	<310	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<310	ug/kg
Acenaphthene	SW846-8270C	<310	ug/kg
2,4-Dinitrophenol	SW846-8270C	<310	ug/kg
Dibenzofuran	SW846-8270C	<310	ug/kg
4-Nitrophenol	SW846-8270C	<310	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<310	ug/kg
Fluorene	SW846-8270C	<310	ug/kg
Diethylphthalate	SW846-8270C	<310	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<310	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<310	ug/kg
4-Nitroaniline	SW846-8270C	<310	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<310	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<310	ug/kg



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-08W

HES Lab I.D.#: 060220B04 (continued)

Sample Matrix: Soil  
Date Sample Collected: 02/17/06  
Date Received: 02/20/06  
Date Prepared: 02/20/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<310	ug/kg
Pentachlorophenol	SW846-8270C	<310	ug/kg
Phenanthrene	SW846-8270C	<310	ug/kg
Anthracene	SW846-8270C	<310	ug/kg
Di-n-burylphthalate	SW846-8270C	<310	ug/kg
Fluoranthene	SW846-8270C	<310	ug/kg
Pyrene	SW846-8270C	<310	ug/kg
Butylbenzylphthalate	SW846-8270C	<310	ug/kg
Benzo(a)anthracene	SW846-8270C	<310	ug/kg
Chrysene	SW846-8270C	<310	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<310	ug/kg
Di-n-octylphthalate	SW846-8270C	<310	ug/kg
Benzo(b)fluoranthene	SW846-8270C	<310	ug/kg
Benzo(k)fluroanthene	SW846-8270C	<310	ug/kg
Benzo(a)pyrene	SW846-8270C	<310	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<310	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<310	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<310	ug/kg
Total Solids	EPA 160.3	79	%

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-09W

HES Lab I.D.#: 060220B05

Sample Matrix: Soil  
 Date Sample Collected: 02/17/06  
 Date Received: 02/20/06  
 Date Prepared: 02/20/06  
 Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<290	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<290	ug/kg
2-Chlorophenol	SW846-8270C	<290	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<290	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<290	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<290	ug/kg
4-Methylphenol	SW846-8270C	<290	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<290	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<290	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<290	ug/kg
Hexachloroethane	SW846-8270C	<290	ug/kg
Nitrobenze	SW846-8270C	<290	ug/kg
2-Nitrophenol	SW846-8270C	<290	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<290	ug/kg
2,4-Dichlorophenol	SW846-8270C	<290	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<290	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-09W

HES Lab I.D.#: 060220B05 (continued)

Sample Matrix: Soil  
Date Sample Collected: 02/17/06  
Date Received: 02/20/06  
Date Prepared: 02/20/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<290	ug/kg
Hexachlorobutadiene	SW846-8270C	<290	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<290	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<290	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<290	ug/kg
2-Chloronaphthalene	SW846-8270C	<290	ug/kg
2-Nitroaniline	SW846-8270C	<290	ug/kg
3-Nitroaniline	SW846-8270C	<290	ug/kg
Pyridine	SW846-8270C	<290	ug/kg
Dimethylphthalate	SW846-8270C	<290	ug/kg
Acenaphthylene	SW846-8270C	<290	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<290	ug/kg
Acenaphthene	SW846-8270C	<290	ug/kg
2,4-Dinitrophenol	SW846-8270C	<290	ug/kg
Dibenzofuran	SW846-8270C	<290	ug/kg
4-Nitrophenol	SW846-8270C	<290	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<290	ug/kg
Fluorene	SW846-8270C	<290	ug/kg
Diethylphthalate	SW846-8270C	<290	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<290	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<290	ug/kg
4-Nitroaniline	SW846-8270C	<290	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<290	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<290	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-09W

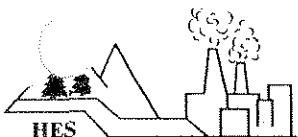
HES Lab I.D.#: 060220B05 (continued)

Sample Matrix: Soil  
 Date Sample Collected: 02/17/06  
 Date Received: 02/20/06  
 Date Prepared: 02/20/06  
 Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<290	ug/kg
Pentachlorophenol	SW846-8270C	17,000	ug/kg
Phenanthrene	SW846-8270C	8,200	ug/kg
Anthracene	SW846-8270C	<290	ug/kg
Di-n-burylphthalate	SW846-8270C	<290	ug/kg
Fluoranthene	SW846-8270C	20,000	ug/kg
Pyrene	SW846-8270C	18,000	ug/kg
Butylbenzylphthalate	SW846-8270C	<290	ug/kg
Benzo(a)anthracene	SW846-8270C	7,200	ug/kg
Chrysene	SW846-8270C	7,600	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<290	ug/kg
Di-n-octylphthalate	SW846-8270C	<290	ug/kg
Benzo(b)fluoranthene	SW846-8270C	7,200	ug/kg
Benzo(k)fluroanthene	SW846-8270C	7,200	ug/kg
Benzo(a)pyrene	SW846-8270C	5,700	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<290	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<290	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<290	ug/kg
Total Solids	EPA 160.3	85	%



# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls | South Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY  
Lab Work

Client HES, Inc  
Client Contact/Person # Scott Clancy  
Project Location Shenango Steel  
Purchase Order 40363  
HES Contact S. Clancy

Mail Address HES, Inc  
590A CALLERY Rd  
Cranberry Twp, PA  
Phone # 724 538 8522 16066

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
DL0227AD	LN-07 Character #	2/24	4:10	Soil	Y		1	TPH & pH only
↓ AC227 (CAT B)	TG-Modern LF-224	2/24		Soil	X		1	TCLP Metals only
			A					
			A					
			P					
			P					
			A					
			P					
			A					
			P					
			A					
			P					
			A					
			P					

Matrix  
S - Soil  
SE - Sediment  
SO - Solid

SL - Sludge  
O - Oil  
DW - Drinking Water  
GW - Ground Water

SW - Surface Water  
L - Leachate  
A - Air  
WI - Wipe

DS - Drum Solids  
DL - Drum Liquids  
X - Other  
WW - Waste Water

Special Instructions:  
\* DL002/DL005, DL0223 MO

Sampled by: (Signature)	Date/Time <u>2/24 4:10 pm</u>	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time <u>2/24 4:50 pm</u>	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Dispatched by: (Signature)	Method of Shipment:		Date/Time
Received at Laboratory	Date/Time <u>2/24/06 10:20 am</u>	Turnaround Time:	Lab Approval:

HES Use Only	
Samples Were: 1. Shipped or Hand Delivered NOTES:	
2. Ambient or Chilled NOTES: <u>50c</u>	
3. Received Broken/ Leaking (Improperly Sealed) NOTES: <u>N</u>	
4. Properly Preserved NOTES: <u>Y</u> <u>N</u>	
5. Received Within Holding Times NOTES: <u>Y</u> <u>N</u>	
COC Tape Was: 1. Present on Outer Package <u>Y</u> <u>N</u>	
2. Unbroken on Outer Package <u>Y</u> <u>N</u>	
3. Present on Sample <u>Y</u> <u>N</u>	
4. Unbroken on Sample NOTES: <u>Y</u> <u>N</u>	
COC Record Was: 1. Present upon Receipt of Samples <u>Y</u> <u>N</u>	
Discrepancies Between Sample Labels and COC Record? <u>Y</u> <u>N</u>	
NOTES:	

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04 Characterization

HES Lab I.D.#: 060210C05,060223M01,060227A01

Sample Matrix: Soil

Date Sample Collected: 02/09/06

Date Received: 02/23/06

Date Prepared: 02/23/06

Date Analyzed: 02/24/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.16	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.08	mg/l	1.0
Copper	SW846-6010B	0.13	mg/l	NA
Lead	SW846-6010B	0.30	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Nickel	SW846-6010B	0.067	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	4.7 U	mg/l	NA

U = Sample was prepared and analyzed in accordance with all NELAC requirements with the following exception: Matrix Spike recoveries were outside of control limits, due to believed matrix bias.

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 10gm/5ml

Sample Prep: 8260B

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
Dichlorodifluoromethane	SW846-8260B	<15	0.5	ug/kg
Chloromethane	SW846-8260B	<15	0.5	ug/kg
Vinyl chloride	SW846-8260B	<15	0.5	ug/kg
Bromomethane	SW846-8260B	<15	0.5	ug/kg
Chloroethane	SW846-8260B	<15	0.5	ug/kg
Trichlorofluoromethane	SW846-8260B	<15	0.5	ug/kg
1,1-Dichloroethene	SW846-8260B	<15	0.5	ug/kg
Methylene chloride	SW846-8260B	<15	0.5	ug/kg
Trans-1,2-Dichloroethene	SW846-8260B	<15	0.5	ug/kg
1,1-Dichloroethane	SW846-8260B	<15	0.5	ug/kg
2,2-Dichloropropane	SW846-8260B	<15	0.5	ug/kg
cis-1,2-Dichloroethene	SW846-8260B	<15	0.5	ug/kg
Bromochloromethane	SW846-8260B	<15	0.5	ug/kg
Chloroform	SW846-8260B	<15	0.5	ug/kg
1,1,1-Trichloroethane	SW846-8260B	<15	0.5	ug/kg
Carbon Tetrachloride	SW846-8260B	<15	0.5	ug/kg
1,1-Dichloropropene	SW846-8260B	<15	0.5	ug/kg
Benzene	SW846-8260B	<15	0.5	ug/kg
1,2-Dichloroethane	SW846-8260B	<15	0.5	ug/kg
Trichloroethene	SW846-8260B	<15	0.5	ug/kg
1,2-Dichloropropane	SW846-8260B	<15	0.5	ug/kg
Dibromomethane	SW846-8260B	<15	0.5	ug/kg
Bromodichloromethane	SW846-8260B	<15	0.5	ug/kg
cis-1,3-Dichloropropene	SW846-8260B	<15	0.5	ug/kg
Toluene	SW846-8260B	22	0.5	ug/kg
trans-1,3-Dichloropropene	SW846-8260B	<15	0.5	ug/kg
1,1,2-Trichloroethane	SW846-8260B	<15	0.5	ug/kg
Tetrachloroethene	SW846-8260B	82	0.5	ug/kg
1,3-Dichloropropane	SW846-8260B	<15	0.5	ug/kg
Dibromochloromethane	SW846-8260B	<15	0.5	ug/kg
1,2-Dibromoethane	SW846-8260B	<15	0.5	ug/kg

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 10gm/5ml

Sample Prep: 8260B

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
Chlorobenzene	SW846-8260B	<15	0.5	ug/kg
1,1,1,2-Tetrachloroethane	SW846-8260B	<15	0.5	ug/kg
Ethylbenzene	SW846-8260B	23	0.5	ug/kg
Total Xylenes	SW846-8260B	38	0.5	ug/kg
Styrene	SW846-8260B	<15	0.5	ug/kg
Bromoform	SW846-8260B	<15	0.5	ug/kg
Isopropylbenzene	SW846-8260B	<15	0.5	ug/kg
Bromobenzene	SW846-8260B	<15	0.5	ug/kg
1,1,2,2-Tetrachloroethane	SW846-8260B	<15	0.5	ug/kg
1,2,3-Trichloropropane	SW846-8260B	<15	0.5	ug/kg
n-Propylbenzene	SW846-8260B	<15	0.5	ug/kg
2-Chlorotoluene	SW846-8260B	<15	0.5	ug/kg
4-Chlorotoluene	SW846-8260B	<15	0.5	ug/kg
1,3,5-Trimethylbenzene	SW846-8260B	47	0.5	ug/kg
p-Isopropyltoluene	SW846-8260B	120	0.5	ug/kg
1,2,4-Trimethylbenzene	SW846-8260B	120	0.5	ug/kg
sec-Butylbenzene	SW846-8260B	22	0.5	ug/kg
1,3-Dichlorobenzene	SW846-8260B	<15	0.5	ug/kg
tert-Butylbenzene	SW846-8260B	<15	0.5	ug/kg
1,4-Dichlorobenzene	SW846-8260B	<15	0.5	ug/kg
1,2-Dichlorobenzene	SW846-8260B	<15	0.5	ug/kg
n-Butylbenzene	SW846-8260B	26	0.5	ug/kg
1,2-Dibromo-3-chloropropane	SW846-8260B	<15	0.5	ug/kg
1,2,4-Trichlorobenzene	SW846-8260B	<15	0.5	ug/kg
Hexachlorobutadiene	SW846-8260B	<15	0.5	ug/kg
Naphthalene	SW846-8260B	8,400	0.5	ug/kg
1,2,3-Trichlorobenzene	SW846-8260B	<15	0.5	ug/kg
MTBE	SW846-8260B	<15	0.5	ug/kg



SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 30gm/1ml

Sample Prep: 8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<300	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<300	ug/kg
2-Chlorophenol	SW846-8270C	<300	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<300	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<300	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<300	ug/kg
4-Methylphenol	SW846-8270C	<300	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<300	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<300	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<300	ug/kg
Hexachloroethane	SW846-8270C	<300	ug/kg
Nitrobenze	SW846-8270C	<300	ug/kg
2-Nitrophenol	SW846-8270C	<300	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<300	ug/kg
2,4-Dichlorophenol	SW846-8270C	<300	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<300	ug/kg
Naphthalene	SW846-8270C	<300	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 30gm/1ml

Sample Prep: 8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<300	ug/kg
Hexachlorobutadiene	SW846-8270C	<300	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<300	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<300	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<300	ug/kg
2-Chloronaphthalene	SW846-8270C	<300	ug/kg
2-Nitroaniline	SW846-8270C	<300	ug/kg
3-Nitroaniline	SW846-8270C	<300	ug/kg
Pyridine	SW846-8270C	<300	ug/kg
Dimethylphthalate	SW846-8270C	<300	ug/kg
Acenaphthylene	SW846-8270C	<300	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<300	ug/kg
Acenaphthene	SW846-8270C	660	ug/kg
2,4-Dinitrophenol	SW846-8270C	<300	ug/kg
Dibenzofuran	SW846-8270C	440	ug/kg
4-Nitrophenol	SW846-8270C	<300	ug/kg
2,4-Dinitrotoluene	SW846-8270C	500	ug/kg
Fluorene	SW846-8270C	<300	ug/kg
Diethylphthalate	SW846-8270C	<300	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<300	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<300	ug/kg
4-Nitroaniline	SW846-8270C	<300	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<300	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<300	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization

HES Lab I.D.#: 060210C05, 060223M01, 00227A01

Sample Wt For Extraction: 30gm/1ml

Sample Prep: 8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<300	ug/kg
Pentachlorophenol	SW846-8270C	<300	ug/kg
Phenanthrene	SW846-8270C	1,700	ug/kg
Anthracene	SW846-8270C	<300	ug/kg
Di-n-burylphthalate	SW846-8270C	<300	ug/kg
Fluoranthene	SW846-8270C	1,000	ug/kg
Pyrene	SW846-8270C	1,000	ug/kg
Butylbenzylphthalate	SW846-8270C	<300	ug/kg
Benzo(a)anthracene	SW846-8270C	<300	ug/kg
Chrysene	SW846-8270C	<300	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<300	ug/kg
Di-n-octylphthalate	SW846-8270C	<300	ug/kg
Benzo(b)fluoranthene	SW846-8270C	<300	ug/kg
Benzo(k)fluroanthene	SW846-8270C	<300	ug/kg
Benzo(a)pyrene	SW846-8270C	<300	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<300	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<300	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<300	ug/kg

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-07 Characterization Solid  
HES Lab I.D.#: 060210C05, 060223M01, 060227A01

Sample Matrix: Solid  
Date Sample Collected: 02/09/06  
Date Received: 02/10/06  
Date Prepared: 02/10/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30.12gms  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.03	ug/kg
Aroclor 1221	SW846-8082	<0.03	ug/kg
Aroclor 1232	SW846-8082	<0.03	ug/kg
Aroclor 1242	SW846-8082	<0.03	ug/kg
Aroclor 1248	SW846-8082	<0.03	ug/kg
Aroclor 1254	SW846-8082	<0.03	ug/kg
Aroclor 1260	SW846-8082	<0.03	ug/kg
Total Solids	EPA 160.3	81	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 1010 (Modified)

Customer I.D.#: LN-07 Characterization Solid  
HES Lab I.D.#: 060210C05, 060223M01, 060227A01

Sample Matrix: Solid  
Date Sample Collected: Not Specified  
Date Received: 02/23/06  
Date Prepared: 02/23/06  
Date Analyzed: 02/24/06

Sample Prep: SW846-1010 (Modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Ignitability	SW846-1010 (Modified)	>212	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-07 Characterization Solid

HES Lab I.D.#: 060210C05, 060223M01, 060227A01

Sample Matrix: Soil

Date Sample Collected: 02/24/06

Date Received: 02/27/06

Date Prepared: 02/27/06

Date Analyzed: 02/27/06

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
pH	SW846-9055	8.64	NA	su



# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803  
 Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803  
 Phone: 518/747-1060 Fax: 518/747-1062

## CHAIN OF CUSTODY RECORD/ Lab Work Request

Client HES, Inc.  
 Client Contact/Person # S. Plamy  
 Project Location Slattery's Steel  
 Purchase Order \_\_\_\_\_  
 HES Contact S. Plamy

Mail Address HES, Inc.  
590A CALIBURY Rd  
CRANBURY TWP PA  
 Phone # 717 538 8522

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
7003-001	TG-0-03 CHARACTERIZATION	2/14	4:15	SOIL	X		2	PH, Ignt, TPA, PCB, TELP metals, VOC/SVOC
7003-002	TG-0-04 CHARACTERIZATION	2/14	4:15	SOIL	X		2	
7003-003	TG-A-01 CONFIRM (CAT B)	2/14	3:00			X	1	TCL-PCB'S (CAT B)
7003-004	TG-A-04 CONFIRM (CAT B)	↓	3:00	↓		X	1	TCL-PCB'S

Matrix: SL - Sludge, O - Oil, SE - Sediment, SO - Solid

SW - Surface Water, L - Leachate, A - Air, WI - Wipe

DS - Drum Solids, DL - Drum Liquids, X - Other, WW - Waste Water

Special Instructions:

### HES Use Only

Samples Were:

1. Shipped or Hand Delivered  
NOTES:

2. Ambient or Chilled  
NOTES:

3. Received Broken/Leaking (Improperly Sealed)  
Y ☒ N ☐  
NOTES:

4. Properly Preserved  
NOTES: Y ☒ N ☐

5. Received Within Holding Times  
Y ☒ N ☐  
NOTES:

COC Tape Was:

1. Present on Outer Package Y ☒ N ☐

2. Unbroken on Outer Package Y ☒ N ☐

3. Present on Sample Y ☒ N ☐

4. Unbroken on Sample Y ☒ N ☐

COC Record Was:

1. Present upon Receipt of Samples Y ☒ N ☐

Discrepancies Between Sample Labels and COC Record? Y ☒ N ☐

NOTES:

Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>2/14 3:00 PM</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>2/14 5:15 PM</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) _____	Date/Time _____	Received by: (Signature) _____	Date/Time _____
Dispatched by: (Signature) _____	Method of Shipment: _____		Date/Time _____
Received @ Laboratory <u>[Signature]</u>	Date/Time <u>2/15/00 10:00 AM</u>	Turnaround Time: _____	Lab Approval: _____

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-A-01-CONFIRM  
HES Lab I.D.#: 060215B03

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/15/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg
Aroclor 1221	SW846-8082	<0.03	mg/kg
Aroclor 1232	SW846-8082	<0.03	mg/kg
Aroclor 1242	SW846-8082	<0.03	mg/kg
Aroclor 1248	SW846-8082	<0.03	mg/kg
Aroclor 1254	SW846-8082	<0.03	mg/kg
Aroclor 1260	SW846-8082	<0.03	mg/kg
Total Solids	EPA 160.3	74	%



Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-A-04-CONFIRM  
HES Lab I.D.#: 060215B04

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/15/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.03	mg/kg
Aroclor 1221	SW846-8082	<0.03	mg/kg
Aroclor 1232	SW846-8082	<0.03	mg/kg
Aroclor 1242	SW846-8082	<0.03	mg/kg
Aroclor 1248	SW846-8082	<0.03	mg/kg
Aroclor 1254	SW846-8082	<0.03	mg/kg
Aroclor 1260	SW846-8082	0.03	mg/kg
Total Solids	EPA 160.3	76	%



# HUDSON ENVIRO'NTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECO  
Lab Work Request

Client HES, Inc.  
Client Contact/Person # Scott Clary  
Project Location Sluiceway Steel  
Purchase Order \_\_\_\_\_  
HES Contact S. Clary 40274

Mail Address HES, Inc.  
590A CALDWAY Rd  
CLAMBERG Twp PA  
Phone # 724.538.8522 166N

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
<u>AB</u> 040215B01	TG-0-03 Characterization	2/14	4:15 P	SOIL	X		2	PH, Ignit, TPA, PCB, TELP, PHTALS, VOC, SVOC
<u>AB</u> B02	TG-0-04 Characterization	2/14	4:15 P	SOIL	X		2	
<u>AB</u> B03	TG-A-01 CONFIRM (CAT B)	2/14	3:00 P			X	1	TCL-PCB'S (CAT B)
<u>AB</u> B04	TG-A-04 CONFIRM (CAT B)		3:00 P			X	1	TCL-PCB'S
			A					
			P					
			A					
			P					
			A					
			P					

Matrix S - Soil SE - Sediment SO - Solid	SL - Sludge O - Oil DW - Drinking Water GW - Ground Water	SW - Surface Water L - Leachate A - Air WI - Wipe	DS - Drum Solids DL - Drum Liquids X - Other WW - Waste Water	Special Instructions:
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Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>2/14 3:02 PM</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>2/14 5:15 PM</u>	Received by: (Signature) _____	Date/Time _____
Relinquished by: (Signature) _____	Date/Time _____	Received by: (Signature) _____	Date/Time _____
Dispatched by: (Signature) <u>[Signature]</u>	Method of Shipment: _____	Date/Time _____	
Received at Laboratory <u>[Signature]</u>	Date/Time <u>2/15/14 10:10 AM</u>	Turnaround Time: _____	Lab Approval: _____

HES Use Only	
Samples Were: 1. Shipped or Hand Delivered NOTES:	
2. Ambient or Chilled NOTES: <u>13R</u>	
3. Received Broken/ Leaking (Improperly Scaled) Y <u>(N)</u> NOTES:	
4. Properly Preserved NOTES: <u>(Y)</u> N	
5. Received Within Holding Times Y <u>(N)</u> NOTES:	
COC Tape Was: 1. Present on Outer Package <u>(Y)</u> N	
2. Unbroken on Outer Package Y <u>(N)</u>	
3. Present on Sample <u>(Y)</u> N	
4. Unbroken on Sample NOTES: Y <u>(N)</u>	
COC Record Was: 1. Present upon Receipt of Samples <u>(Y)</u> N	
Discrepancies Between Sample Labels and COC Record? Y <u>(N)</u>	
NOTES:	

WHITE - Lab Copy

YELLOW - Sampler Copy

2

PINK - Generator Copy

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Barium	SW846-6010B	0.95	mg/l	100
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.025	mg/l	NA

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: LN-0-04 Characterization

HES Lab I.D.#: 060215B02

Sample Matrix: Soil

Date Sample Collected: 02/14/06

Date Received: 02/15/06

Date Prepared: 02/15/06

Date Analyzed: 02/16/06

Sample Wt For Extraction: 10gm/200ml

Sample Prep: TCLP METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	0.057	mg/l	5.0
Barium	SW846-6010B	0.74	mg/l	100
Cadmium	SW846-6010B	0.009	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Selenium	SW846-6010B	<0.057	mg/l	1.0
Silver	SW846-7760A	0.025	mg/l	NA

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)  
SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg/l)</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/16/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/16/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/16/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/16/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/16/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/16/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	2.0

SAMPLE DATA ANALYSIS SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-04 Characterization

HES Lab I.D.#: 060215B02

Sample Wt For Extraction: 48gm/960ml

Sample Prep: TCLP 8270C

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>	<u>TCLP REGULATOR LEVELS (mg/l)</u>
m-Cresol/p-Cresol	SW846-8270C	<0.0075	mg/l	02/16/06	200.0
o-Cresol	SW846-8270C	<0.0075	mg/l	02/16/06	200.0
2,4-Dinitrotoluene	SW846-8270C	<0.0075	mg/l	02/16/06	0.13
Hexachlorobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	0.13
Hexachlorobutadiene	SW846-8270C	<0.0075	mg/l	02/16/06	0.5
Hexachloroethane	SW846-8270C	<0.0075	mg/l	02/16/06	3.0
Nitrobenzene	SW846-8270C	<0.0075	mg/l	02/16/06	2.0
Pentachlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	100.0
Pyridine	SW846-8270C	<0.0075	mg/l	02/16/06	5.0
2,4,5-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	400.0
2,4,6-Trichlorophenol	SW846-8270C	<0.0075	mg/l	02/16/06	2.0

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-0-03 Characterization  
HES Lab I.D.#: 060215B01

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/17/06

Sample Amount For Extraction: 30gm/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	<0.03	mg/kg
Total Solid	EPA 160.3	88	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: TG-0-04 Characterization  
HES Lab I.D.#: 060215B02

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/17/06

Sample Amount For Extraction: 30gm/ml  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Total PCB	SW846-8082	100	mg/kg
Total Solid	EPA 160.3	82	%



Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

SAMPLE ANALYSIS DATA SHEET  
Method SW846 - 8015 (Modified)

Customer I.D.#: TG-0-03 Characterization  
HES Lab I.D.#: 060215B01

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

Sample Amt. For Extraction: 10gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<63	mg/kg

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

SAMPLE ANALYSIS DATA SHEET  
Method SW846 - 8015 (Modified)

Customer I.D.#: TG-0-04 Characterization  
HES Lab I.D.#: 060215B02

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

Sample Amt. For Extraction: 10gm/1ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<61	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 1010(Modified)

Customer I.D.#: TG-0-03 Characterization  
HES Lab I.D.#: 060215B01

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

Sample Prep: SW846-1010(Modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Ignitability	SW846-1010 (Modified)	>212	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 1010 (Modified)

Customer I.D.#: TG-0-04 Characterization  
HES Lab I.D.#: 060215B02

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

Sample Prep: SW846-1010 (Modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Ignitability	SW846-1010 (Modified)	>212	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-0-03 Characterization

HES Lab I.D.#: 060215B01

Sample Matrix: Soil

Date Sample Collected: 02/14/06

Date Received: 02/15/06

Date Prepared: 02/15/06

Date Analyzed: 02/16/06

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
pH	SW846-9055	9.89	NA	su

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

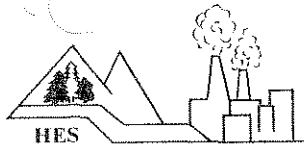
Customer I.D.#: TG-0-04 Characterization

HES Lab I.D.#: 060215B02

Sample Matrix: Soil  
Date Sample Collected: 02/14/06  
Date Received: 02/15/06  
Date Prepared: 02/15/06  
Date Analyzed: 02/16/06

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
pH	SW846-9055	9.11	NA	su

SCOTT: 211 FERRY BLVD. - SOUTH GLENS FALLS, NY



# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803  
 Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803  
 Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECORD/  
 Lab Work Request

Client HES, Inc  
 Client Contact/Person # Scott Clary  
 Project Location Shenando Steel  
 Purchase Order \_\_\_\_\_  
 HES Contact Scott Clary

Mail Address HES, Inc  
590 A CALLERY RD  
CLARKSBURG MD 21713  
 Phone # 7245388522

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
000217001	TG-001W confirm	2/16	3:45	SWL	X		1	TCL-PCBS (cat. B)
002	TG-002W confirm				X			↓ ↓
003	TG-PCB-216				X			Total PCB's only
004	LN-04W confirm				X			SVOC's (cat B)
005	LN-05W confirm				X			↓ ↓
006	TG-003F confirm				X			TCL-PCB's ↓
007	LN-06W confirm *	↓	↓	↓	X		↓	<del>TCL</del> SVOC's ↓
008	LN-DECON	↓	↓	↓	X		↓	SVOC's ↓

Matrix  
S=Soil  
SE-Sediment  
SO-Solid

SL-Sludge  
O-Oil  
DW-Drinking Water  
GW-Ground Water

SW-Surface Water  
L-Leachate  
A-Air  
WI-Wipe

DS-Drum Solids  
DL-Drum Liquids  
X-Other  
WW-Waste Water

Special Instructions:  
 \* oblate - Not included 12/17/16  
confirm called client 1/17/16

HES Use Only	
Samples Were: 1. Shipped or Hand Delivered NOTES:	
2. Ambient or Chilled NOTES:	
3. Received Broken/Leaking (Improperly Scaled) Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> NOTES:	
4. Properly Preserved NOTES: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
5. Received Within Holding Times Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NOTES:	
COC Tape Was: 1. Present on Outer Package Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
2. Unbroken on Outer Package Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
3. Present on Sample Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
4. Unbroken on Sample NOTES: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
COC Record Was: 1. Present upon Receipt of Samples Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Discrepancies Between Sample Labels and COC Record? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NOTES:	

Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>2/16 4:45 PM</u>	Received by: (Signature)	Date/Time <u>2/16 11:00</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>2/16 5:30 PM</u>	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Dispatched by: (Signature)	Method of Shipment:		Date/Time
Received @ Laboratory: <u>[Signature]</u>	Date/Time <u>2/16 10:30 AM</u>	Turnaround Time:	Lab Approval:

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

Run all samples with UPS LN 06W confirm

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-001W-Confirm  
HES Lab I.D.#: 060217C01

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.02	mg/kg
Aroclor 1221	SW846-8082	<0.02	mg/kg
Aroclor 1232	SW846-8082	<0.02	mg/kg
Aroclor 1242	SW846-8082	<0.02	mg/kg
Aroclor 1248	SW846-8082	<0.02	mg/kg
Aroclor 1254	SW846-8082	<0.02	mg/kg
Aroclor 1260	SW846-8082	0.24	mg/kg
Total Solids	EPA 160.3	87	%



Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-002W-Confirm  
HES Lab I.D.#: 060217C02

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<2.0	mg/kg
Aroclor 1221	SW846-8082	<2.0	mg/kg
Aroclor 1232	SW846-8082	<2.0	mg/kg
Aroclor 1242	SW846-8082	<2.0	mg/kg
Aroclor 1248	SW846-8082	<2.0	mg/kg
Aroclor 1254	SW846-8082	<2.0	mg/kg
Aroclor 1260	SW846-8082	23	mg/kg
Total Solids	EPA 160.3	85	%

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: TG-003F-Confirm  
HES Lab I.D.#: 060217C06

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction:  
Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.02	mg/kg
Aroclor 1221	SW846-8082	<0.02	mg/kg
Aroclor 1232	SW846-8082	<0.02	mg/kg
Aroclor 1242	SW846-8082	<0.02	mg/kg
Aroclor 1248	SW846-8082	<0.02	mg/kg
Aroclor 1254	SW846-8082	<0.02	mg/kg
Aroclor 1260	SW846-8082	0.2	mg/kg
Total Solids	EPA 160.3	86	%

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04W-Confirm

HES Lab I.D.#: 060217C04

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<290	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<290	ug/kg
2-Chlorophenol	SW846-8270C	<290	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<290	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<290	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<290	ug/kg
4-Methylphenol	SW846-8270C	<290	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<290	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<290	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<290	ug/kg
Hexachloroethane	SW846-8270C	<290	ug/kg
Nitrobenze	SW846-8270C	<290	ug/kg
2-Nitrophenol	SW846-8270C	<290	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<290	ug/kg
2,4-Dichlorophenol	SW846-8270C	<290	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<290	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04W-Confirm

HES Lab I.D.#: 060217C04(Continued)

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<290	ug/kg
Hexachlorobutadiene	SW846-8270C	<290	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<290	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<290	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<290	ug/kg
2-Chloronaphthalene	SW846-8270C	<290	ug/kg
2-Nitroaniline	SW846-8270C	<290	ug/kg
3-Nitroaniline	SW846-8270C	<290	ug/kg
Pyridine	SW846-8270C	<290	ug/kg
Dimethylphthalate	SW846-8270C	<290	ug/kg
Acenaphthylene	SW846-8270C	<290	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<290	ug/kg
Acenaphthene	SW846-8270C	1,760	ug/kg
2,4-Dinitrophenol	SW846-8270C	<290	ug/kg
Dibenzofuran	SW846-8270C	1,200	ug/kg
4-Nitrophenol	SW846-8270C	740	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<290	ug/kg
Fluorene	SW846-8270C	2,300	ug/kg
Diethylphthalate	SW846-8270C	<290	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<290	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<290	ug/kg
4-Nitroaniline	SW846-8270C	<290	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<290	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<290	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-04W-Confirm

HES Lab I.D.#: 060217C04(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1mlSample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<290	ug/kg
Pentachlorophenol	SW846-8270C	<290	ug/kg
Phenanthrene	SW846-8270C	12,000	ug/kg
Anthracene	SW846-8270C	6,200	ug/kg
Di-n-butylphthalate	SW846-8270C	<290	ug/kg
Fluoranthene	SW846-8270C	17,000	ug/kg
Pyrene	SW846-8270C	18,000	ug/kg
Butylbenzylphthalate	SW846-8270C	<290	ug/kg
Benzo(a)anthracene	SW846-8270C	11,000	ug/kg
Chrysene	SW846-8270C	94,000	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<290	ug/kg
Di-n-octylphthalate	SW846-8270C	<290	ug/kg
Benzo(b)fluoranthene	SW846-8270C	7,700	ug/kg
Benzo(k)fluoranthene	SW846-8270C	1,800	ug/kg
Benzo(a)pyrene	SW846-8270C	3,600	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	4,400	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	610	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	3,900	ug/kg
Total Solids	EPA 160.3	84	%

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05W-Confirm  
 HES Lab I.D.#: 060217C05

Sample Matrix: Soil  
 Date Sample Collected: 02/16/06  
 Date Received: 02/17/06  
 Date Prepared: 02/17/06  
 Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml  
 Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<310	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<310	ug/kg
2-Chlorophenol	SW846-8270C	<310	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<310	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<310	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<310	ug/kg
4-Methylphenol	SW846-8270C	<310	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<310	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<310	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<310	ug/kg
Hexachloroethane	SW846-8270C	<310	ug/kg
Nitrobenze	SW846-8270C	<310	ug/kg
2-Nitrophenol	SW846-8270C	<310	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<310	ug/kg
2,4-Dichlorophenol	SW846-8270C	<310	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<310	ug/kg

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05W-Confirm

HES Lab I.D.#: 060217C05(continued)

Sample Matrix: Soil

Date Sample Collected: 02/16/06

Date Received: 02/17/06

Date Prepared: 02/17/06

Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<310	ug/kg
Hexachlorobutadiene	SW846-8270C	<310	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<310	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<310	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<310	ug/kg
2-Chloronaphthalene	SW846-8270C	<310	ug/kg
2-Nitroaniline	SW846-8270C	<310	ug/kg
3-Nitroaniline	SW846-8270C	<310	ug/kg
Pyridine	SW846-8270C	<310	ug/kg
Dimethylphthalate	SW846-8270C	<310	ug/kg
Acenaphthylene	SW846-8270C	<310	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<310	ug/kg
Acenaphthene	SW846-8270C	<310	ug/kg
2,4-Dinitrophenol	SW846-8270C	<310	ug/kg
Dibenzofuran	SW846-8270C	530	ug/kg
4-Nitrophenol	SW846-8270C	365	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<310	ug/kg
Fluorene	SW846-8270C	780	ug/kg
Diethylphthalate	SW846-8270C	<310	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<310	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<310	ug/kg
4-Nitroaniline	SW846-8270C	<310	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<310	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<310	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-05W-Confirm

HES Lab I.D.#: 060217C05(continued)

Sample Matrix: Soil

Date Sample Collected: 02/16/06

Date Received: 02/17/06

Date Prepared: 02/17/06

Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<310	ug/kg
Pentachlorophenol	SW846-8270C	<310	ug/kg
Phenanthrene	SW846-8270C	2,500	ug/kg
Anthracene	SW846-8270C	1,200	ug/kg
Di-n-burylphthalate	SW846-8270C	<310	ug/kg
Fluoranthene	SW846-8270C	1,600	ug/kg
Pyrene	SW846-8270C	1,600	ug/kg
Butylbenzylphthalate	SW846-8270C	<310	ug/kg
Benzo(a)anthracene	SW846-8270C	730	ug/kg
Chrysene	SW846-8270C	730	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<310	ug/kg
Di-n-octylphthalate	SW846-8270C	<310	ug/kg
Benzo(b)fluoranthene	SW846-8270C	600	ug/kg
Benzo(k)fluroanthene	SW846-8270C	380	ug/kg
Benzo(a)pyrene	SW846-8270C	480	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<310	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<310	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<310	ug/kg
Total Solids	EPA 160.3	79	%



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-DECON

HES Lab I.D.#: 060217C07

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Phenol	SW846-8270C	<330	ug/kg
bis-(2-Chloroethyl)ether	SW846-8270C	<330	ug/kg
2-Chlorophenol	SW846-8270C	<330	ug/kg
1,3-Dichlorobenzene	SW846-8270C	<330	ug/kg
1,4-Dichlorobenzene	SW846-8270C	<330	ug/kg
1,2-Dichlorobenzene	SW846-8270C	<330	ug/kg
4-Methylphenol	SW846-8270C	<330	ug/kg
2-Methylphenol/3-Methylphenol	SW846-8270C	<330	ug/kg
bis(2-chloroisopropyl)ether	SW846-8270C	<330	ug/kg
n-Nitroso-di-n-propylamine	SW846-8270C	<330	ug/kg
Hexachloroethane	SW846-8270C	<330	ug/kg
Nitrobenze	SW846-8270C	<330	ug/kg
2-Nitrophenol	SW846-8270C	<330	ug/kg
Bis-(2-chloroethoxy)methane	SW846-8270C	<330	ug/kg
2,4-Dichlorophenol	SW846-8270C	<330	ug/kg
1,2,4-Trichlorobenzene	SW846-8270C	<330	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-DECON

HES Lab I.D.#: 060217C07 (continued)

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
4-Chloroaniline	SW846-8270C	<330	ug/kg
Hexachlorobutadiene	SW846-8270C	<330	ug/kg
4-Chloro-3-methylphenol	SW846-8270C	<330	ug/kg
2,4,6-Trichlorophenol	SW846-8270C	<330	ug/kg
Hexachlorocyclopentadiene	SW846-8270C	<330	ug/kg
2-Chloronaphthalene	SW846-8270C	<330	ug/kg
2-Nitroaniline	SW846-8270C	<330	ug/kg
3-Nitroaniline	SW846-8270C	<330	ug/kg
Pyridine	SW846-8270C	<330	ug/kg
Dimethylphthalate	SW846-8270C	<330	ug/kg
Acenaphthylene	SW846-8270C	<330	ug/kg
2,6-Dinitrotoluene	SW846-8270C	<330	ug/kg
Acenaphthene	SW846-8270C	<330	ug/kg
2,4-Dinitrophenol	SW846-8270C	<330	ug/kg
Dibenzofuran	SW846-8270C	<330	ug/kg
4-Nitrophenol	SW846-8270C	<330	ug/kg
2,4-Dinitrotoluene	SW846-8270C	<330	ug/kg
Fluorene	SW846-8270C	<330	ug/kg
Diethylphthalate	SW846-8270C	<330	ug/kg
4-Chlorophenyl-phenylether	SW846-8270C	<330	ug/kg
4,6-Dinitro-2-methylphenol	SW846-8270C	<330	ug/kg
4-Nitroaniline	SW846-8270C	<330	ug/kg
N-Nitrosodiphenylamine	SW846-8270C	<330	ug/kg
4-Bromophenyl-phenyl-ether	SW846-8270C	<330	ug/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-DECON

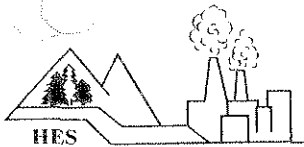
HES Lab I.D.#: 060217C07(continued)

Sample Matrix: Soil  
Date Sample Collected: 02/16/06  
Date Received: 02/17/06  
Date Prepared: 02/17/06  
Date Analyzed: 02/20/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: SW846-8270C

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Hexachlorobenzene	SW846-8270C	<330	ug/kg
Pentachlorophenol	SW846-8270C	<330	ug/kg
Phenanthrene	SW846-8270C	<330	ug/kg
Anthracene	SW846-8270C	<330	ug/kg
Di-n-butylphthalate	SW846-8270C	<330	ug/kg
Fluoranthene	SW846-8270C	<330	ug/kg
Pyrene	SW846-8270C	<330	ug/kg
Butylbenzylphthalate	SW846-8270C	<330	ug/kg
Benzo(a)anthracene	SW846-8270C	<330	ug/kg
Chrysene	SW846-8270C	<330	ug/kg
Bis(2-ethylhexyl)phthalate	SW846-8270C	<330	ug/kg
Di-n-octylphthalate	SW846-8270C	<330	ug/kg
Benzo(b)fluoranthene	SW846-8270C	<330	ug/kg
Benzo(k)fluoroanthene	SW846-8270C	<330	ug/kg
Benzo(a)pyrene	SW846-8270C	<330	ug/kg
Indeno(1,2,3-cd)pyrene	SW846-8270C	<330	ug/kg
Dibenzo(a,h)anthracene	SW846-8270C	<330	ug/kg
Benzo(g,h,i)perylene	SW846-8270C	<330	ug/kg
Total Solids	EPA 160.3	74	%



# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803  
Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803  
Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECORD/  
Lab Work Request

Client HES, Inc  
Client Contact/Person # Scott Clary  
Project Location Shawangunk Steel  
Purchase Order \_\_\_\_\_  
HES Contact S. Clary

Mail Address HES Inc  
390A CALVERT Rd  
CLARKSBURG, MD  
Phone # 724 538 8522

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
000322001	Basin 1 - 2-21 (Cat. B)	2/21	5:00	A	Soil	X	1	PCB, SVOC (Metals)
002	Basin 2 - 2-21	2/21	5:00	A		X	1	
003	Basin 3 - 2-21	2/21	5:00	A		X	1	Metals to consist of
004	Basin 4 - 2-21	2/21	5:00	A		X	1	Following elements
				A				Cd, Cr, A, Pb, Hg
				P				Ni, Zn, Cu, Se
				A				
				P				
005	LN-WATER-2110 (Cat B)	2/21	5:00	A	Water		1	pH, TPA, PCB, VOC, SVOC's, Metals

Matrix

S - Soil

SE - Sediment

SO - Solid

SL - Sludge

O - Oil

DW - Drinking Water

GW - Ground Water

SW - Surface Water

L - Leachate

A - Air

WI - Wipe

DS - Drum Solids

DL - Drum Liquids

X - Other

WW - Waste Water

Special Instructions: Client has been notified & will be qualified on report  
VOC not in proper container

Sampled by: (Signature) <u>[Signature]</u>	Date/Time <u>4:30 pm 2/21/06</u>	Received by: (Signature) <u>Scott Clary</u>	Date/Time <u>called 3/20/06 to request</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>5:30 pm 2/21/06</u>	Received by: (Signature) <u>PH + T PH on</u>	Date/Time <u>Soil Samples DOI -&gt; DO4</u>
Relinquished by: (Signature) _____	Date/Time _____	Received by: (Signature) _____	Date/Time _____
Dispatched by: (Signature) _____	Method of Shipment: _____	Date/Time _____	
Received @ Laboratory <u>[Signature]</u>	Date/Time <u>2/20/06 10:30 AM</u>	Turnaround Time: <u>24 HR</u>	Lab Approval: _____

HES Use Only	
Samples Were:	
1. Shipped or Hand Delivered	NOTES:
2. Ambient or Chilled	NOTES:
3. Received Broken/Leaking (Improperly Sealed)	Y N
4. Properly Preserved	NOTES: Y N
5. Received Within Holding Times	Y N
NOTES:	
COC Tape Was:	
1. Present on Outer Package	Y N
2. Unbroken on Outer Package	Y N
3. Present on Sample	Y N
4. Unbroken on Sample	NOTES: Y N
COC Record Was:	
1. Present upon Receipt of Samples	Y N
Discrepancies Between Sample Labels and COC Record?	
Y N	
NOTES:	

Lab Name: Hudson Environmental Services, Inc.  
 Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: Basin 1-2-21

HES Lab I.D.#: 060222D01

Sample Matrix: Soil  
 Date Sample Collected: 02/21/06  
 Date Received: 02/22/06  
 Date Prepared: 02/22/06  
 Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: TCLP METALS AND TOTAL METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.021	mg/l	1.0
Copper	SW846-6010B	0.023	mg/l	NA
Lead	SW846-6010B	0.54	mg/l	5.0
Mercury	SW846-7470A	0.008	mg/l	0.2
Nickel	SW846-6010B	<0.006	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	<0.004	mg/l	NA

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Arsenic	SW846-6010B	<1.0	mg/kg
Cadmium	SW846-6010B	<0.19	mg/kg
Chromium	SW846-6010B	100	mg/kg
Copper	SW846-6010B	77	mg/kg
Lead	SW846-6010B	130	mg/kg
Mercury	SW846-7470A	800	mg/kg
Nickel	SW846-6010B	17	mg/kg
Selenium	SW846-6010B	31	mg/kg
Zinc	SW846-6010B	140	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: Basin 2-2-21

HES Lab I.D.#: 060222D02

Sample Matrix: Soil

Date Sample Collected: 02/21/06

Date Received: 02/22/06

Date Prepared: 02/22/06

Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: TCLP METALS AND TOTAL METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	<0.007	mg/l	1.0
Copper	SW846-6010B	0.022	mg/l	NA
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Nickel	SW846-6010B	<0.006	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	<0.004	mg/l	NA

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Arsenic	SW846-6010B	<0.95	mg/kg
Cadmium	SW846-6010B	<0.18	mg/kg
Chromium	SW846-6010B	59	mg/kg
Copper	SW846-6010B	400	mg/kg
Lead	SW846-6010B	95	mg/kg
Mercury	SW846-7470A	8.8	mg/kg
Nickel	SW846-6010B	17	mg/kg
Selenium	SW846-6010B	13	mg/kg
Zinc	SW846-6010B	110	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: Basin 3-2-21

HES Lab I.D.#: 060222D03

Sample Matrix: Soil

Date Sample Collected: 02/21/06

Date Received: 02/22/06

Date Prepared: 02/22/06

Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: TCLP METALS AND TOTAL METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE

(TCLP)

SW-846 METHOD 1311

TCLP

REGULATORY  
LEVELS (mg/l)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>REGULATORY</u> <u>LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.009	mg/l	1.0
Copper	SW846-6010B	0.019	mg/l	NA
Lead	SW846-6010B	<0.042	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Nickel	SW846-6010B	<0.006	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	0.050	mg/l	NA

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Arsenic	SW846-6010B	<1.0	mg/kg
Cadmium	SW846-6010B	<0.19	mg/kg
Chromium	SW846-6010B	60	mg/kg
Copper	SW846-6010B	62	mg/kg
Lead	SW846-6010B	110	mg/kg
Mercury	SW846-7470A	5.2	mg/kg
Nickel	SW846-6010B	18	mg/kg
Selenium	SW846-6010B	5.3	mg/kg
Zinc	SW846-6010B	220	mg/kg

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: Basin 4-2-21

HES Lab I.D.#: 060222D04

Sample Matrix: Soil  
Date Sample Collected: 02/21/06  
Date Received: 02/22/06  
Date Prepared: 02/22/06  
Date Analyzed: 02/13/06

Sample Wt For Extraction: 30gm/1ml

Sample Prep: TCLP METALS AND TOTAL METALS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
(TCLP)

SW-846 METHOD 1311

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TCLP REGULATORY LEVELS (mg/l)</u>
Arsenic	SW846-6010B	<0.016	mg/l	5.0
Cadmium	SW846-6010B	<0.003	mg/l	100
Chromium	SW846-6010B	0.051	mg/l	1.0
Copper	SW846-6010B	0.12	mg/l	NA
Lead	SW846-6010B	0.20	mg/l	5.0
Mercury	SW846-7470A	<0.001	mg/l	0.2
Nickel	SW846-6010B	0.023	mg/l	NA
Selenium	SW846-6010B	<0.057	mg/l	1.0
Zinc	SW846-6010B	0.41	mg/l	NA

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
Arsenic	SW846-6010B	<0.95	mg/kg
Cadmium	SW846-6010B	<0.18	mg/kg
Chromium	SW846-6010B	58	mg/kg
Copper	SW846-6010B	59	mg/kg
Lead	SW846-6010B	89,000	mg/kg
Mercury	SW846-7470A	2.7	mg/kg
Nickel	SW846-6010B	170	mg/kg
Selenium	SW846-6010B	<3.4	mg/kg
Zinc	SW846-6010B	180	mg/kg



SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Customer I.D.#: LN-Water-216

HES Lab I.D.#: 060222D05

Sample Prep: TOTAL METALS

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>MRL</u>	<u>UNITS</u>
Arsenic	SW846-6010B	<0.016	0.016	mg/l
Cadmium	SW846-6010B	<0.003	0.003	mg/l
Chromium	SW846-6010B	0.015	0.007	mg/l
Copper	SW846-6010B	0.017	0.005	mg/l
Lead	SW846-6010B	0.045	0.042	mg/l
Mercury	SW846-7470A	<0.001	0.001	mg/l
Nickel	SW846-6010B	<0.006	0.006	mg/l
Selenium	SW846-6010B	<0.057	0.057	mg/l
Zinc	SW846-6010B	<0.004	0.004	mg/l

SAMPLE ANALYSIS DATA SHEET

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8015 (Modified)

Customer I.D.#: LN-Water-216  
HES Lab I.D.#: 060222D05

Sample Matrix: Liquid  
Date Sample Collected: 02/21/06  
Date Received: 02/22/06  
Date Prepared: 02/23/06  
Date Analyzed: 02/23/06

Sample Amt. For Extraction: 10ml  
Sample Prep: SW846-8015(modified)

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>
TPH	SW846-8015 (Modified)	<50	mg/L

Lab Name: Hudson Environmental Services, Inc.  
Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: Basin 1-2-21  
HES Lab I.D.#: 060222D01

Sample Matrix: Soil  
Date Sample Collected: 02/21/06  
Date Received: 02/22/06  
Date Prepared: 02/22/06  
Date Analyzed: 02/23/06

Sample Wt For Extraction: 30.12gms

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.26	mg/kg
Aroclor 1221	SW846-8082	<0.26	mg/kg
Aroclor 1232	SW846-8082	<0.26	mg/kg
Aroclor 1242	SW846-8082	<0.26	mg/kg
Aroclor 1248	SW846-8082	<0.26	mg/kg
Aroclor 1254	SW846-8082	<0.26	mg/kg
Aroclor 1260	SW846-8082	<0.26	mg/kg
Total Solids	EPA 160.3	78	%

Lab Name: Hudson Environmental Services, Inc.

Lab I.D.: N.Y.S. ELAP # 11140

Method SW846 - 8082

SAMPLE ANALYSIS DATA SHEET

Customer I.D.#: Basin 2-2-21

HES Lab I.D.#: 060222D02

Sample Matrix: Soil

Date Sample Collected: 02/21/06

Date Received: 02/22/06

Date Prepared: 02/22/06

Date Analyzed: 02/23/06

Sample Wt For Extraction: 15.76gms

Sample Prep: SW846-8082

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT*</u>	<u>UNITS</u>
Aroclor 1016	SW846-8082	<0.05	mg/kg
Aroclor 1221	SW846-8082	<0.05	mg/kg
Aroclor 1232	SW846-8082	<0.05	mg/kg
Aroclor 1242	SW846-8082	<0.05	mg/kg
Aroclor 1248	SW846-8082	<0.05	mg/kg
Aroclor 1254	SW846-8082	<0.05	mg/kg
Aroclor 1260	SW846-8082	<0.05	mg/kg
Total Solids	EPA 160.3	84	%