Department of Environmental Conser

Division of Environmental Remediation

Primoshield Remediation Contract
Contract No. 1

Site No. 6-33-027
City of Utica
Oneida County, New York

Post Remediation Report

March 1999

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* JOHN P. CAHILL, *Commissioner*

15 (12/75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: Distribution
FROM: Craig Lapinski, Project Manager, CFSS, Bureau of Construction Services, DER
SUBJECT: Primoshield Plating Site, Site No. 6-33-027, Oneida County

DATE: MAR 10 1999

Please insert the enclosed Page 18 into your copy of the final Post Remediation Report (dated March 1999) that I sent to you on March 5, 1999. Call me at 518-457-9280 if you have any questions.

Distribution: D. Sweredoski, Region 6
M. Rivara, NYSDOH
G. Rider, O&M (2 copies)

MAR 1999

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

Terry
PVI
3/5/99

TO: Distribution
FROM: Craig Lapinski, Project Manager, CFSS, BCS, DER CML
SUBJECT: Primoshield Plating Site, Site No. 6-33-027, Oneida County

DATE: MAR 0 5 1999

Enclosed for your information is a copy of the final Post Remediation Report (dated March 1999) for the above referenced site. Please call me at (518) 457-9280 if you have any questions.

Distribution
D. Sweredoski - NYSDEC, Region 6
M. Rivara - NYSDOH
[redacted]

Primoshield Plating Site			No. 633027		Oneida County			
1998	Effluent Treatment System Results							
								dup
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
	Chromium	Lead	Nickel	Cadmium	Zinc	Copper	Cyanide	Cyanide
08/26/98	<0.003	<0.003	0.032	<0.001	0.043		<0.05	<0.05
09/11/98	0.007	0.075	<0.003	0.003	0.021		<0.005	<0.005
09/21/98	0.005	0.021	0.085	<0.001	0.048	0.022	<0.005	<0.005
10/07/98	<0.003	<0.003	0.114	<0.001	0.027	0.024	<0.010	
10/20/98	<0.003	0.012	0.158	<0.001	0.028	0.012	<0.01	
11/05/98	0.004	0.012	0.202	0.002	0.84		0.03	
11/20/98	0.006	0.014	0.195	<0.001	0.072		0.03	
12/02/98	<0.003	0.005	0.153	<0.001	0.051	0.026	<0.010	
LIMITS	5.00	5.00	2.00	1.00	4.00	3.00	3.00	3.00
		mg/l	dup					
	pH	Total VOC's	Total VOC's					
08/26/98	7.40	0.088	0.015					
09/11/98	7.25	0.033	0					
09/21/98	7.29	0.006						
10/07/98	7.20	0						
10/20/98	7.34	0						
11/05/98	7.65	0						
11/20/98	7.09	0						
12/02/98	7.22	0						
LIMITS	5.0-12.5	2.00						

Primoshield Plating Site			No. 633027		Oneida County			
1998	Effluent Treatment System Results							
								dup
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
	Chromium	Lead	Nickel	Cadmium	Zinc	Copper	Cyanide	Cyanide
08/26/98	<0.003	<0.003	0.032	<0.001	0.043		<0.05	<0.05
09/11/98	0.007	0.075	<0.003	0.003	0.021		<0.005	<0.005
09/21/98	0.005	0.021	0.085	<0.001	0.048	0.022	<0.005	<0.005
10/07/98	<0.003	<0.003	0.114	<0.001	0.027	0.024	<0.010	
10/20/98	<0.003	0.012	0.158	<0.001	0.028	0.012	<0.01	
11/05/98	0.004	0.012	0.202	0.002	0.84		0.03	
11/20/98	0.006	0.014	0.195	<0.001	0.072		0.03	
12/02/98	<0.003	0.005	0.153	<0.001	0.051	0.026	<0.010	
LIMITS	5.00	5.00	2.00	1.00	4.00	3.00	3.00	3.00
		mg/l	dup					
	pH	Total VOC's	Total VOC's					
08/26/98	7.40	0.088	0.015					
09/11/98	7.25	0.033	0					
09/21/98	7.29	0.006						
10/07/98	7.20	0						
10/20/98	7.34	0						
11/05/98	7.65	0						
11/20/98	7.09	0						
12/02/98	7.22	0						
LIMITS	5.0-12.5	2.00						

Table of Contents

List of Tables

List of Illustrations

1.0 BACKGROUND

1.1 Site Location and Description

Primoshield Inc. is a former Metal Electroplating facility located at 1212 St. Vincent Street; Utica, New York 13501. The site is located in a mixed commercial/residential area within the City of Utica and is also located in Oneida County and NYSDEC Region 6. Due to past operations and the presence of hazardous wastes at the site, it has been listed as a Class 2 Inactive Hazardous Waste Site (Code No.: 6-33-027) on the NYSDEC registry of inactive hazardous waste sites. The site is bordered by Conkling Avenue on the northwest and St. Vincent Street to the south and east. The DePaul building and property border the site on the southwest and two residential properties border the site on the northeast (see Figure 1). The site, as defined in the registry, consists of the Primoshield Plating property and the adjacent DePaul Building cinder and gravel parking lot which together total approximately 1.5 acres. The site is located in a primarily residential neighborhood which also contains a number of commercial properties and the St. Agnes R.C. cemetery immediately to the southeast. The Mohawk River is located downgradient from and approximately one and one half miles to the north of the site.

1.1 Site History

Primoshield Inc. was a metal electroplating facility that operated from the early 1970s until August 1985. The Primoshield property consisted of a factory or production building, a small office building, a small laboratory and a small storage trailer all of which were in an advanced state of disrepair.

A large number of drums and open vats (some containing acids, cyanide solutions and spent plating solutions) were left behind when the facility was abandoned by its owners following a fire which occurred during August of 1985.

Local citizen concerns regarding health and safety issues associated with this site were transmitted to the NYSDEC. Following an initial site reconnaissance and sampling effort by NYSDEC in December of 1985, laboratory sample results obtained indicated a very high risk to the public from the site at that time. Consequently, on March 12, 1986 the NYSDEC formally petitioned the U.S. EPA Region II Office requesting that the USEPA perform an Emergency Response and Removal Action at the Primoshield Site, including but not limited to the cleanup and removal of all the surficial and containerized hazardous wastes and the installation of a fence and gate system to resecure the site.

During 1986 and 1987 the USEPA conducted an emergency response and removal action at the Primoshield Site. All of the containerized waste and most of the accessible surficial waste materials were removed from the site during this initial cleanup and taken to approved off-site disposal facilities. Site security was also established by the installation of a chain link fence and gate system. In November 1987 U.S. EPA emergency response and cleanup funds for the Primoshield Site were exhausted and jurisdiction for further remedial action at the site was returned to NYSDEC.

Following the fire which occurred in August 1985, the Primoshield facility was abandoned by the owners and the City of Utica subsequently assumed ownership of the property due to non-payment of taxes. In December of 1989 the NYSDEC signed a negotiated Order on Consent with the City of Utica which agreed to perform a Remedial Investigation/Feasibility Study (RI/FS) to further investigate and remediate residual hazardous waste contamination remaining at the site. The City of Utica applied for State assistance (75% sharing of eligible costs) under Title III of the New York State (NYS) 1986 Environmental Quality Bond Act (EQBA). On May 3, 1991 State Assistance Contract No. C300241 was entered into by the New York State Department of Environmental Conservation and the City of Utica for the City of Utica to complete an RI/FS at the Primoshield Site under Title III of the NYS 1986 EQBA. The City of Utica subsequently retained O'Brien and Gere Engineers Inc. (Syracuse, N.Y.) and Stetson Harza Inc. (Utica, N.Y.) to provide engineering services and technical support for the Primoshield Site RI/FS.

The RI was conducted in basically a single phase beginning with a site baseline survey which was initiated during September/October 1992 and ending with a second round of ground water sample collection and analyses during September 1993. Some additional sample collection and analyses (primarily for metals in surface soils and TCLP testing of building materials) was conducted after April 1993 to fill in gaps in the data base. A one day on-site air quality sampling and monitoring program conducted on August 29, 1994 was the final field data collection for the Primoshield Site Remedial Investigation.

Site related contaminants of concern in surface soil were identified (based on the results of the RI) as cadmium, chromium, nickel and cyanide. Site-related contaminants in ground water above class GA ground water standards included trichloroethene, 1,1,1-trichloroethane, 1,1 dichloroethane and chromium. Water and Sediment Samples collected from the sumps in the basement of the 1208 St. Vincent Street residence indicated elevated concentration levels for both VOCs (1,1-dichloroethane; 1,1,1 [redacted] and trichloroethene) and heavy metals/inorganics (cadmium, chromium, lead, nickel, and cyanide). These elevated concentration levels of both VOCs and heavy metals/inorganics in both the ground water and the sediment in the basement of the 1208 St. Vincent Street residence indicate the need to address these two areas during site remediation.

A number of IRMs were under consideration during the RI/FS at the Primoshield Site. After extensive analysis and discussion, only the following two relatively minor IRMs were actually implemented:

1. On June, 1993 an interim structural brace (tubular metal scaffolding system) was installed in roughly the center of the main production building, to transfer roof loading from an isolated unbraced vertical column which appeared to be close to failure.

2. On April 19, 1994 a site surficial cleanup was held at the Primoshield Site. Scrap metal and scrap lumber were collected and stockpiled for later recycling and/or disposal. Brush was cleared and stockpiled and miscellaneous waste and debris was collected and stockpiled for later disposal off-site.

The Record of Decision (ROD) for the site was signed on March 30, 1995. The site was re-assigned as a State Superfund (SSF) project in November 1996 because the city of Utica had inadequate funds to perform construction.

The other important dates for this project are as follows:

Remedial Investigation / Feasibility Study Start ..... April 1991

Remedial Investigation / Feasibility Study End ..... March 1995

Design Start ..... July 1995

Design End ..... February 1996

Construction Project was first Advertised ..... July 25, 1997

Addenda No. 1 was issued ..... July 25, 1997

Addenda No. 2 was issued ..... August 11, 1997

Addenda No. 3 was issued ..... August 22, 1997

Bid Opening Date ..... August 27, 1997

Notice to Proceed Date ..... March 23, 1998

Substantial Completion Date ..... September 16, 1998

Final Completion Date ..... December 15, 1998

Site Location Map

633027 Primoshield, Inc.

NYSDOT Planimetric Quadrangle(s):
UTICA WEST, UTICA EAST

FIGURE 1-1

2.0 SUMMARY OF REMEDIAL WORK

2.1 General Overview

On August 27, 1997, a bid opening was held for construction contract No. 1 (see Appendix A for the original tabulation of bids received). The first low bidder, Sevenson Environmental Services, withdrew their bid due to errors in their estimation of work. The Bureau of Construction Services (BCS) accepted Sevenson's bid withdrawal after reviewing their errors and after concurrence with the Division of Environmental Enforcement. As a result, the second lowest bidder was a joint venture between Ontario Specialty Contracting, Inc. and Industrial Site Services, Inc. (OSC/ISS) located at 333 Ganson Street in Buffalo, New York 14203. OSC/ISS was selected through a competitive bidding process by the NYSDEC with a bid of $538,850.00. Table 2-1 includes a breakdown of OSC/ISS's bid. Notice to Proceed was issued on March 23, 1998, after approval of OSC/ISS's project plans (i.e., work plan, sampling plan and quality assurance/quality control plan) and providing no further comments on OSC/ISS's health & safety plan. OSC/ISS began to mobilize and start work on this same date.

The major tasks completed at the site includes:

- Mobilization to the site. This work included trailer setup, electric & telephone phone hook up, providing potable water & sanitary facilities, providing a solid waste disposal dumpster and the delivery of contractor equipment;

- performing real time (background and during construction), documentational and periodic air monitoring during excavation and other intrusive activities (a copy of all air monitoring results was sent to the New York State Department of Health).

- removing all hazardous materials inside the former production and [redacted] buildings and placing them into a 20 cubic yard covered roll-off for off-site disposal prior to performing demolition work;

- demolition of the former production, laboratory and office buildings and off-site disposal at the Seneca Meadows Landfill as asbestos containing [redacted];

- excavation of non-hazardous soils and off-site disposal at the Seneca Meadows Landfill;
- excavation of hazardous soils and off-site disposal at the Chemical Waste Management Facility in Model City, New York;
- pumping the liquids from two underground storage tanks (USTs) into a vacuum truck, cleaning both [redacted], disposing the liquid waste & the tanks at the proper disposal facility and removing & disposing the petroleum contaminated soil under the two tanks;
- terminating six utilities (3 sewer pipes, 2 gas pipes and 1 electrical line) at the property boundaries;
- removing a leachfield which was unearthed during excavation work;
- backfilling the excavated areas with run-of-bank gravel;
- cleaning out the sump, pressure washing and applying a sealant to the basement walls of the home located at 1208 St. Vincent Street;
- repairing the existing site perimeter fence;
- replacing a residential vegetable garden at 1208 St. Vincent Street and planting trees and shrubs on the parcel immediately southwest of 1208 St. Vincent Street;
- regrading the site, placing topsoil and seeding the entire site;
- construction of thr[redacted]ter cutoff trenches, a central collection manhole and installation of a submersible pump to intercept and collect the plume of contaminated groundwater;
- construction of a groundwater treatment system (GWTS) to remove the Volatile Organic Compounds (VOCs) from the groundwater. The system uses Granular Activated Carbon (GAC) drums to accomplish this task;
- construction of a building to house the GWTS;

- discharge of treated wastewater to the Oneida County Sewer System;
- issuance of Substantial Completion - September 16, 1998
- Completing all punch list items (i.e. removing miscellaneous debris, repairing seeded areas, performing operation and maintenance of the GWTS); and
- Final Completion issued (December 15, 1998).

The significant changes from the original contract documents are discussed in Section 2.2 of this report. Quantity adjustments, based on actual site conditions, are discussed in Section 2.3.

A summary of wastes removed during construction and a list of the disposal facilities can be found on Table 2-2. A list of subcontractors utilized by OSC/ISS during the remedial activities at the site is included in Table 2-3.

2.2 Variations from the Original Contract Documents

Below is a summary of the variations from the original contract documents that occurred during the remediation work at the site. Additional information regarding these differences can be found in Appendix B, under Final Change Order No. 1.

Building Demolition

The plans and specifications required the three on-site buildings to be demolished. These buildings included the former laboratory, office and production buildings. First, hazardous materials in the production and laboratory buildings (as designated per section 02023,1.1C of the specifications) were removed. Next, asbestos contaminated materials were addressed in accordance with the contractor's asbestos removal plan and the Department of Labor's regulations (12 NYCRR Part 56). Since the asbestos in the buildings was non-friable and the building was structurally unsound, the Department of Labor determined that it could be demolished with the building and disposed with the rest of the demolition debris.

After the hazardous materials were removed, the three buildings were demolished. Scrap metal was segregated from the other construction & demolition (C&D) debris and sent to a recycler. One, composite sample of the C&D was taken and analyzed for lead contamination. This sampling technique was deemed acceptable by the ultimate disposal facility. All C&D material was loaded into trucks and disposed at the Seneca Meadows Landfill.

Excavation of Hazardous and Non-Hazardous Soil

The original contract documents called for the Contractor to excavate soil to the limits on the plan sheets, perform verification samples afterward to prove all contaminated soil was removed and perform characterization sampling on the excavated soil to determine if was hazardous or non-hazardous. Instead, the Contractor took soil samples in-situ and delineated and characterized the area to be excavated prior to performing excavation work. The advantage to this approach was that the contaminated soil could be excavated and loaded directly into a truck for off-site disposal.

The ROD called for one foot of soil to be removed over the entire site. However, verification soil samples taken from a depth of one foot failed the criteria in the ROD in many locations. The criteria which was used is as follows:

CONSTITUENT	CRITERIA (less than)
Cadmium	10 ppm
Chromium	50 ppm
Lead	500 ppm
Nickel	30 ppm
Cyanide	1.2 ppm

It took the contractor several rounds of verification sampling to determine the area of excavation. From the sampling results, it was clear that at least one foot of soil had to be removed from the entire site. Also, six inches had to be removed under the concrete slabs.

However, there were seven other areas of concern where contamination was found at much greater depths. The final depths of these areas were determined after the New York State Department of Health (NYSDOH) and the NYSDEC held an internal meeting to clarify the criteria in the ROD. The NYSDOH decided that the 30 ppm criteria for Nickel was too stringent for depths greater than one foot. However, the levels of 10 ppm and 50 ppm had to be met at all depths for Cadmium and Chromium respectively. Based on this information the following final depths of excavation were determined by the NYSDEC and the NYSDOH and subsequently performed by the Contractor:

LOCATION	AREA	DEPTH
Around Soil Sample 008	40 ft. x 40 ft.	3.5 ft.
Around Soil Sample 009	40 ft. x 40 ft.	2.0 ft.
Around Soil Sample 010	25 ft. x 45 ft.	1.5 ft.
Around Soil Sample 014	*(Removed when soil under 500 gal. UST was excavated)*	
Around Soil Sample 021	27 ft. x 76 ft.	3.0 ft.
Around Soil Sample 029	25 ft. x 45 ft.	3.5 ft.
Around Soil Sample 032	(40 ft. x 40 ft.) x .5	4.0 ft.

From the characterization sampling performed by the contractor, an area of hazardous soil was discovered around verification sample 21. After the area of hazardous soil was delineated, this portion was excavated and trucked to Model City for proper disposal. The remaining non-hazardous soil was excavated and loaded directly into trucks for off-site disposal at the Seneca Meadows Landfill.

Two sumps were discovered within the footprint (northern and southern corners) of the former production building. The sediments in the sumps were characterized and removed as hazardous waste. There was a concrete septic tank located around the northern sump. The concrete was removed and verification samples were taken at the bottom of the excavation. Verification samples were also taken after the sediments in the southern sump were removed. No septic tank was located around the southern sump. Some soil from underneath the two sumps had to be removed as hazardous waste as well.

An abandoned weigh scale was discovered in the western corner of the site. Surface soils taken from the bottom of the dirt scale pit floor showed elevated levels of lead. The top six inches of the floor were therefore removed and properly disposed. Exit samples showed the cleanup standards were met.

The original plans and specifications called for a 200 gallon underground storage tank (UST) to be removed. During excavation work, however, not only was it discovered that the tank was actually 1,000 gallons in size, but, an additional 500 gallon UST was unearthed. The liquid in the two tanks was analyzed, pumped out and disposed at an off-site facility. Then, both tanks were properly inerted, cleaned and excavated in accordance with the Spills guidance for tank removals. The petroleum contaminated soil around the tanks was also removed and disposed as non-hazardous waste.

The contractor found and terminated six utilities (three sewer pipes, two gas pipes and one electrical line) at the property boundaries in accordance with the requirements of the appropriate utility. They also removed an existing leachfield which was unearthed during excavation work.

Concrete footings from the former production building which extended above the final site elevations were tested with wipe samples (analytical results showed that the concrete was clean), broken off and buried on-site in the basement of the former office building, in the scale pit and in the excavation after removal of the sewer along the southeast portion of the site. The remaining concrete which did not extend above the final elevations was buried in-place within the footprint of the former production building.

A summary of all the verification, characterization and wipe samples taken are located in Appendix C. Sample results related to the UST disposal are located in Appendix D. The location of the terminated utilities, the buried concrete and the two USTs is located on the final as-built drawings in Appendix F.

Groundwater Collection Trenches

The contract documents required three groundwater collection trenches to be installed on the site. The purpose of these trenches is to intercept the plume of groundwater contamination caused by the former Primoshield Plating operations, drain contaminated groundwater to a central collection sump and install a sump pump to transfer the groundwater to an on-site treatment system. Each collection trench consists of a six inch diameter perforated pipe surrounded by two square feet of stone wrapped in filter fabric.

Depth of excavation varied from 6 to 10 feet per the contract plan sheets. The location of the collection trench was consistent with the plan sheets except along the northeast site boundary where the final placement was altered slightly in an effort to reduce the number of 90 degree turns and keep excavation activities farther from a nearby residence.

The final location of the three groundwater collection trenches is located on the as-built drawings in Appendix F.

Groundwater Treatment System Building

The Contractor chose to use a pre-fabricated concrete building instead of the metal pre-engineered building specified to house the groundwater treatment system. The Contractor's building/foundation submittal (stamped and signed by a NYS Licensed Professional Engineer) was reviewed and approved by the Department. One field change was made. The manufacturer inadvertently omitted the rebar ties around the sump penetration in the floor of the building. These ties were required to connect the precast concrete sump to the building. Instead, additional rebar was added by drilling into the floor slob and grouting in the rebar.

Groundwater Treatment System

The Contractor built the groundwater treatment system (GWTS) per the specifications using the equipment specified or an approved "equal". The following items make up the GWTS:

- Submersible groundwater pump;
- Duplex basket strainers;
- Two-stage Granular Activated Carbon (GAC) units (plus one spare unit);
- Flow meter;
- five sampling spigots;
- Treatment building;
- Utilities connection; and
- Control systems.

A GWTS flow diagram can be found in Appendix E. For more specific information on the make and model of each component of the GWTS, consult the Operation and Maintenance Manual prepared by the Department.

Site Restoration

All topsoil and backfill used on this project was supplied by Cavallaro Trucking & Excavating of Poland, New York. and tested by Construction Materials Evaluation Associates, Inc. of Buffalo, New York. This source was acceptable because its ph, organic content and sieve analysis results were within the acceptable limits as defined by the contract documents.

The Contractor requested to use a different seed mixture than what was in the contract documents. The following specifies what was approved:

Seed:	All Perennial Landscape Mixture
Fertilizer:	Lofts Lawn, Garden and Shrub Food

Operation & Maintenance

After the GWTS was constructed, groundwater was pumped through the system and discharged into a frac tank. This was know as "startup". Water continued to be collected in the tank until three successive samples proved that the effluent met the limits of the discharge criteria. After that time, the tank was emptied and contractor was allowed to discharge directly to the Oneida County Sewer System.

The contract documents required the Contractor to operate the GWTS for a period of 90 days after the startup period was complete. Bi-weekly sampling by the Contractor was required. Another requirement was that the system had to run for two consecutive weeks without a shutdown. The 90 day period began on September 16, 1998 and ended on December 15, 1998.

A copy of the Oneida County Sewer District Permit and the influent/effluent sample results throughout the Operation and Maintenance period is located in Appendix F.

As-Built Drawings

As-built drawings were done for this project. A complete set of as-builts are located in Appendix G of this report.

2.3 Quantity and Cost Adjustments

There were numerous adjustments to the contract amounts based on actual quantities as measured in the field. As discussed in section 2.2 under "Excavation of Hazardous and Non-hazardous Soils", the increased depth of excavation led to increased sampling, excavating and backfilling costs. Also, the quantity for the bid items associated with Site Services, Health and Safety, Sheeting & Bracing, Pea Gravel, Type F Fill, Sidewalks/Pavement, Topsoiling & Seeding Bituminous Pavement, 1 ½" PVC Discharge, 6" Groundwater Collection Pipe, Terminate Utilities, Sewer Pipe Removal and 2" PVC Effluent Pipe were all adjusted to reflect actual quantities. Refer to change order Item "E" in Appendix B for a more thorough explanation and breakdown of costs. A summary of the estimated and actual contract quantities and amounts by bid item can be found in Table 2-1.

2.4 Change Orders

There was one change order issued during the contract. The complete change order is included in Appendix B of this report. Change Order No. 1 (Final) was issued after Substantial Completion on October 21, 1998 and contained five items. The change order had a value of $95,169.43, revising the contract amount to $634,019.43.

The date of substantial completion was increased 28 days to September 16, 1998. Subsequently, the date of final completion was increased 88 days to December 15, 1998.

The additional 28 days for substantial completion were needed for the Contractor to "shake down" the system. Although the Contractor built the groundwater treatment system by the original substantial completion date, excess silt collected in the piping and electrical wiring problems forced the Contractor to shut down the system numerous times. The treatment system could not be used until the silt was pumped out of the collection sump and the electrician solved the electrical problems. Therefore, the official start of the 90 Day O&M period could not begin until 28 days later.

The additional days for final completion were needed for the Contractor to perform the three month "Operation and Maintenance period" outlined in the contract. The time to complete this portion of the contract was never factored into the originally estimated completion dates.

Table 2-1

SUMMARY OF CONTRACT COSTS
Primoshield Plating , Inc. Site
NYSDEC Site No. 6-33-027

Bid Item	Description	Unit Price	Est. Quantity	Subtotal
1A	Mobilization/ Demobilization/ Site Prep	$50,000.00	Lump Sum	$50,000.00
1B	Site Services	$200.00	150 Days	$30,000.00
1C	Health and Safety	$250.00	90 Days	$22,500.00
1.3	Wood Sheeting and Bracing Left in Place	$10,000.00	0.5 MFBF	$5,000.00
1.5A	Select Fill - Pea Gravel	$30.00	70 yd^3	$2,100.00
1.5B	Select Fill - Common Earth	$15.00	1,400 yd^3	$21,000.00
1.5C	Select Fill - Type F Fill	$40.00	15 yd^3	$600.00
1.6B	Restoration - Concrete Sidewalks/ Pavement	$50.00	30 yd^2	$1,500.00
1.6C	Restoration - Trees, Shrubs and Landscape Items	$400.00	5 Each	$2,000.00
1.6D	Topsoil and Seeding	$4.00	5,000 yd^2	$20,000.00
1.6E	Bituminous Pavement	$50.00	5 yd^2	$250.00
1.7	Furnish and Install 1 1/2" PVC Col. Pump Disch.	$50.00	20 L.F.	$1,000.00
1.8	Furnish and Install 6" G.W. Collection Piping	$35.00	440 L.F.	$15,400.00
1.9	Termination of Each Utility at Each Location	$500.00	7 Each	$3,500.00
1.11	Sewer Pipe Removal	$15.00	300 L.F.	$4,500.00
1.13A	Soil Excavation - Hazardous	$500.00	50 Tons	$25,000.00
1.13B	Soil Excavation - Non-Hazardous	$90.00	1,500 yd^3	$135,000.00
1.14A	Furnish and Install 2" PVC Tmt. System Effluent	$30.00	50 L.F.	$1,500.00
1.15	Groundwater Collection System O&M	$200.00	90 Days	$18,000.00
3.1	Collection Manhole	$8,000.00	Lump Sum	$8,000.00
3.2	G.W. T. S. Equipment and Piping	$25,000.00	Lump Sum	$25,000.00
3.3	Construction of G.W.T.S. Enclosure	$25,000.00	Lump Sum	$25,000.00
3.4	Demolition of Site Structures and Concrete Slabs	$96,000.00	Lump Sum	$96,000.00
3.5	Resident Basement Cleanup	$2,500.00	Lump Sum	$2,500.00
3.6	Removal of Asbestos	$18,000.00	Lump Sum	$18,000.00
3.7	Underground Storage Tank Removal	$500.00	Lump Sum	$500.00
3.8	Electrical Work	$5,000.00	Lump Sum	$5,000.00
			Original Contract Total	$538,850.00

C.O. Item	Description	Unit Price	Est. Quantity	Subtotal
Item A	Additional Sampling	$12,003.43	Lump Sum	$12,003.43
Item B	Payment Item 1.5B - Select Fill (Common Earth)	$8,760.00	Lump Sum	$8,760.00
Item C	Payment Item 1.13A - Soil Excavation (Hazardous)	$36,891.50	Lump Sum	$36,891.50
Item D	Payment Item 1.13B - Soil Excavation (Non-Hazardous)	$55,647.00	Lump Sum	$55,647.00
Item E	Credit After Adjusting Remaining Quantities	($18,132.50)	Lump Sum	($18,132.50)
			Final Change Order Amount	$95,169.43
		FINAL CONTRACT AMOUNT	**$634,019.43**	

Table 2-2

SUMMARY OF WASTES REMOVED AND DISPOSAL FACILITIES
Primoshield Plating, Inc. Site
NYSDEC Site No. 6-33-027

DESCRIPTION	QUANTITY	DISPOSAL FACILITY
Non-Hazardous Soil	2,118.3 Cubic Yards	Seneca Meadows Landfill Waterloo, NY
Hazardous Soil	152.19 Tons	Chemical Waste Management Model City, NY
Construction & Demolition Debris/ Non-Friable Asbestos	549.73 Tons	Seneca Meadows Landfill Waterloo, NY
Underground Storage Tank Liquid	1,215 gallons	Industrial Oil Tank Services Oriskanny, NY
Scrap Metal	45 Cubic Yards	Universal Empire Wurt Avenue Utica, NY

Table 2-3

LIST OF SUBCONTRACTORS
Perfection Plating Company, Inc. Site
NYSDEC Site No. 4-01-037

Subcontractor	Responsibility
Jack Eisenbach Engineering 291 Genesee Street Utica, NY 13501	Obtaining asbestos permits and health and safety during demolition of the on-site buildings
Industrial Oil Tank Services 120 Dry Road Oriskanny, NY 13424	Pumping out the contents of the two USTs, cleaning the inside of the tanks and disposing the liquid waste
Dave Hall Electric 2 Stueben Park Utica, NY 13501	Groundwater treatment system electrical work
Price Trucking P.O. Box 70 67 Beacon Street Buffalo, NY 14220	Hauling hazardous and non-hazardous waste from the site to the proper ultimate disposal facilities.
Kistner Concrete Products, Inc. 8713 Read Road East Pembroke, NY 14056	Constructed the pre-engineered concrete groundwater treatment system building
BISCO Environmental 60 Sterols Way Dedham, MA 02026	Constructed the groundwater treatment system

3.0 ENGINEER'S CERTIFICATION

PERFECTION PLATING COMPANY, INC. SITE
CONSTRUCTION CERTIFICATION

Construction was completed in substantial conformance with the Contract Documents entitled "Primoshield Remediation Contract" dated May 1997, Addenda No. 1 dated July 25, 1997, Addenda No. 2 dated August 11, 1997 and Addenda No. 3 dated August 22, 1997.

Signature: James Van Hoesen

James G. Van Hoesen, P.E.
Designated Representative

Date: 3-2-99

APPENDIX A

ORIGINAL TABULATION OF BIDS

BID TABULATION AND ENGINEER'S ESTIMATE FOR
PRIMOSHIELD PLATING SITE, SITE NO. 8-33-027

Bids Opened 8-27-97
Tabulation By John Dumin

Bid Item		Description	Unit	QNTY	Engineer's Estimate			Sevenson Environ. Services			Ontario Speciality Corp.			Philip Services Corp.			Climinell Services Corp.			Allstate Power Vac, Inc.			OBG Technical Services	
					Unit Cost	Cost		Unit Cost	Cost		Unit Cost	Cost		Unit Cost	Cost		Unit Cost	Cost		Unit Cost	Cost		Unit Cost	Cost
1A		Mob/Demob/Site Fac	L S	1	$100,000.00	$100,000.00		$23,377.00	$23,377.00		$50,000.00	$50,000.00		$92,000.00	$92,000.00		$75,000.00	$75,000.00		$67,800.00	$67,800.00		$77,000.00	$77,000.00
1B		Site Services	Days	150	$0.00	$0.00		$136.00	$20,400.00		$200.00	$30,000.00		$291.00	$43,650.00		$200.00	$30,000.00		$265.00	$39,750.00		$275.00	$41,250.00
1C		Health & Safety	Days	90	$0.00	$0.00		$552.00	$49,680.00	0	$250.00	$22,500.00		$328.00	$29,520.00		$125.00	$11,250.00		$800.00	$72,000.00		$350.00	$31,500.00
1 3		Sheeting & Bracing		0 5	$2,100.00	$1,050.00		$1.00	$0.50		$10,000.00	$5,000.00		$2,290.00	$1,145.00		$3,000.00	$1,500.00		$4,500.00	$2,250.00		$2,500.00	$1,250.00
1 5A		Select Fill-Pea Gravel	CY	70	$50.00	$3,500.00		$18.00	$1,260.00		$30.00	$2,100.00		$18.00	$1,260.00		$54.00	$3,780.00		$35.00	$2,450.00		$37.50	$2,625.00
1 5B		Sel Fill-Common Earth	CY	1400	$15.00	$21,000.00		$18.00	$25,200.00		$15.00	$21,000.00		$11.30	$15,820.00		$17.00	$23,800.00		$18.00	$25,200.00		$17.75	$24,850.00
1 5C		Select Fill- Type F Fill	CY	15	$35.00	$525.00		$20.00	$300.00		$40.00	$600.00		$25.44	$381.60		$70.00	$1,050.00		$31.00	$465.00		$40.00	$600.00
1 6B		Sidewalks/Pavement	SY	30	$27.00	$810.00		$50.00	$1,500.00		$50.00	$1,500.00		$59.20	$1,776.00		$61.00	$1,830.00		$56.00	$1,680.00		$91.50	$2,745.00
1 6C		Trees/Landscape	Each	5	$150.00	$750.00		$100.00	$500.00		$400.00	$2,000.00		$680.00	$3,300.00		$650.00	$3,250.00		$233.00	$1,165.00		$300.00	$1,500.00
1 6D		Topsoil/Seeding	SY	5000	$3.20	$16,000.00		$3.75	$18,750.00		$4.00	$20,000.00		$3.60	$18,000.00		$5.00	$25,000.00		$6.60	$33,000.00		$4.50	$22,500.00
1 6E		Bituminous Pavement	SY	5	$0.00	$0.00		$50.00	$250.00		$50.00	$250.00		$206.00	$1,030.00		$245.00	$1,225.00		$36.00	$180.00		$15.00	$75.00
1 7		1 1/2" PVC Discharge	LF	20	$50.00	$1,000.00		$29.00	$580.00		$50.00	$1,000.00		$75.00	$1,500.00		$185.00	$3,700.00		$20.00	$400.00		$50.00	$1,000.00
1 8		6" GW Collection Piping	LF	440	$20.00	$8,800.00		$39.00	$17,160.00		$35.00	$15,400.00		$26.70	$11,748.00		$22.00	$9,680.00		$110.00	$48,400.00		$35.00	$15,400.00
1 9		Terminate Utilities	Each	7	$600.00	$4,200.00		$809.00	$5,663.00		$500.00	$3,500.00		$322.00	$2,254.00		$610.00	$4,270.00		$665.00	$4,655.00		$550.00	$3,850.00
1 11		Sewer Pipe Removal	LF	300	$17.00	$5,100.00		$8.00	$2,400.00		$15.00	$4,500.00		$10.00	$3,000.00		$9.00	$2,700.00		$22.50	$6,750.00		$25.00	$7,500.00
1 13A		Hazardous Soil Excav	Ton	50	$300.00	$15,000.00		$298.00	$14,900.00		$500.00	$25,000.00		$135.00	$6,750.00		$240.00	$12,000.00		$227.00	$11,350.00		$325.00	$16,250.00
1 13B		Non-Haz. Soil Excav.	CY	1500	$113.34	170010		$73.25	$109,875.00		$90.00	$135,000.00		$67.50	$101,250.00		$80.00	$120,000.00		$78.50	$117,750.00		$110.00	$165,000.00
1 14A		2" PVC Effluent Pipe	LF	50	$30.00	$1,500.00		$29.00	$1,450.00		$30.00	$1,500.00		$61.00	$3,050.00		$40.00	$2,000.00		$43.50	$2,175.00		$50.00	$2,500.00
1 15		GW Treatment Sys O&	Days	90	0	0		$109.00	$9,810.00		$200.00	$18,000.00		$105.00	$9,450.00		$550.00	$49,500.00		$142.50	$12,825.00		$350.00	$31,500.00
3 1		Collection Manhole	L S	1	$2,000.00	$2,000.00		$3,300.00	$3,300.00		$8,000.00	$8,000.00		$4,600.00	$4,600.00		$10,000.00	$10,000.00		$5,000.00	$5,000.00		$4,750.00	$4,750.00
3 2		GWTS Equipment/Piping	L S	1	$8,000.00	$8,000.00		$14,706.00	$14,706.00		$25,000.00	$25,000.00		$12,070.00	$12,070.00		$25,000.00	$25,000.00		$25,000.00	$25,000.00		$7,500.00	$7,500.00
3 3		GWTS Enclosure	L S	1	$12,100.00	$12,100.00		$22,045.00	$22,045.00		$25,000.00	$25,000.00		$22,105.00	$22,105.00		$35,000.00	$35,000.00		$35,000.00	$35,000.00		$13,500.00	$13,500.00
3 4	0	Demolition Struct./Conc	L S	1	$215,700.00	$215,700.00		$23,166.00	$23,166.00		$96,000.00	$96,000.00		$98,060.00	$98,060.00		$85,000.00	$85,000.00		$69,500.00	$69,500.00		$155,000.00	$155,000.00
3 5		Residence Base Cleanu	L S	1	$6,120.00	$6,120.00		$1,741.00	$1,741.00		$2,500.00	$2,500.00		$1,819.00	$1,819.00		$8,000.00	$8,000.00		$8,500.00	$8,500.00		$5,500.00	$5,500.00
3 6		Asbestos Removal	L S	1	$27,000.00	$27,000.00		$9,442.00	$9,442.00		$18,000.00	$18,000.00		$19,400.00	$19,400.00		$25,000.00	$25,000.00		$60,500.00	$60,500.00		$25,000.00	$25,000.00
3 7		UST Removal	L S	1	$4,400.00	$4,400.00		$2,722.00	$2,722.00		$500.00	$500.00		$1,325.00	$1,325.00		$3,000.00	$3,000.00		$5,000.00	$5,000.00		$4,750.00	$4,750.00
3 8		Electrical Work	L S	1	$16,000.00	$16,000.00		$1,000.00	$1,000.00		$5,000.00	$5,000.00	0	$33,335.00	$33,335.00		$25,000.00	$25,000.00		$20,000.00	$20,000.00		$15,500.00	$15,500.00
					Total	$440,565.00			$381,177.50			$538,850.00			$539,796.60			$587,535.00			$678,745.00			$636,395.00
	0	=$1.75K+$8.2K+$32.5K for Demo+Misc Debris + Off-site Disposal Costs			Pollution Liability Insurance				$2,857.00			$76,839.00			$10,800.00			$15,000.00			$25,000.00			No Cost
							0	Sevenson Withdrew Bid On 8-29-97		0	Reduced Original Bid Amt. By $10,000.00 Using 90 Days Not 130 Days		0	Words Govern, Reduced Original Bid By $15.00										

APPENDIX B

FINAL CHANGE ORDER

Primoshield Plating Site

Change Order No. 1
Contract Number: 1
NYSDEC Site Number: 6-33-027
State Contract Number: D003778

Change Order Amount: **$95,169.43** Date of Issue: **October 21, 1998**

Contractor: Ontario Speciality Consulting / Industrial Site Services
333 Ganson Street
Buffalo, New York 14203

Change Order Items: This Change Order comprises five (5) items as discussed below.

I. CHANGE ORDER ITEMS

A. ADDITIONAL SAMPLING

DESCRIPTION OF CHANGE:

This change is for the cost associated with the additional sampling which the Contractor performed throughout construction. The sampling included additional verification, Volatile, Cadmium, wipe, and waste oil samples.

DRAWING REFERENCE: Not Applicable

SPECIFICATION REFERENCE: Various

CONTRACTOR PAY ITEM NO.: Not Applicable

REASON FOR CHANGE:

This change is necessary for the increase in the number of samples actually taken by the Contractor. More samples were taken than originally specified because:

- Verification Samples - Many of the first few rounds of verification samples failed and forced the Contractor to perform additional sampling rounds. These samples were necessary for the Contractor to define the extent and depth of contaminated soil.

- TCLP Volatile Samples - These samples were taken to define the extent and depth of excavation in the two building sumps since VOCs were discovered in these areas. Additional samples were also taken around the sumps and in the Rodriguez's basement.

- TCLP and Total Cadmium Samples - These samples were necessary to distinguish the hazardous soil from the contaminated soil in "excavation area 21" since the hazardous soil was more expensive to dispose.

- Wipe Samples - These additional samples were necessary to ensure that the concrete (footers, slabs, etc...) that was to be buried on-site was not hazardous.

- Waste Oil Drum Sample - A drum filled with waste oil was found in the building prior to demolition. The drum had to be sampled to determine the proper disposal method.

COST:

This change order includes the cost of the Contractor's labor and equipment to perform the sampling as well as the cost of the Contractor's laboratory to analyze the samples.

A breakdown of these costs is as follows:

Contractor Labor	$1,393.70
Labor Fee (15%)	$209.06
Subtotal	$1,602.76
Contractor Materials & Equipment	$1,352.75
Mat./Equip. Fee (10%)	$135.28
Subtotal	$1,488.03
Sampling Cost	$8,912.64
Total (Contractor costs plus sampling costs)	$12,003.43
Total **INCREASE** in Contract Price	**$12,003.43**

B. PAYMENT ITEM 1.5B - SELECT FILL (COMMON EARTH)

DESCRIPTION OF CHANGE:

Increase in the contract amount for Payment Item Number 1.5B.

DRAWING REFERENCE: Not Applicable

SPECIFICATION REFERENCE: Section 02231

CONTRACTOR PAY ITEM NO.: Payment Item 1.5B

REASON FOR CHANGE:

This change is necessary for the increase in the amount of backfill which was brought on-site by the Contractor. Contamination was discovered at lower depths and forced the Contractor to increase the original excavation volume. Thus, additional material was required to fill in the larger holes created from the deeper excavation work.

COST:

Increase in Payment Item 1.5B from 1,400 CY to 1,984 CY (584 CY increase).

584 CY @ $15.00/CY = $8,760.00

Total **INCREASE** in Contract Price **$8,760.00**

C. PAYMENT ITEM 1.13A - SOIL EXCAVATION (HAZARDOUS)

DESCRIPTION OF CHANGE:

Increase in the contract amount and decrease in unit cost for Payment Item Number 1.13A.

DRAWING REFERENCE: Not Applicable

SPECIFICATION REFERENCE: Section 02221

CONTRACTOR PAY ITEM NO.: Payment Item 1.13A

REASON FOR CHANGE:

This change is necessary for the increase in the amount of hazardous soil which was excavated and disposed off-site by the Contractor. A portion of the soil excavated failed the TCLP test for Cadmium. Thus, this soil had to be disposed as hazardous instead of non-hazardous as originally suspected. When this soil and the VOC contaminated sump sediments were weighed, the total amount of hazardous soil removed from the site was well over the original estimate. The extent and depth of hazardous waste under the production plating building floor was greater than expected.

COST:

Since increasing this quantity from 50 tons to 152.19 tons met the two criteria for renegotiation (greater than 15% of the original quantity and an increase of at least $30,000.00), the unit price for the quantity above 115% was renegotiated downward. This was initiated since the Department felt the $500.00/ton bid price was higher than other jobs similar in scope and size.

Increase in Payment item 1.13A from 50 to 152.19 tons (102.19 ton increase).

7.5 tons @ $500.00/ton	= $3,750.00
94.69 tons @ $350.00/ton	= $33,141.50
Subtotal	= $36,891.50

Total **INCREASE** in Contract Price **$36,891.50**

D. PAYMENT ITEM 1.13B - SOIL EXCAVATION (NON-HAZARDOUS)

DESCRIPTION OF CHANGE:

Decrease in the contract amount and price for Payment Item Number 1.13B.

DRAWING REFERENCE: Not Applicable

SPECIFICATION REFERENCE: Section 02221

CONTRACTOR PAY ITEM NO.: Payment Item 1.13B

REASON FOR CHANGE:

This change is necessary for the increase in the amount of non-hazardous soil which was excavated and disposed off-site by the Contractor. Contamination was discovered at lower depths and forced the Contractor to increase the original excavation volume. Thus, additional material was excavated and removed from the site.

COST:

By increasing the final quantity from 1,500 to 2,118.3 cubic yards met the two criteria for renegotiation (greater than 15% of the original quantity and an increase of at least $30,000.00), the unit price for the quantity above 115% was not renegotiated downward. It was not initiated since the $90.00/cubic yard bid price was similar to other jobs similar in scope and size.

Increase in Payment Item 1.13B from 1,500 to 2,118.3 CY (618.3 CY increase).

618.3 CY @ $90.00/CY = $55,647.00

Total **INCREASE** in Contract Price **$55,647.00**

E. CREDIT AFTER ADJUSTING REMAINING QUANTITIES

DESCRIPTION OF CHANGE:

This change order is for quantities that decreased and increased slightly throughout the course of construction.

DRAWING REFERENCE: Not Applicable

SPECIFICATION REFERENCE: Various

CONTRACTOR PAY ITEM NO.: Various

REASON FOR CHANGE:

This change order is necessary since actual field quantities were different than originally estimated. Therefore, a credit was given to the Department for each of the payment items which decreased and the contractor was given an extra for each of the payment items which increased.

COST:

Item No.	Payment Item Description	Original Quantity	Final Quantity	Difference in Quantity	Unit Price	Difference (+/-)
1B	Site Services	150 days	144 days	-6 days	$200/day	($1,200.00)
1C	Health & Safety	90 days	52 days	-38 days	$250/day	($9,500.00)
1.3	Sheeting & Bracing	.5 MFBM	0 MFBM	-0.5 MFBM	$10K/unit	($5,000.00)
1.5A	Select Fill - Pea Gravel	70 CY	65.9 CY	+4.1 CY	$30/CY	($123.00)
1.5C	Select Fill - Type F Fill	15 CY	32.5 CY	+17.5 CY	$40/CY	$700.00
1.6B	Sidewalks/Pavement	30 SY	35.9 SY	+5.9 SY	$50/SY	$295.00
1.6D	Topsoil and Seeding	5000 SY	4732 SY	-268 SY	$4/SY	($1,072.00)
1.6E	Bituminous Pavement	5 SY	6.3 SY	+1.3 SY	$50/SY	$65.00
1.7	1 ½" PVC Discharge	20 LF	38 LF	+18 LF	$50/LF	$900.00
1.8	6" GW Collection Pipe	440 LF	458.5 LF	+18.5 LF	$35/LF	$647.50
1.9	Terminate Utilities	7 EA	6 EA	-1 EA	$500/EA	($500.00)
1.11	Sewer Pipe Removal	300 LF	70 LF	-230 LF	$15/LF	($3,450.00)
1.14A	2" PVC Effluent Pipe	50 LF	53.5 LF	+3.5 LF	$30/LF	$105.00
					TOTAL CREDIT	($18,132.50)

Total **DECREASE** in Contract Price **($18,132.50)**

II. CHANGE ORDER No. 1 SUMMARY

A.	Additional Sampling	$12,003.43
B.	Payment Item 1.5B - Select Fill (Common Earth)	$8,760.00
C.	Payment Item 1.13A - Soil Excavation (Hazardous)	$36,891.50
D.	Payment Item 1.13B - Soil Excavation (Non-Hazardous)	$55,647.00
E.	Credit After Adjusting Remaining Quantities	($18,132.50)
TOTAL		**$95,169.43**

III. CHANGE IN CONTRACT PRICE

Original Contract Price:	$538,850.00
Contract Price After Previous Approved Change Orders:	$538,850.00
Net INCREASE due to this Change Order:	$95,169.43
New Contract Price including this Change Order:	**$634,019.43**

IV. CHANGE IN CONTRACT TIME:

Notice To Proceed: March 23, 1998

	Substantial Completion		Final Completion	
	Days	Date	Days	Date
Original Contract Time	150 days	August 19, 1998	180 days	September 18, 1998
Net Increase Due to this Change Order	28 days	September 16, 1998	88 days	December 15, 1998
New Contract Time Including this Change Order	**178 days**	**September 16, 1998**	**268 days**	**December 15, 1998**

NOTE: The additional 28 days for substantial completion were needed for the Contractor to "shake down" the system. Although the Contractor built the groundwater treatment system by the original substantial completion date, excess silt collected in the piping and electrical wiring problems forced the Contractor to shut down the system numerous times. Therefore, the official start of the 90 Day O&M period could not begin until 28 days later.

The additional days for final completion were needed for the Contractor to perform the three month "Operation and Maintenance period" outlined in the contract. The time to complete this portion of the contract was never factored into the originally estimated completion dates.

It is understood and agreed that, unless expressly so stated above, the work herein authorized will not extend the time for the completion of the contract.

It is understood and agreed that this change order represents full and complete compensation for all work described herein.

This work is to be performed in accordance with the terms of the contract and original plans and specifications, except as herein modified. It is understood and agreed that this order shall be deemed executory only to the extent of moneys available and no liability shall be incurred by the State beyond the moneys available for the purpose.

CONTRACT NUMBER D003778

IN WITNESS WHEREOF, representatives of the Department and the Contractor have executed this Contract on the day and year written beneath their respective signatures. The signatory for the Department provides the following Agency Certification: "In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

Recommended:	FOR DEPARTMENT
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____
FOR NYSDEC ENGINEER	FOR CONTRACTOR
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____
Approved as to Form:	Approved:
By: _____ Attorney General	By: _____ State Comptroller
Date: _____	Date: _____

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of)
County of) s.s.:

On the ____ day of _____, 19 ____, 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 _____, 19 ____, 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

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of)
County of) s.s.:

On the ____ day of _____, 19 ____, before me personally came _____ to me known and known to me to be a member of _____, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Seal

_____
Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

State of)
County of) s.s.:

On the ____ day of _____, 19____, before me personally came _____ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Seal

_____
Notary Public

APPENDIX C

SOIL EXCAVATION RELATED MATERIALS

Verification Sampling

Sample No.	Location	Cadmium 10 mg/kg	Chromium 50 mg/kg	Lead 500 mg/kg	Nickel 30 mg/kg	Cyanide 1.2 mg/kg
1A	1 foot	0.47	9.60	45.20	14.80	0.29
2A	1 foot	0.21	3.80	10.70	8.30	0.35
3A	1 foot	0.70	8.70	63.90	21.60	0.35
4A	1 foot	0.53	10.00	15.30	18.80	0.28
5A	1 foot	0.95	13.60	57.10	33.40	0.29
5B	1.5 feet	1.10	7.80	29.20	28.80	0.28
6S	Surface	1.70	53.10	29.70	14.80	0.28
7A	1 foot	1.20	18.30	41.10	52.80	0.29
7B	1.5 feet	Not Taken	Not Taken	Not Taken	10.7	Not Taken
8A	1 foot	273.00	40.20	146.00	Not Taken	3.30
8B	1.5 feet	9.20	17.10	60.60	258.00	1.40
8C	2 feet	57.70	17.20	5.10	148.00	9.00
8D	3 feet	22.70	20.30	10.30	84.60	0.46
8E	4 feet	1.80	10.90	9.90	20.10	0.28
8F	5 feet	0.85	8.90	8.90	16.90	0.26
9A	1 foot	Not Taken	25.40	61.00	710.00	2.50
9B	1.5 feet	37.10	20.00	10.00	401.00	0.70
9C	2 feet	5.00	7.80	18.50	267.00	0.28
10A	1 foot	1.20	15.10	84.10	607.00	0.31
10B	1.5 feet	1.40	5.40	13.80	294.00	0.28
10C	2 feet	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken
10D	3 feet	1.00	9.50	12.10	458.00	0.29
10E	4 feet	0.93	10.50	13.10	130.00	0.32
10F	5 feet	1.50	16.90	14.10	276.00	0.30
11A	1 foot	0.89	15.00	539.00	Not Taken	0.30
11B	1.5 feet	1.00	12.60	115.00	18.40	0.29
12S	Surface	0.32	10.60	23.70	10.00	0.27
13S	Surface	17.70	52.80	97.90	151.00	3.30
13@6"	0.5 feet	0.49	5.20	28.60	21.30	Not Taken
14A	1 foot	6.40	80.30	392.00	Not Taken	1.90
14B	1.5 feet	2.50	11.40	147.00	131.00	0.28
14C	2 feet	16.90	12.00	267.00	182.00	0.29
14D	3 feet	1.10	10.00	13.10	14.00	0.29
14E	4 feet	0.89	9.30	8.00	16.40	0.28
14F	5 feet	1.20	9.20	11.70	21.50	0.33
15A	1 foot	0.87	9.60	58.40	Not Taken	0.29
15B	1.5 feet	1.50	17.20	71.90	73.20	0.31
15C	2 feet	0.52	2.60	39.20	34.20	0.26
16A	1 foot	2.80	15.60	394.00	148.00	0.31
16B	1.5 feet	1.10	8.50	245.00	18.50	0.29
17A	1 foot	1.20	15.40	254.00	38.10	0.33
17B	1.5 feet	1.00	8.20	45.80	17.00	0.29
18A	1 foot	1.40	14.10	407.00	20.50	0.32
19S	Surface	0.95	613.00	289.00	10.70	0.92
19@6"	0.5 feet	0.39	5.40	16.50	6.30	Not Taken
20S	Surface	76.60	73.20	162.00	152.00	6.60
20@6"	0.5 feet	1.60	30.90	61.40	47.10	Not Taken
21A	1 foot	174.00	31.00	80.20	Not Taken	25.20
21B	1.5 feet	197.00	117.00	72.00	1070.00	29.90
21C	2 feet	0.94	8.00	8.90	7.80	0.30
21D	3 feet	25.10	13.00	8.40	358.00	0.79
21E	4 feet	0.78	8.60	6.00	14.70	0.26
21F	5 feet	1.00	6.70	5.10	19.00	0.25

Sample No.	Location	Cadmium 10 mg/kg	Chromium 50 mg/kg	Lead 500 mg/kg	Nickel 30 mg/kg	Cyanide 1.2 mg/kg
22S	Surface	27.20	110.00	312.00	61.50	5.40
22@6"	0.5 feet	3.60	14.00	39.40	16.00	1.50
23S	Surface	0.66	7.00	34.20	10.80	0.40
24A	1 foot	4.30	13.10	105.00	Not Taken	2.30
24B	1.5 feet	1.50	13.70	11.10	18.20	0.46
25S	Surface	5.80	24.30	65.20	135.00	24.00
25@6"	0.5 feet	0.33	9.90	8.80	5.90	Not Taken
26S	Surface	5.60	13.70	2720.00	24.30	0.39
26@6"	0.5 feet	0.31	4.80	3.10	12.70	Not Taken
27S	Surface	4.70	13.60	3160.00	19.00	17.00
27A	1 foot	0.91	18.90	24.00	Not Taken	1.40
27B	1.5 feet	1.20	13.00	15.40	21.70	0.29
28S	Surface	0.76	24.30	47.90	26.60	0.26
29A	1 foot	47.40	24.10	105.00	Not Taken	0.50
29B	1.5 feet	283.00	136.00	46.00	11900.00	3.10
29C	2 feet	243.00	386.00	16.00	5200.00	3.30
29D	3 feet	15.20	23.20	12.70	208.00	0.27
29E	4 feet	0.63	7.00	4.50	9.20	0.30
29F	5 feet	1.41	10.60	16.00	27.70	0.30
30A	1 foot	2.20	14.20	900.00	Not Taken	0.29
30B	1.5 feet	1.00	11.10	40.20	24.40	0.30
31A	1 foot	1.90	14.40	35.70	44.20	0.29
31B	1.5 feet	1.50	11.10	35.70	25.80	0.29
32S	Surface	121.00	32.50	83.60	471.00	0.38
32@6"	0.5 feet	118.00	8.00	26.00	255.00	Not Taken
32@2.5'	2.5 feet	20.80	Not Taken	Not Taken	Not Taken	Not Taken
32@3'	3 feet	0.80	Not Taken	Not Taken	Not Taken	Not Taken
33@3"	3 inches	2.00	16.60	522.00	21.40	0.31
34@3"	3 inches	2.80	18.00	538.00	33.90	0.51
35@3"	3 inches	1.60	14.50	226.00	23.90	0.30
36@3"	3 inches	2.30	16.00	61.10	58.30	0.28
37@3"	3 inches	1.80	15.40	74.40	72.80	0.30
37A	1 foot	1.20	11.00	47.20	18.30	0.28
42A	1 foot	1.2	8.5	20.7	44.2	0.27
47S	Surface	3.1	35.8	423	20.5	0.52
48S	Surface	13.5	179	220	129	52.20
49S	Surface	8.4	12.5	27.6	207	14.30
49@5'	5 feet	42.00	11.90	9.40	305	0.28
49@7'	7 feet	0.63	9.80	7.80	66.30	Not Taken
54@3'	3 feet	1.60	12.50	22.10	42.00	11.20
55 SED	sump	7.00	265.00	65.20	761.00	772.00
57S	surface	3.40	134.00	37.20	19.60	1.80
59S	surface	2.70	6.80	27.80	359.00	10.90
60A	1 foot	13.10	2.90	3.60	81.20	3.20
61 A	1 foot	1.80	3.10	45.20	95.40	0.33
62 A	1 foot	0.50	7.00	5.60	10.00	0.26
69 SED	sump	10.50	28.50	287.00	485.00	0.23
70 SED	sump	1.90	4.90	193.00	36.10	0.34
71@2.5'	2.5 feet	7.50	Not Taken	Not Taken	Not Taken	Not Taken
72@2.5'	2.5 feet	0.91	Not Taken	Not Taken	Not Taken	Not Taken
73@2.5'	2.5 feet	2.70	Not Taken	Not Taken	Not Taken	Not Taken
75	decon pad	0.82	10.70	10.90	42.80	0.35

Characterization Sampling

TCLP for Metals of Concern

Sample No.	Location	Cyanide Total 1.2 mg/kg	TCLP Cadmium 1.0 mg/l	TCLP Chromium 5.0 mg/l	TCLP Lead 5.0 mg/l	TCLP Nickel
WX-SO-001	Sample point 001	<0.25	0.002	0.004	0.041	0.010
WX-SO-002	Sample point 002	<0.25	0.008	0.006	0.014	0.034
WX-SO-003	Sample point 003	1.02	0.152	0.007	0.038	1.000
WX-SO-004	Sample point 004	0.63	0.011	0.005	0.034	0.415
WX-SO-006	Sample point 006	0.30	0.007	0.004	0.038	0.088
WX-SO-007	Sample point 007	<0.25	0.044	0.012	0.004	0.036
WX-SO-008	Sample point 008	1.76	0.183	0.009	0.014	0.213
WX-SO-009	Sample point 009	1.10	0.435	0.006	0.011	3.480
WX-SO-010	Sample point 010	<0.25	0.015	0.005	0.023	4.160
WX-SO-011	Sample point 011	<0.25	0.003	0.017	0.448	0.040
WX-SO-014	Sample point 014	5.05	0.128	0.013	0.253	0.870
WX-SO-015	Sample point 015	<0.25	0.061	0.004	0.011	2.420
WX-SO-016	Sample point 016	<0.25	0.024	0.006	0.250	0.580
WX-SO-017	Sample point 017	0.37	0.005	0.009	0.137	0.057
WX-SO-018	Sample point 018	0.29	0.002	0.003	0.014	0.007
WX-SO-020	Sample point 020	0.81	0.549	0.002	0.005	1.190
WX-SO-024	Sample point 024	15.00	0.783	0.028	0.019	0.831
WX-SO-027	Sample point 027	1.65	0.017	0.009	0.031	0.040
WX-SO-029	Sample point 029	0.33	0.524	0.009	0.074	10.3
WX-SO-030	Sample point 030	0.28	0.029	0.005	<0.003	0.078
WX-SO-031	Sample point 031	<0.25	0.006	0.004	0.004	0.026
WX-SO-039	Sample point 039	2.47	0.171	0.057	0.677	0.702
WX-SO-040	Sample point 040	3.02	0.049	0.023	0.128	1.280
WX-SO-041	Sample point 041	9.66	0.324	0.053	0.954	1.560
WX-SO-021	Sample point 021	136.00	2.060	0.015	0.021	6.210
VS-SO-0021-2.5	S.P. 021 - 2.5 ft. BGS	<0.25	0.008	0.005	0.006	1.520
VS-SO-0043	East of S.P. 021	Not Analyzed	12.1	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0044	North of S.P. 021	Not Analyzed	3.490	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0045	West of S.P. 021	Not Analyzed	0.294	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0051	10 ft. east of S.P. 043	Not Analyzed	0.003	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0052	8 ft. north of S.P. 044	Not Analyzed	9.000	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0053	10 ft. west of S.P. 045	Not Analyzed	0.196	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0064	7 ft. north of S.P. 052	Not Analyzed	0.002	Not Analyzed	Not Analyzed	Not Analyzed
VS-SO-0049-CB	N. Sump sediments	39.60	2.410	0.138	0.022	23.300
VS-SO-0049-C	N. Sump - 5 ft. BGS	1.64	0.156	0.010	0.019	2.460
VS-SO-0049-D	N. Sump - 7 ft. BGS	0.37	0.765	0.008	0.009	3.250
VS-SO-0055-C	S. Sump - 2 ft. BGS	<0.25	0.082	0.004	0.007	0.594
VS-SO-0055-D	S. Sump - 3 ft. BGS	<0.25	0.005	0.006	0.008	0.099
VS-SO-0065-NW	Under Prod. bldg	2.29	0.016	0.006	0.005	0.540
VS-SO-0066-SW	Under Prod. bldg	5.89	0.003	0.003	0.006	0.064
VS-SO-0067-NE	Under Prod. bldg	0.51	0.069	0.027	0.017	15.400
VS-SO-0068	Under Scale House	<0.25	0.002	0.004	0.003	0.071

Characterization Sampling

TCLP for VOCs of Concern

Sample No.	Location	Depth	TCLP 1,1-Dichloroetane	TCLP Chloroform	TCLP 1,1,1-Trichloroethane	TCLP Trichloroethane	TCLP Benzene
VSSO-0021-V	Sample Point 21	1 foot	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
VSSO-0049-V	North Sump	1 foot	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
VSSO-0049-CB-V	North Sump	sludge	Not Detected	269.0	10.5	Not Detected	116.2
VSSO-0049-C-V	North Sump	5 feet	Not Detected	Not Detected	4.0	Not Detected	Not Detected
VSSO-0049-D-V	North Sump	7 feet	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
WXSED 0054	South Sump	sediment	Not Detected	Not Detected	8.4	108.5	Not Detected
VSSO-0054-C-V	South Sump	2 feet	Not Detected	Not Detected	18.3	Not Detected	Not Detected
VSSO-0054-D-V	South Sump	3 feet	Not Detected	Not Detected	28.2	Not Detected	Not Detected
VSSO-0056.1	Scale House	Surface	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
VSSO-0058.2	Production Bldg.	Surface	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
VSSO-0065-NW-V	Production Bldg.	under slab	Not Detected	Not Detected	Not Detected	34.4	Not Detected
VSSO-0066-SW-V	Production Bldg.	under slab	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
VSSO-0067-NE-V	Production Bldg.	under slab	Not Detected	Not Detected	19.7	Not Detected	Not Detected

Wipe Sampling

Sample No.	Location	Cadmium	Chromium	Lead	Nickel	Cyanide
WIPE 001	Production building concrete slab	Not Taken	Not Taken	Not Taken	Not Taken	0.011
WIPE 002	Production building concrete slab	0.011	0.030	0.137	0.175	Not Taken
WIPE 003	North side scale house foundation wall	Not Taken	Not Taken	Not Taken	Not Taken	0.005
WIPE 004	North side scale house foundation wall	0.007	0.015	0.390	0.087	Not Taken
WIPE 005	Production building north foundation wall	Not Taken	Not Taken	Not Taken	Not Taken	0.039
WIPE 006	Production building north foundation wall	0.087	0.013	0.126	0.204	Not Taken
WIPE 007	Production building center footer	Not Taken	Not Taken	Not Taken	Not Taken	0.102
WIPE 008	Production building center footer	0.211	0.470	0.153	0.220	Not Taken
WIPE 009	Not Taken	***	***	***	***	***
WIPE 010	Not Taken	***	***	***	***	***
WIPE 011	Production building north foundation wall	Not Taken	Not Taken	Not Taken	Not Taken	0.003
WIPE 012	Production building north foundation wall	0.004	0.003	0.013	0.056	Not Taken
WIPE 013	Production building west foundation wall	Not Taken	Not Taken	Not Taken	Not Taken	0.013
WIPE 014	Production building west foundation wall	0.005	0.010	0.039	0.096	Not Taken
WIPE 015	Footers burried to NE of production bldg.	0.002	0.005	0.136	0.011	Not Taken
WIPE 016	Footers burried to NE of production bldg.	Not Taken	Not Taken	Not Taken	Not Taken	<0.01
WIPE 017	Footers burried to NE of production bldg.	0.003	0.013	0.154	0.126	Not Taken
WIPE 018	Footers burried to NE of production bldg.	Not Taken	Not Taken	Not Taken	Not Taken	<0.01

APPENDIX D

UNDERGROUND STORAGE TANK REMOVAL
SAMPLE RESULTS

Underground Storage Tank Removal - Sample Results

Sample No.	Sample Date	Media Analyzed
17531	04/16/98	1,000 gallon UST contents
17532	04/16/98	Soil under the tanks for disposal purposes
17533	04/23/98	Soil under the tanks for disposal purposes
17749	05/06/98	500 gallon UST contents
17750	05/06/98	500 gallon UST contents

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - MISC

Cust ONTARIO SPEC. CONT.
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 716-856-3333
FAX 716-842-1630

RECEIVED
MAY 28 1998

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHEILD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results shown in bold type:
Detection Limits shown in mg/kg or mg/L
Results expressed in mg/kg or mg/L=ppm
< DL = less than detectable limit

Sample ID (LAB)	17531	
Sample ID #1 (CUST)	1000 GAL U.S.T./#003-009	
nple ID #2 (CUST)	LIQUID	
Matrix	LIQUID	
Sampled By	KEITH OLIVER	
Date Sampled	04/16/98	14:00
Date Received	04/27/98	09:00
Date Analyzed	04/29/98	
Date Reported	05/20/98	

TOX by EPA 9077 **100 ppm**

TOX:10750

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8021

Cust ONTARIO SPEC. CONT.
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 716-856-3333
FAX 716-842-1630

PO Number:
Project Number 9705
Project Cust:
Project Site: PRIMOSHEILD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: **Volatile Organics**
Extraction Method: **EPA 5030 Purge & Trap**
Analysis Method: **EPA 8021 GC PID/FID**

Sample ID (LAB)	17531	
Sample ID#1(CUST)	1000 GAL U.S.T./#003-009	
Sample ID#2(CUST)	LIQUID	
Matrix	LIQUID	
Sampled By	KEITH OLIVER	
Date Sampled	4/16/98	14:00
Date Received	4/27/98	9:00
Date Analyzed	4/28/98	
Date Reported	4/28/98	

	Results	Det Limit* (PPB)
MTBE	24222462	2000000.0
Benzene	6429327	200000.0
Toluene	1479083	200000.0
Ethylbenzene	11127367	200000.0
m&p-Xylene	51874102	400000.0
o-Xylene	19813087	200000.0
Isopropylbenzene	2974289	200000.0
n-Propylbenzene	5217266	200000.0
1,3,5-Trimethylbenzene	11164222	200000.0
tert-Butylbenzene	< DL(U)	200000.0
1,2,4-Trimethylbenzene	30625054	200000.0
sec-Butylbenzene&1,3-Dichlorobenzene	< DL(U)	400000.0
Isopropyltoluene	1906541	200000.0
n-Butylbenzene	5712322	200000.0
Naphthalene	9201068	200000.0

< DL (U)=compound analyzed but not detected B=analyte found in blank
L=estimated value E= exceed calibration range

RESULTS WHEN YOU WANT THEM RPT8021B

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METALS - Oil

Cust	ONTARIO SPEC. CONT.
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICHARD CYGAN
Phone	716-856-3333
FAX	716-842-1630

PO Number:	
Project Number:	9705
Project Cust:	
Project Site:	PRIMOSHEILD, UTICA
Date FAXED:	
Lab Director	

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Detection Limits* = Oil=mg/Kg =mg/kg or ppm

*See Individual Limits

Results shown are: Metals

Digestion Method: EPA 3050

Analysis Method: EPA 6010 ICP; AA/Cold Vapor

Sample ID (LAB)	17531	
Sample ID #1 (CUST)	1000 GAL U.S.T./#003-009	
Sample ID #2 (CUST)	LIQUID	
Matrix	LIQUID	
Sampled By	KEITH OLIVER	
Date Sampled	04/16/98	14:00
Date Received	04/27/98	09:00
Date Analyzed	04/28/98	
Date Reported	04/29/98	

* ND = Below Detection Limit	Results	Det Limit (ppm)
Arsenic	< DL(U)	0.300
Barium	0.30	0.100
Cadmium	< DL(U)	0.100
Chromium	0.20	0.100
Lead	640	0.300
Mercury	0.024	0.020
Selenium	< DL(U)	0.500
Silver	< DL(U)	0.100

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - TCLP METALS

Cust	ONTARIO SPEC. CONT.
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICHARD CYGAN
Phone	716-856-3333
FAX	716-842-1630

RECEIVED MAY 15 1998

PO Number:	
Project Number:	9705
Project Cust:	
Project Site:	PRIMOSHEILD, UTICA
Date FAXED:	
Lab Director	

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Detection Limits* = Water =mg/L or ppm

*See Individual Limits

Results shown are: TCLP Metals

Extraction Method: Closed Cup Extraction for 18 hrs

Analysis Method: EPA 6010 ICP; AA/Cold Vapor

Sample ID (LAB)	17532	
Sample ID #1 (CUST)	SUSPECTED CONTAM.	
Sample ID #2 (CUST)	LAYER SOIL	
Matrix	SOIL	
Sampled By	KEITH OLIVER	
Date Sampled	04/16/98	14:00
Date Received	04/27/98	09:00
Date Analyzed	04/29/98	
Date Reported	04/29/98	

	Results	Det Limit*
Lead	0.229	0.05

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - TCLP 8021

Cust ONTARIO SPEC. CONT.
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 716-856-3333
FAX 716-842-1630

PO Number:
Project Number 9705
Project Cust:
Project Site: PRIMOSHEILD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organics
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8021 GC PID/FID

Sample ID (LAB)	17532	
Sample ID#1(CUST)	SUSPECTED CONTAM.	
Sample ID#2(CUST)	LAYER SOIL	
Matrix	SOIL	
Sampled By	KEITH OLIVER	
Date Sampled	4/16/98	14:00
Date Received	4/27/98	9:00
Date Analyzed	4/28/98	
Date Reported	4/29/98	
	Results	Det Limit* (PPB)
Benzene	55.1	1.0

< DL (U)=compound analyzed but not detected B=analyte found in blank
L=estimated value E= exceed calibration range

Analysis performed on TCLP extract

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - MISC

Cust	ONTARIO SPEC. CONT.
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICHARD CYGAN
Phone	716-856-3333
FAX	716-842-1630

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHEILD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results shown in bold type:
Detection Limits shown in mg/kg or mg/L
Results expressed in mg/kg or mg/L=ppm
< DL = less than detectable limit

Sample ID (LAB)	17532	
Sample ID #1 (CUST)	SUSPECTED CONTAM.	
Sample ID #2 (CUST)	LAYER SOIL	
Matrix	SOIL	
Sampled By	KEITH OLIVER	
Date Sampled	04/16/98	14:00
Date Received	04/27/98	09:00
Date Analyzed	04/29/98	
Date Reported	04/29/98	

Ignitability: Positive Flash at 35 Degrees C

Corrosivity: pH = 7.13

Reactivity: Cyanide <20ppm
Sulfide <20ppm

% Solids: 71.97%

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - TCLP METALS

Cust	ONTARIO SPEC. CONT.
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICHARD CYGAN
Phone	716-856-3333
FAX	716-842-1630

PO Number:	
Project Number:	9705
Project Cust:	
Project Site:	PRIMOSHEILD, UTICA
Date FAXED:	
Lab Director	

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Detection Limits* = Water =mg/L or ppm

*See Individual Limits

Results shown are: TCLP Metals

Extraction Method: Closed Cup Extraction for 18 hrs

Analysis Method: EPA 6010 ICP; AA/Cold Vapor

Sample ID (LAB)	17533	
Sample ID #1 (CUST)	SUSPECTED	
Sample ID #2 (CUST)	CONTAM. LAYER SOIL	
Matrix	SOIL	
Sampled By	KEITH OLIVER	
Date Sampled	04/23/98	15:35
Date Received	04/27/98	09:00
Date Analyzed	04/29/98	
Date Reported	04/29/98	

	Results	Det Limit*
Lead	0.159	0.05

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - TCLP 8021

Cust ONTARIO SPEC. CONT.
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 716-856-3333
FAX 716-842-1630

PO Number:
Project Number 9705
Project Cust:
Project Site: PRIMOSHEILD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organics
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8021 GC PID/FID

Sample ID (LAB)	17533	
Sample ID#1(CUST)	SUSPECTED	
Sample ID#2(CUST)	CONTAM. LAYER SOIL	
Matrix	SOIL	
Sampled By	KEITH OLIVER	
Date Sampled	4/23/98	15:35
Date Received	4/27/98	9:00
Date Analyzed	4/28/98	
Date Reported	4/29/98	
	Results	Det Limit* (PPB)
Benzene	16.2	1.0

< DL (U)=compound analyzed but not detected B=analyte found in blank
L=estimated value E= exceed calibration range

Analysis performed on TCLP extract

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - MISC

Cust	ONTARIO SPEC. CONT.
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICHARD CYGAN
Phone	716-856-3333
FAX	716-842-1630

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHEILD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results shown in bold type:
Detection Limits shown in mg/kg or mg/L
Results expressed in mg/kg or mg/L=ppm
< DL = less than detectable limit

Sample ID (LAB)	17533	
Sample ID #1 (CUST)	SUSPECTED	
mple ID #2 (CUST)	CONTAM. LAYER SOIL	
Matrix	SOIL	
Sampled By	KEITH OLIVER	
Date Sampled	04/23/98	15:35
Date Received	04/27/98	09:00
Date Analyzed	04/29/98	
Date Reported	04/29/98	

Ignitability: Negative Flashpoint
no flash up to 140 Degrees F

Corrosivity: pH = 7.56

Reactivity: Cyanide <20ppm
Sulfide <20ppm

% Solids: 81.90%

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - MISC

Cust OSC
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 716-856-3333
FAX 716-842-1360

RECEIVED
MAY 28 1998

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results shown in bold type:
Detection Limits shown in mg/kg or mg/L
Results expressed in mg/kg or mg/L=ppm
< DL = less than detectable limit

500 gallon UST

Sample ID (LAB)	17749	
Sample ID #1 (CUST)	CSL-0009	
Sample ID #2 (CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	05/06/98	16:00
Date Received	05/08/98	10:45
Date Analyzed	05/18/98	
Date Reported	05/20/98	

TOX by EPA 9077 **400mg/L**

TOX:10750

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8021

Cust **OSC**
Address: **333 GANSON ST.**
BUFFALO, NY 14203
Attn: **RICH CYGAN**

Phone 716-856-3333
FAX 716-842-1360

PO Number:
Project Number **9705**
Project Cust:
Project Site: **PRIMOSHIELD**
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: **Volatile Organics**
Extraction Method: **EPA 5030 Purge & Trap**
Analysis Method: **EPA 8021 GC PID/FID**

Sample ID (LAB)	**17749**	
Sample ID#1(CUST)	**CSL-0009**	
Sample ID#2(CUST)		
Matrix	**WATER**	
Sampled By	**KEITH OLIVER**	
Date Sampled	**5/6/98**	**16:00**
Date Received	**5/8/98**	**10:45**
Date Analyzed	**5/12/98**	
Date Reported	**5/12/98**	

	Results	Det Limit* (PPB)
MTBE	**< DL(U)**	100.0
Benzene	**< DL(U)**	100.0
Toluene	**209.7**	100.0
Ethylbenzene	**< DL(U)**	100.0
m&p-Xylene	**323.8**	200.0
o-Xylene	**143.6**	100.0
Isopropylbenzene	**< DL(U)**	100.0
n-Propylbenzene	**269.8**	100.0
1,3,5-Trimethylbenzene	**2616.8**	100.0
tert-Butylbenzene	**536.9**	100.0
1,2,4-Trimethylbenzene	**9209.4**	100.0
sec-Butylbenzene&1,3-Dichlorobenzene	**3299.1**	200.0
Isopropyltoluene	**2825.3**	100.0
n-Butylbenzene	**5734.5**	100.0
Naphthalene	**11054.3**	100.0

< DL (U)=compound analyzed but not detected B=analyte found in blank
L=estimated value E= exceed calibration range

RESULTS WHEN YOU WANT THEM RPT8021B

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METALS DIRECT - WATER

Cust OSC
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 716-856-3333
FAX 716-842-1360

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Detection Limits* = Water=mg/ =mg/L or ppm
*See Individual Limits

Results shown are: Metals
Digestion Method: EPA 3010
Analysis Method: EPA 6010

Sample ID (LAB)	17749	
Sample ID #1 (CUST)	CSL-0009	
Sample ID #2 (CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	05/06/98	16:00
Date Received	05/08/98	10:45
Date Analyzed	05/13/98	
Date Reported	05/13/98	

* ND = Below Detection Limit

	Results	Det. Limit
Arsenic	< DL	0.050
Barium	0.239	0.050
Cadmium	< DL	0.050
Chromium	< DL	0.050
Lead	< DL	0.050
Mercury	< DL	0.002
Selenium	< DL	0.050
Silver	< DL	0.050

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - MISC

Cust	OSC
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICH CYGAN
Phone	716-856-3333
FAX	716-842-1360

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results shown in bold type:
Detection Limits shown in mg/kg or mg/L
Results expressed in mg/kg or mg/L=ppm
< DL = less than detectable limit

500 gallon UST

Sample ID (LAB)	17750	
Sample ID #1 (CUST)	CSL-0010	
Sample ID #2 (CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	05/06/98	16:00
Date Received	05/08/98	10:45
Date Analyzed	05/18/98	
Date Reported	05/20/98	

TOX by EPA 9077 **300mg/L**

TOX:10750

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8021

Cust OSC
Address: 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 716-856-3333
FAX 716-842-1360

PO Number:
Project Number 9705
Project Cust:
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organics
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8021 GC PID/FID

Sample ID (LAB)	17750	
Sample ID#1(CUST)	CSL-0010	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	5/6/98	16:00
Date Received	5/8/98	10:45
Date Analyzed	5/11/98	
Date Reported	5/12/98	

	Results	Det Limit* (PPB)
MTBE	< DL(U)	100.0
Benzene	< DL(U)	100.0
Toluene	< DL(U)	100.0
Ethylbenzene	< DL(U)	100.0
m&p-Xylene	275.6	200.0
o-Xylene	213.0	100.0
Isopropylbenzene	< DL(U)	100.0
n-Propylbenzene	< DL(U)	100.0
1,3,5-Trimethylbenzene	963.8	100.0
tert-Butylbenzene	144.7	100.0
1,2,4-Trimethylbenzene	3342.2	100.0
sec-Butylbenzene&1,3-Dichlorobenzene	1048.2	200.0
Isopropyltoluene	1208.5	100.0
n-Butylbenzene	4043.9	100.0
Naphthalene	6977.5	100.0

< DL (U)=compound analyzed but not detected B=analyte found in blank
L=estimated value E= exceed calibration range

RESULTS WHEN YOU WANT THEM RPT8021B

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METALS DIRECT - WATER

Cust	OSC
Address:	333 GANSON ST.
	BUFFALO, NY 14203
Attn:	RICH CYGAN
Phone	716-856-3333
FAX	716-842-1360

PO Number:
Project Number: 9705
Project Cust:
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Detection Limits* = Water=mg/ =mg/L or ppm
*See Individual Limits

Results shown are: Metals
Digestion Method: EPA 3010
Analysis Method: EPA 6010

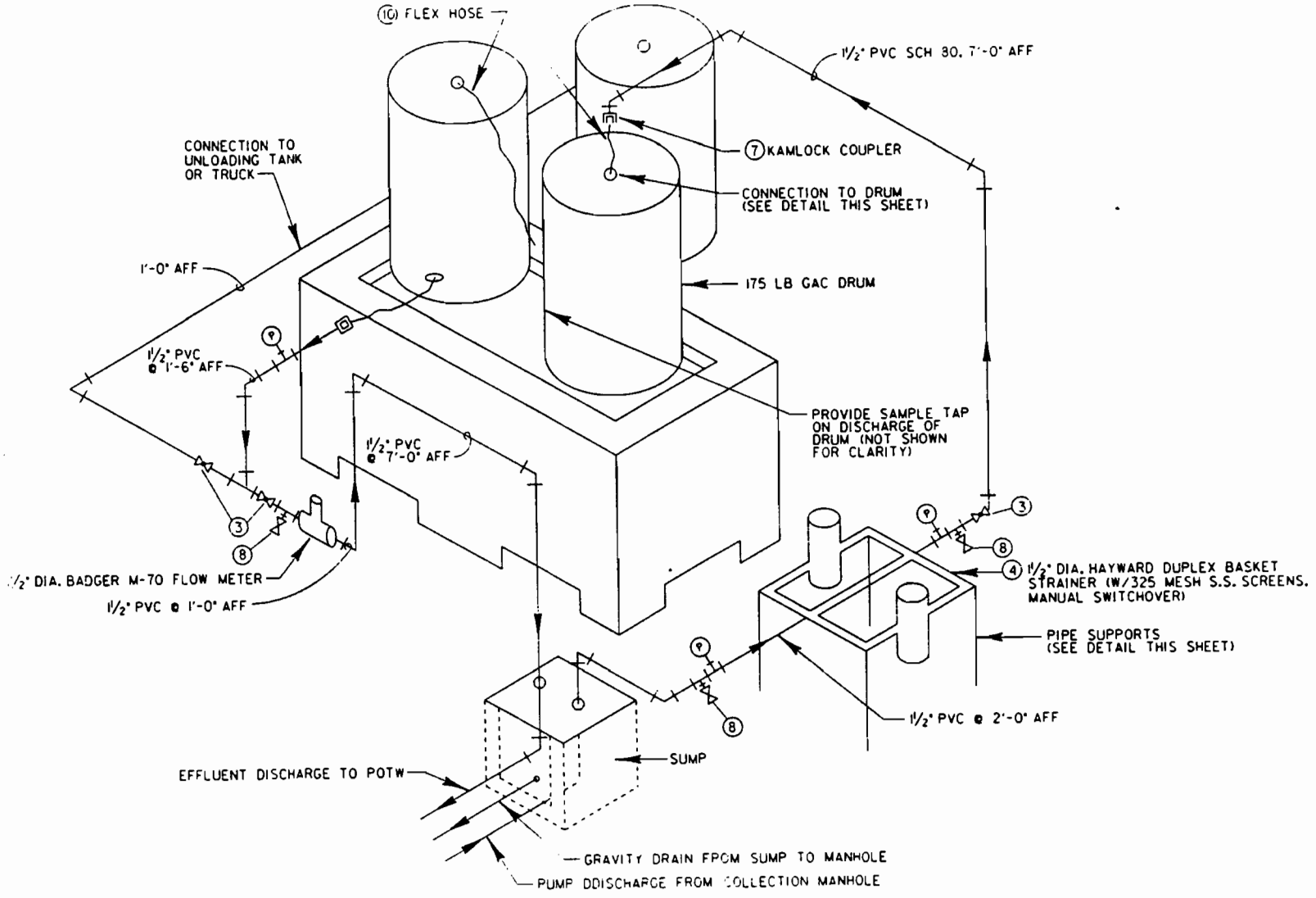
Sample ID (LAB)	17750	
Sample ID #1 (CUST)	CSL-0010	
Sample ID #2 (CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	05/06/98	16:00
Date Received	05/08/98	10:45
Date Analyzed	05/13/98	
Date Reported	05/13/98	

* ND = Below Detection Limit

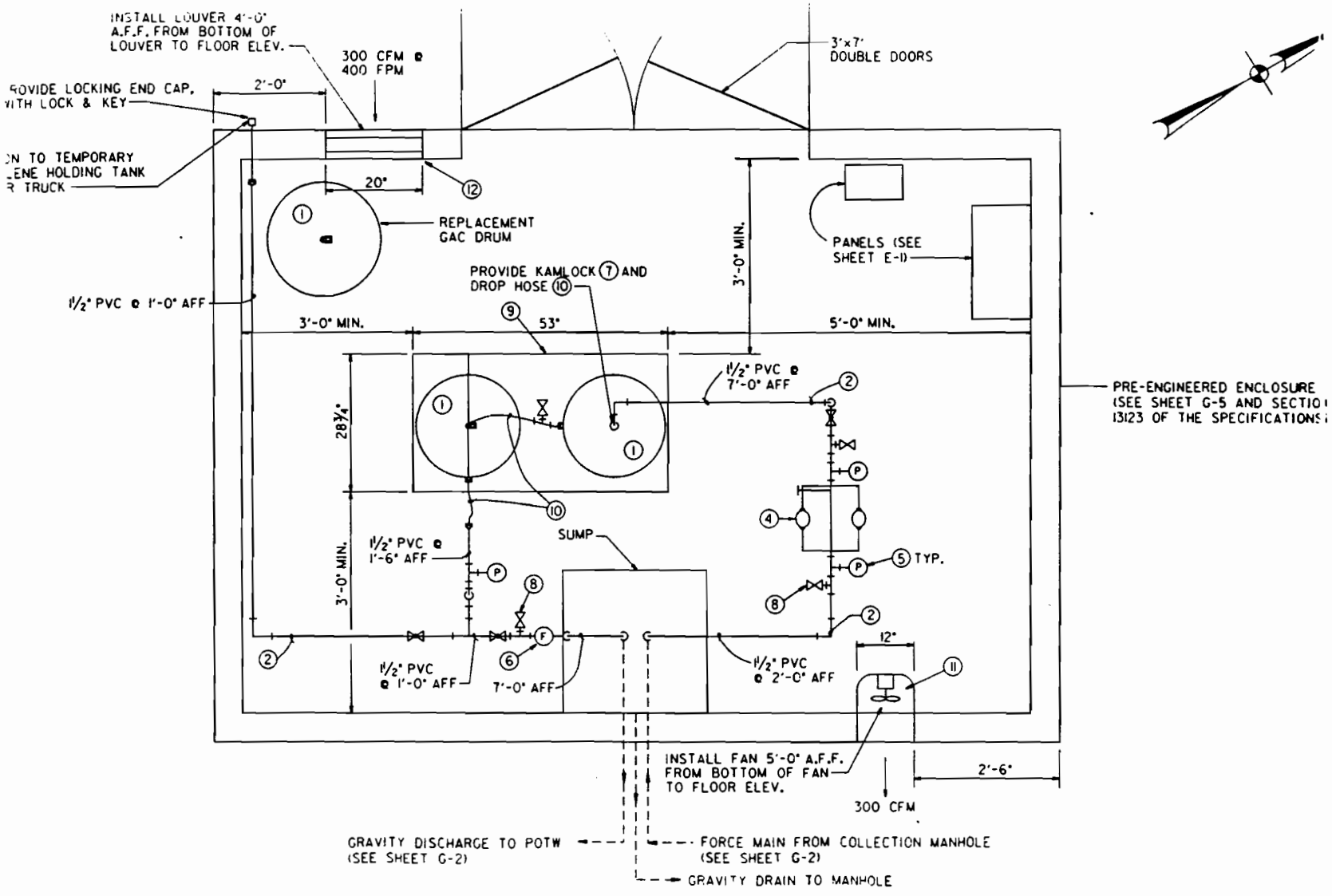
	Results	Det. Limit
Arsenic	< DL	0.050
Barium	0.135	0.050
Cadmium	< DL	0.050
Chromium	< DL	0.050
Lead	< DL	0.050
Mercury	< DL	0.002
Selenium	< DL	0.050
Silver	< DL	0.050

APPENDIX E

GWTS PROCESS FLOW DIAGRAM



TREATMENT SYSTEM SCHEMATIC



TREATMENT SYSTEM PLAN VIEW

ITEM	QTY.	DESCRIPTION
1	3	GRANULAR ACTIVATED CARBON CONTACTOR DRUM 175 LBS GAC (55 GAL) CAMERON-YAKIMA WSU-55 OR EQUAL
2	AS REQ'D	1½" PVC PIPE & FITTINGS, SCH. 80, ASTM D-1784 & D-1785 (SEE NOTE 3)
3	3	1½" BALL VALVE, PVC, SOLVENT WELDED JOINTS, TFE SEALS, CHEMTROL S45HV-V OR EQUAL
4	1	DUPLEX BASKET STRAINER (WITH CONTROL VALVE) PVC, 1½" DIA. SOCKET END CONNECTIONS, 325 MESH, 40 MICRON, S.S. SCREENS, HAYWARD OR EQUAL
5	3	PRESSURE GAUGE, 0-100 PSI RANGE WITH CHEMGUARD, 4½" DIA. FACE, TRERICE MODEL 450 S.S. OR EQUAL
6	1	1½" DIA. FACE BADGER MODEL M-70 FLOW METER WITH TOTALIZER OR EQUAL
7	6	1½" DIA. QUICK CONNECT KAMLOCK COUPLER AND ADAPTOR, OPW 633 C AND 633 F (WITH HOSE SHANK) OR EQUAL
8	4	SAMPLE PORT, PVC, ½" NPT x ½" HOSE, CHEMTROL CHEMCOCK VALVE OR EQUAL
9	1	2 DRUM POLYETHYLENE SPILL CONTAINMENT PALLET, NEW PIG MODEL PAK357J OR EQUAL
10	AS REQ'D	1½" CHEMICAL TRANSFER HOSE (TYP.), GOODYEAR XLPE WITH SYNTHETIC FABRIC REINFORCEMENT AND SYNTHETIC RUBBER COVER, OR EQUAL
11	1	PROPELLER WALL MOUNTED FAN, ACME DYNAMASTER F09, 300 CFM @ .125" STATIC PRESSURE, WALL COLLAR, BACKDRAFT DAMPER OR EQUAL
12	1	EXTRUDED ALUMINUM LOUVER, 20" x 20" DRAINABLE BLADE COMBINATION LOUVER, DOWCO C-DWE-46 WITH MANUAL OPERATOR OR EQUAL

NOTES:

1. ALL PIPE ELEVATIONS NOTED ARE DISTANCES FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE PIPE.
2. QUANTITIES SHOWN IN THE BILL OF MATERIALS ARE FOR THIS DRAWING ONLY.
3. ALL PVC PIPE AND FITTINGS SHALL BE MADE FROM CLASS 12454-B MATERIALS OR BETTER IN ACCORDANCE WITH ANSI/ASTM D-1784/D-1785 AND SHALL BE SCHEDULE 80 UNLESS OTHERWISE SPECIFIED.
4. PROVIDE AND INSTALL GRINNELL FIG. 103 OR EQUAL OFFSET PIPE CLAMPS AND RELATED HARDWARE FOR WALL MOUNTED HORIZONTAL AND VERTICAL PIPE RUNS AT 5'-0" INTERVALS.
5. PROVIDE AND INSTALL GRINNELL FIG. 191 OR EQUAL PIPE STANCHIOINS WITH U-BOLT FOR FLOOR PIPE RUNS AT INLET AND OUTLET OF DUPLEX BASKET STRAINER AND FLOW METER.
6. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL PIPING AND EQUIPMENT WITH THE INSTALLATION OF ELECTRICAL EQUIPMENT AS SHOWN ON SHEET E-1.

LEGEND

- (P) PRESSURE GAUGE
- (F) FLOW METER WITH TOTALIZER
- BALL VALVE
- QUICK CONNECT KAMLOCK COUPLER

APPENDIX F

OPERATION & MAINTENANCE SAMPLE RESULTS

Groundwater Treatment System - Effluent Sample Results

Sample No.	Sample Date	Analyzed For
001	08/26/98	Chromium, Lead, Nickel, Cadmium & Zinc
002	08/26/98	Cyanide
003	08/26/98	Cyanide
004	08/26/98	pH
005	08/26/98	Total VOCs
006	08/26/98	Total VOCs
007	09/11/98	Chromium, Lead, Nickel, Cadmium, Zinc & pH
008	09/11/98	Cyanide
009	09/11/98	Cyanide
010	09/11/98	Total VOCs
011	09/11/98	Total VOCs
012	09/21/98	pH
013	09/21/98	Chromium, Lead, Nickel, Cadmium, Copper & Zinc
014	09/21/98	Cyanide
015	09/21/98	Cyanide
016	09/21/98	Total VOCs
017	10/07/98	pH
018	10/07/98	Chromium, Lead, Nickel, Cadmium, Copper & Zinc
019	10/07/98	Cyanide
020	10/07/98	Total VOCs
021	10/20/98	pH
022	10/20/98	Chromium, Lead, Nickel, Cadmium, Copper & Zinc
023	10/20/98	Cyanide
024	10/20/98	Total VOCs
025	11/05/98	Total VOCs
026 A	11/05/98	Cyanide, Chromium, Lead, Nickel, Cadmium, Zinc & pH
026 B	11/20/98	Total VOCs
027 A	11/20/98	Cyanide, Chromium, Lead, Nickel, Cadmium, Zinc & pH
027 B	12/02/98	pH
028	12/02/98	Cyanide
029	12/02/98	Chromium, Lead, Nickel, Cadmium, Copper & Zinc
030	12/02/98	Total VOCs

LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 864-6360
FAX (716) 864-6364

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5611 Water St
Middlesex, NY 14507

Attn: Barbara Collin

Client Project: O.S.C

Date Received: 8/28/98
Laboratory No.: 22326
Report Date: 9/1/98

SAMPLE INFORMATION

Sample Date: 8/26/98
Sampler: Client

Matrix: Water

LABORATORY REPORT

Lab ID: / Client ID: / Location:	22326-1 Effluent From GWTS 001 (001)	22326-2 Effluent From GWTS 002 (002)	Units	Method Number	Analysis Date
PARAMETER					
Chromium	<0.003		mg/l	EPA 200.7	9/1/98
Lead	<0.003		mg/l	EPA 200.7	9/1/98
Nickel	0.032		mg/l	EPA 200.7	9/1/98
Cadmium	<0.001		mg/l	EPA 200.7	9/1/98
Zinc	0.043		mg/l	EPA 200.7	9/1/98
Cyanide		<0.05	mg/l	SM 4500	8/31/98

Lab ID: / Client ID: / Location:	22326-3 Effluent From GWTS 003 (003)	22326-4 Effluent From GWTS 004 (004)	Units	Method Number	Analysis Date
PARAMETER					
Cyanide	<0.05		mg/l	SM 4500	8/31/98
pH		7.4	S.U.	EPA 150.1	8/26/98

PAGE: 1

Analyst:

James R. Lozier

Approved By:

HYDROLAB LAB ID # 10390

TOTAL P.02

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Numbe 9705
Project Cust: O.S.C.
Project Site: PRIMOSHELD, UTICA
Date FAXED:
Lab Director

DEC 9

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20214
Sample ID#1(CUST)	EFFLUENT FROM GWTS
Sample ID#2(CUST)	5
Matrix	WATER
Sampled By	PATRICK FOOTE
Date Sampled	08/26/98 15:15
Date Received	08/28/98 09:00
Date Analyzed	08/31/98
Date Reported	09/01/98

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	8.0	Trichloroethene	< DL(U)	8.0
Bromomethane	< DL(U)	6.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	10.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	8.0
Methylene Chloride	< DL(U)	18.0	1,1,2,2-Tetrachloroethane	< DL(U)	10.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	8.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	8.0
Methyl ethyl ketone	< DL(U)	40.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	8.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	8.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Numbe 9705
Project Cust: O.S.C.
Project Site: PRIMOSHELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20214	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	5	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	08/26/98	15:15
Date Received	08/28/98	09:00
Date Analyzed	08/31/98	
Date Reported	09/01/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	2.1	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	2.6	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	6.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	6.9	2.0
1,4-Dichlorobenzene	8.1	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	9.0	2.0
n-Butylbenzene	6.8	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	12.6	4.0
Hexachlorobutadiene	11.2	2.0
Naphthalene	15.5	10.0
1,2,3-Trichlorobenzene	13.3	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Numbe 9705
Project Cust: O.S.C.
Project Site: PRIMOSHELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20215	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	6	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	08/26/98	15:15
Date Received	08/28/98	09:00
Date Analyzed	08/31/98	
Date Reported	09/01/98	

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	8.0	Trichloroethene	< DL(U)	8.0
Bromomethane	< DL(U)	6.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	10.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	8.0
Methylene Chloride	< DL(U)	18.0	1,1,2,2-Tetrachloroethane	< DL(U)	10.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	8.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	8.0
Methyl ethyl ketone	< DL(U)	40.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	8.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	8.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Numbe 9705
Project Cust: O.S.C.
Project Site: PRIMOSHELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20215	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	6	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	08/26/98	15:15
Date Received	08/28/98	09:00
Date Analyzed	08/31/98	
Date Reported	09/01/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	< DL(U)	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	6.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	3.5	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	6.2	4.0
Hexachlorobutadiene	5.4	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

DEC

LOZIER LABORATORIES, INC.

908 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6360
FAX (716) 654-6364

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5811 Water St
Middlesex, NY 14507

Date Received: 9/15/98
Laboratory No.: 22586
Report Date: 9/29/98

Attn: Barbara Collin

Client Project:

SAMPLE INFORMATION

Sample Date: 9/11/98
Sampler: Client

Matrix: Water

LABORATORY REPORT

Lab ID:	22586-1	22586-2			
Client ID:	7	8			
Location:	007	008			
PARAMETER			Units	Method Number	Analysis Date
Lead	0.007		mg/l	EPA 200.7	9/16/98
Nickel	0.075		mg/l	EPA 200.7	9/16/98
Chromium	<0.003		mg/l	EPA 200.7	9/16/98
Cadmium	0.003		mg/l	EPA 200.7	9/16/98
Zinc	0.021		mg/l	EPA 200.7	9/16/98
pH	7.25		S.U.	EPA 150.1	9/15/98
Cyanide		<0.005	mg/l	SM 4500	9/29/98

Lab ID:	22586-3			
Client ID:	9			
Location:	009			
PARAMETER		Units	Method Number	Analysis Date
Cyanide	<0.005	mg/l	SM 4500	9/29/98

Approved By:

NYSDOH LAB ID # 10390

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO. NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: OSC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20647	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	10	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	09/11/98	14:20
Date Received	09/15/98	09:50
Date Analyzed	09/15/98	
Date Reported	09/15/98	

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	2.0	Trichloroethene	< DL(U)	2.0
Bromomethane	< DL(U)	2.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	2.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	2.0
Methylene Chloride	< DL(U)	25.0	1,1,2,2-Tetrachloroethane	< DL(U)	2.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	2.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	2.0
Methyl ethyl ketone	31.1	20.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	2.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	2.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: OSC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* =
*See Individual Limit
Soil=ug/kg ppb
Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20647	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	10	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	09/11/98	14:20
Date Received	09/15/98	09:50
Date Analyzed	09/15/98	
Date Reported	09/15/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	2.1	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	2.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	< DL(U)	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	5.0
1,2,4-Trichlorobenzene	< DL(U)	4.0
Hexachlorobutadiene	< DL(U)	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO. NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: OSC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20648	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	11	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	09/11/98	14:22
Date Received	09/15/98	09:50
Date Analyzed	09/15/98	
Date Reported	09/15/98	

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	2.0	Trichloroethene	< DL(U)	2.0
Bromomethane	< DL(U)	2.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	2.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	2.0
Methylene Chloride	< DL(U)	25.0	1,1,2,2-Tetrachloroethane	< DL(U)	2.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	2.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	2.0
Methyl ethyl ketone	< DL(U)	20.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	2.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	2.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: OSC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20648	
Sample ID#1(CUST)	EFFLUENT FROM GWTS	
Sample ID#2(CUST)	11	
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	09/11/98	14:22
Date Received	09/15/98	09:50
Date Analyzed	09/15/98	
Date Reported	09/15/98	

	Results	Det Limit*		Results	Det Limit*
m&p-Xylene	< DL(U)	4.0	1,2-Dichlorobenzene	< DL(U)	2.0
o-Xylene	< DL(U)	2.0	n-Butylbenzene	< DL(U)	2.0
Styrene	< DL(U)	2.0	1,2-Dibromo-3-chloropropane	< DL(U)	5.0
Isopropylbenzene	< DL(U)	2.0	1,2,4-Trichlorobenzene	< DL(U)	4.0
n-Propylbenzene	< DL(U)	2.0	Hexachlorobutadiene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0	Naphthalene	< DL(U)	10.0
tert-Butylbenzene	< DL(U)	2.0	1,2,3-Trichlorobenzene	< DL(U)	10.0
1,2,4-Trimethylbenzene	< DL(U)	2.0			
sec-Butylbenzene	< DL(U)	2.0			
Chlorobenzene	< DL(U)	2.0			
1,1,1,2-Tetrachloroethane	< DL(U)	2.0			
Bromobenzene	< DL(U)	2.0			
1,2,3-Trichloropropane	< DL(U)	2.0			
2-Chlorotoluene	< DL(U)	2.0			
4-Chlorotoluene	< DL(U)	2.0			
1,3-Dichlorobenzene	< DL(U)	2.0			
4-Isopropyltoluene	< DL(U)	2.0			
1,4-Dichlorobenzene	< DL(U)	2.0			

< DL(U)= analyzed but not detected
J= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

DEC 9

LOZIER LABORATORIES, INC.

809 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 864-6350
FAX (716) 864-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5611 Water St
Middlesex, NY 14507

Attn: Barbara Catlin

Client Project:

Date Received: 9/25/98
Laboratory No.: 22801
Report Date: 9/29/98

SAMPLE INFORMATION

Sample Date: 9/21/98
Sampler: Client

Matrix:

LABORATORY REPORT

Lab ID:	22801-1	22801-2			
Client ID:	9705-12	9705-13			
Location:	(012)	(013)			
PARAMETER			Units	Method Number	Analysis Date
pH	7.99		S.U.	EPA 150.1	9/28/98
Cadmium		<0.001	mg/l	EPA 200.7	9/28/98
Chromium		0.005	mg/l	EPA 200.7	9/28/98
Zinc		0.048	mg/l	EPA 200.7	9/28/98
Nickel		0.089	mg/l	EPA 200.7	9/28/98
Lead		0.021	mg/l	EPA 200.7	9/28/98
Copper		0.022	mg/l	EPA 200.7	9/28/98

Lab ID:	22801-3			
Client ID:	9705-14&15			
Location:	(014 + 015)			
PARAMETER		Units	Method Number	Analysis Date
Cyanide	<0.005	mg/l	SM 4500	9/29/98

Approved By:

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust OSC
Address 333 GANSON ST
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: OSC
Project Site: PRIMOSHIELD-UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20976	
Sample ID#1(CUST)	9705-16 & 9705-17	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	09/21/98	10:00
Date Received	09/25/98	09:30
Date Analyzed	09/28/98	
Date Reported	09/29/98	

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	2.0	Trichloroethene	< DL(U)	35.0
Bromomethane	< DL(U)	2.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	2.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	2.0
Methylene Chloride	< DL(U)	40.0	1,1,2,2-Tetrachloroethane	< DL(U)	2.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	5.9	5.0
2,2-Dichloropropane	< DL(U)	2.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	50.0	1,1,2-Trichloroethane	< DL(U)	2.0
Methyl ethyl ketone	< DL(U)	20.0	Tetrachloroethene	< DL(U)	35.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	2.0
1,1,1-Trichloroethane	< DL(U)	20.0	1,2-Dibromoethane	< DL(U)	2.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust OSC
Address 333 GANSON ST
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: OSC
Project Site: PRIMOSHIELD-UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	20976	
Sample ID#1(CUST)	9705-16 & 9705-17	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	09/21/98	10:00
Date Received	09/25/98	09:30
Date Analyzed	09/28/98	
Date Reported	09/29/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	< DL(U)	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	2.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	< DL(U)	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	5.0
1,2,4-Trichlorobenzene	< DL(U)	4.0
Hexachlorobutadiene	< DL(U)	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5611 Water St
Middlesex, NY 14507

Attn: Barbara Catlin

Client Project:

Date Received: 10/9/98
Laboratory No.: 23047
Report Date: 10/20/98

SAMPLE INFORMATION

Sample Date: 10/9/98
Sampler: Client

Matrix:

LABORATORY REPORT

	Lab ID:	23047-1	23047-2			
	Client ID:	9705-17	9705-18			
	Location:	(017)	(018)			
PARAMETER				Units	Method Number	Analysis Date
Cyanide				mg/l	SM 4500	
pH		7.2		S.U.	EPA 150.1	10/9/98
CADMIUM			<0.001	mg/l	EPA 200.7	10/13/98
CHROMIUM			<0.003	mg/l	EPA 200.7	10/13/98
ZINC			0.027	mg/l	EPA 200.7	10/13/98
NICKEL			0.114	mg/l	EPA 200.7	10/13/98
LEAD			<0.003	mg/l	EPA 200.7	10/13/98
COPPER			0.024	mg/l	EPA 200.7	10/13/98

	Lab ID:	23047-3			
	Client ID:	9705-19			
	Location:	(019)			
PARAMETER			Units	Method Number	Analysis Date
Cyanide		<0.010	mg/l	SM 4500	10/14/98

Footnotes:

James R. Lozier

Approved By:_____

NYSDOH LAB ID # 10390

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number:
Project Number 9705
Project Cust: NYSDEC
Project Site: PRIMOSHIELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	21305
Sample ID#1(CUST)	9705 - 20
Sample ID#2(CUST)	
Matrix	WATER
Sampled By	PATRICK FOOTE
Date Sampled	10/07/98 09:45
Date Received	10/09/98 09:15
Date Analyzed	10/12/98
Date Reported	10/13/98

	Results	Det Limit*
m&p-Xylene	< DL(U)	8.0
o-Xylene	< DL(U)	4.0
Styrene	< DL(U)	4.0
Isopropylbenzene	< DL(U)	4.0
n-Propylbenzene	< DL(U)	4.0
1,3,5-Trimethylbenzene	< DL(U)	4.0
tert-Butylbenzene	< DL(U)	4.0
1,2,4-Trimethylbenzene	< DL(U)	4.0
sec-Butylbenzene	< DL(U)	4.0
Chlorobenzene	< DL(U)	4.0
1,1,1,2-Tetrachloroethane	< DL(U)	4.0
Bromobenzene	< DL(U)	4.0
1,2,3-Trichloropropane	< DL(U)	4.0
2-Chlorotoluene	< DL(U)	4.0
4-Chlorotoluene	< DL(U)	4.0
1,3-Dichlorobenzene	< DL(U)	4.0
4-Isopropyltoluene	< DL(U)	4.0
1,4-Dichlorobenzene	< DL(U)	4.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	4.0
n-Butylbenzene	< DL(U)	4.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	< DL(U)	8.0
Hexachlorobutadiene	< DL(U)	4.0
Naphthalene	< DL(U)	20.0
1,2,3-Trichlorobenzene	< DL(U)	20.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

Lozier Analytical Group

☐ Lozier Laboratories, Inc. #10390 — 888 - 841 - 5227
☐ EXPRESSLAB, Inc. #11369 — 800 - 843 - 5227
☐ Environmental Testing Facilities, Inc. #10312 — 800 - 843 - 5220

Client: EXPRESSLAB INC.
5611 Water St
Middlesex, NY 14507

Attn: Barbara Catlin

Client Project:

Date Received: 10/26/98
Laboratory No.: 23285
Report Date: 10/29/98

SAMPLE INFORMATION

Sample Date: 10/20/98
Sampler: Client

Matrix:

LABORATORY REPORT

Lab ID: / Client ID: / Location: / PARAMETER	23285-1 / 9705-21 / (021)	23285-2 / 9705-22 / (022)	Units	Method Number	Analysis Date
Ph	7.34		S.U.	EPA 150.1	10/27/98
Cadmium		<0.001	mg/l	EPA 200.7	10/27/98
Chromium		<0.003	mg/l	EPA 200.7	10/27/98
Lead		0.004	mg/l	EPA 200.7	10/27/98
Nickel		0.158	mg/l	EPA 200.7	10/27/98
Copper		0.012	mg/l	EPA 200.7	10/27/98
Zinc		0.028	mg/l	EPA 200.7	10/27/98

Lab ID: / Client ID: / Location: / PARAMETER	23285-3 / 9705-23 / (023)	Units	Method Number	Analysis Date
Total Cyanide	< 0.01	mg/l	SM 4500	10/27/98

NYSDOH LAB ID # 10390

Approved By: James A. Lozier

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYSDEC
Project Site: PRIMDSHIELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	21808
Sample ID#1(CUST)	9705 - 24
Sample ID#2(CUST)	
Matrix	WATER
Sampled By	PATRICK FOOTE
Date Sampled	10/20/98 04:15
Date Received	10/26/98 10:10
Date Analyzed	10/26/98
Date Reported	10/27/98

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	8.0	Trichloroethene	< DL(U)	8.0
Bromomethane	< DL(U)	6.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	10.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	8.0
Methylene Chloride	< DL(U)	18.0	1,1,2,2-Tetrachloroethane	< DL(U)	10.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	8.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	8.0
Methyl ethyl ketone	< DL(U)	40.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	8.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	8.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust OSC
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICH CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYSDEC
Project Site: PRIMOSHIELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	21808	
Sample ID#1(CUST)	9705 - 24	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	10/20/98	04:15
Date Received	10/26/98	10:10
Date Analyzed	10/26/98	
Date Reported	10/27/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	< DL(U)	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	6.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	< DL(U)	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	< DL(U)	4.0
Hexachlorobutadiene	< DL(U)	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYS DEC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	22144
Sample ID#1(CUST)	9705 - 25
Sample ID#2(CUST)	
Matrix	WATER
Sampled By	KEITH OLIVER
Date Sampled	11/05/98 01:15
Date Received	11/10/98 09:20
Date Analyzed	11/10/98
Date Reported	11/11/98

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	8.0	Trichloroethene	< DL(U)	8.0
Bromomethane	< DL(U)	6.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	10.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	8.0
Methylene Chloride	< DL(U)	18.0	1,1,2,2-Tetrachloroethane	< DL(U)	10.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	8.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	8.0
Methyl ethyl ketone	< DL(U)	40.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	8.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	8.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 8260

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYS DEC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	22144	
Sample ID#1(CUST)	9705 - 25	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	11/05/98	01:15
Date Received	11/10/98	09:20
Date Analyzed	11/10/98	
Date Reported	11/11/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	< DL(U)	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	6.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	< DL(U)	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	< DL(U)	4.0
Hexachlorobutadiene	< DL(U)	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5611 Wafer St
Middlesex, NY 14507

Date Received: 11/10/98
Laboratory No.: 1181
Report Date: 11/12/98

Attn: Barbara Catlin

Client Project: 0

SAMPLE INFORMATION

Sample Date: 11/5/98
Sampler: Client

Matrix:

LABORATORY REPORT

Lab ID: 1181-1
Client ID: 22145
Location: 026 A

PARAMETER		Units	Method Number	Analysis Date
Cyanide	0.03	mg/l	SM 4500	11/11/98
Ph	7.65	SU	EPA 150.1	11/10/98
Cadmium	0.002	mg/l	EPA 200.7	11/11/98
Lead	0.012	mg/l	EPA 200.7	11/11/98
Nickel	0.202	mg/l	EPA 200.7	11/11/98
Chromium	0.004	mg/l	EPA 200.7	11/11/98
Zinc	0.084	mg/l	EPA 200.7	11/11/98

Lab ID:
Client ID:
Location:

PARAMETER		Units	Method Number	Analysis Date

NYSDOH LAB ID # 10390

Approved By: James A. Lozier

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS
NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYS DEC
Project Site: PRIMOSHIELD
Date FAXED: DEC - 9 1998
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

	22562	
Sample ID (LAB)		
Sample ID#1(CUST)	9705 - 26	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	11/20/98	16:30
Date Received	11/25/98	10:50
Date Analyzed	11/30/98	
Date Reported	12/01/98	

026 B

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	8.0	Trichloroethene	< DL(U)	8.0
Bromomethane	< DL(U)	6.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	10.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	8.0
Methylene Chloride	< DL(U)	18.0	1,1,2,2-Tetrachloroethane	< DL(U)	10.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	8.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	8.0
Methyl ethyl ketone	< DL(U)	40.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	8.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	8.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYS DEC
Project Site: PRIMOSHIELD
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: Volatile Organic Analytes
Extraction Method: EPA 5030 Purge & Trap
Analysis Method: EPA 8260 GC/MS

Sample ID (LAB)	22562	
Sample ID#1(CUST)	9705 - 26	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	KEITH OLIVER	
Date Sampled	11/20/98	16:30
Date Received	11/25/98	10:50
Date Analyzed	11/30/98	
Date Reported	12/01/98	

026 B

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	< DL(U)	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	6.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	< DL(U)	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	< DL(U)	4.0
Hexachlorobutadiene	< DL(U)	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit

LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5611 Water St
Middlesex, NY 14507

Attn: Barbara Catlin

Client Project:

Date Received: 11/25/98
Laboratory No.: 1411
Report Date: 12/1/98

SAMPLE INFORMATION

Sample Date: 11/25/98
Sampler: Client

Matrix:

LABORATORY REPORT

Lab ID: 1411-1
Client ID: 22563
Location: 027 A

PARAMETER		Units	Method Number	Analysis Date
Total Cyanide	0.03	mg/l	SM 4500	11/30/98
pH	7.09	S.U.	EPA 150.1	11/25/98
Chromium	0.006	mg/l	EPA 200.7	11/30/98
Cadmium	<0.001	mg/l	EPA 200.7	11/30/98
Lead	0.014	mg/l	EPA 200.7	11/30/98
Nickel	0.195	mg/l	EPA 200.7	11/30/98
Zinc	0.072	mg/l	EPA 200.7	11/30/98

Lab ID:
Client ID:
Location:

PARAMETER		Units	Method Number	Analysis Date

James A. Lozier

NYSDOH LAB ID # 10390

Approved By: _____

LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: EXPRESSLAB INC.
5611 Water St
Middlesex, NY 14507

Attn: Barbara Catlin

Client Project:

Date Received: 12/4/98
Laboratory No.: 1515
Report Date: 12/10/98

SAMPLE INFORMATION

Sample Date: 12/2/98
Sampler: Client

Matrix:

LABORATORY REPORT

	Lab ID:	1515–1	1515–2			
	Client ID:	22744	22745			
	Location:	027 B	028			
PARAMETER				Units	Method Number	Analysis Date
Cyanide			<0.010	mg/l	SM 4500	12/9/98
pH		7.22		S.U.	EPA 150.1	12/4/98

	Lab ID:	1515–3			
	Client ID:	22746			
	Location:	029			
PARAMETER			Units	Method Number	Analysis Date
Copper		0.026	mg/l	EPA 200.7	12/7/98
Cadmium		<0.001	mg/l	EPA 200.7	12/7/98
Chromium		<0.003	mg/l	EPA 200.7	12/7/98
Lead		0.005	mg/l	EPA 200.7	12/7/98
Nickel		0.153	mg/l	EPA 200.7	12/7/98
Zinc		0.051	mg/l	EPA 200.7	12/7/98

Footnotes:

Approved By: Jessica A. Lozier

NYSDOH LAB ID # 10390

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 856-3333
FAX 842-1630

DEC 23 1998

PO Number: 9705
Project Number:
Project Cust: NYS DEC
Project Site: PRIMOSHIELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: **Volatile Organic Analytes**
Extraction Method: **EPA 5030 Purge & Trap**
Analysis Method: **EPA 8260 GC/MS**

	22747	
Sample ID (LAB)		
Sample ID#1(CUST)	9705 - 30	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	12/02/98	09:30
Date Received	12/04/98	09:50
Date Analyzed	12/07/98	
Date Reported	12/08/98	

	Results	Det Limit*		Results	Det Limit*
Dichlorodifluoromethane	< DL(U)	2.0	Carbon Tetrachloride	< DL(U)	2.0
Vinyl Chloride	< DL(U)	2.0	1,2-Dichloroethane	< DL(U)	2.0
Chloromethane	< DL(U)	8.0	Trichloroethene	< DL(U)	8.0
Bromomethane	< DL(U)	6.0	1,2-Dichloropropane	< DL(U)	2.0
Chloroethane	< DL(U)	5.0	Dibromomethane	< DL(U)	2.0
Trichlorofluoromethane	< DL(U)	2.0	Bromoform	< DL(U)	10.0
1,1-Dichloroethene	< DL(U)	2.0	Bromodichloromethane	< DL(U)	8.0
Methylene Chloride	< DL(U)	18.0	1,1,2,2-Tetrachloroethane	< DL(U)	10.0
trans-1,2-Dichloroethene	< DL(U)	2.0	Benzene	< DL(U)	4.0
Methyl-tert-butyl ether	< DL(U)	8.0	cis-1,3-Dichloropropene	< DL(U)	2.0
1,1-Dichloroethane	< DL(U)	2.0	Toluene	< DL(U)	5.0
2,2-Dichloropropane	< DL(U)	8.0	trans-1,3-Dichloropropene	< DL(U)	2.0
cis-1,2-Dichloroethene	< DL(U)	2.0	1,1,2-Trichloroethane	< DL(U)	8.0
Methyl ethyl ketone	< DL(U)	40.0	Tetrachloroethene	< DL(U)	2.0
Bromochloromethane	< DL(U)	2.0	1,3-Dichloropropane	< DL(U)	2.0
Chloroform	< DL(U)	2.0	Dibromochloromethane	< DL(U)	8.0
1,1,1-Trichloroethane	< DL(U)	2.0	1,2-Dibromoethane	< DL(U)	8.0
1,1-Dichloropropene	< DL(U)	2.0	Ethylbenzene	< DL(U)	2.0

* DL = Detection Limit

EXPRESSLAB

PO Box 40 5611 Water Street Middlesex NY 14507

Tel: (716) 554-5347 Tel: (800) THE LABS Tel: (800) 843-5227 FAX: (716) 554-4114

SPECIALIZING IN ENVIRONMENTAL SOIL TESTS

NEW YORK STATE LABORATORY #11369

LABORATORY REPORT - METHOD 624

Cust O.S.C.
Address 333 GANSON ST.
BUFFALO, NY 14203
Attn: RICHARD CYGAN

Phone 856-3333
FAX 842-1630

PO Number: 9705
Project Number:
Project Cust: NYS DEC
Project Site: PRIMOSHIELD, UTICA
Date FAXED:
Lab Director

SAMPLE DEMOGRAPHICS AND TEST RESULTS

Results in bold type; Detection Limits in small print
Detection Limits* = Soil=ug/kg ppb
*See Individual Limit Water=ug/L ppb

Results shown are: **Volatile Organic Analytes**
Extraction Method: **EPA 5030 Purge & Trap**
Analysis Method: **EPA 8260 GC/MS**

	22747	
Sample ID (LAB)		
Sample ID#1(CUST)	9705 - 30	
Sample ID#2(CUST)		
Matrix	WATER	
Sampled By	PATRICK FOOTE	
Date Sampled	12/02/98	09:30
Date Received	12/04/98	09:50
Date Analyzed	12/07/98	
Date Reported	12/08/98	

	Results	Det Limit*
m&p-Xylene	< DL(U)	4.0
o-Xylene	< DL(U)	2.0
Styrene	< DL(U)	2.0
Isopropylbenzene	< DL(U)	2.0
n-Propylbenzene	< DL(U)	2.0
1,3,5-Trimethylbenzene	< DL(U)	2.0
tert-Butylbenzene	< DL(U)	2.0
1,2,4-Trimethylbenzene	< DL(U)	2.0
sec-Butylbenzene	< DL(U)	2.0
Chlorobenzene	< DL(U)	2.0
1,1,1,2-Tetrachloroethane	< DL(U)	6.0
Bromobenzene	< DL(U)	2.0
1,2,3-Trichloropropane	< DL(U)	2.0
2-Chlorotoluene	< DL(U)	2.0
4-Chlorotoluene	< DL(U)	2.0
1,3-Dichlorobenzene	< DL(U)	2.0
4-Isopropyltoluene	< DL(U)	2.0
1,4-Dichlorobenzene	< DL(U)	2.0

	Results	Det Limit*
1,2-Dichlorobenzene	< DL(U)	2.0
n-Butylbenzene	< DL(U)	2.0
1,2-Dibromo-3-chloropropane	< DL(U)	10.0
1,2,4-Trichlorobenzene	< DL(U)	4.0
Hexachlorobutadiene	< DL(U)	2.0
Naphthalene	< DL(U)	10.0
1,2,3-Trichlorobenzene	< DL(U)	10.0

< DL(U)= analyzed but not detected
L= estimated value
B=analyte found in blank
E=exceed calibration range

* DL = Detection Limit