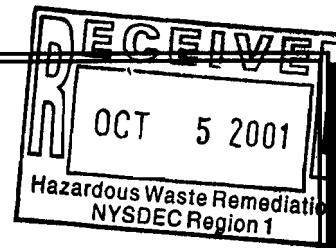


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**Interim Remedial Measures Report (IRM)**

**U.S. Electroplating Corp., Site No.: 1-52-027**

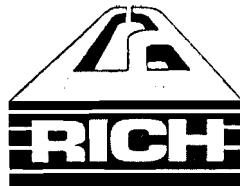
**Order On Consent Index # W1-0710-94-11**

**Submitted:**

**August 7, 1998**

**Prepared by:**

**C.A. Rich Consultants, Inc.  
404 Glen Cove Avenue  
Sea Cliff, New York 11579**



## CA RICH CONSULTANTS, INC.

CERTIFIED GROUND-WATER AND  
ENVIRONMENTAL SPECIALISTS

July 30, 1998

New York State Department of Environmental Conservation  
Bureau of Eastern Remedial Action  
Division of Environmental Remediation  
50 Wolf Road  
Albany, NY 12233-7010

Attention: Ms. Sally Dewes, P.E.

Re:     **Interim Remedial Measures Report**  
          **U.S. Electroplating Corp., Site No.: 1-52-027**  
          **100 Field Street**  
          **West Babylon, NY 11704**  
**Order On Consent Index # W1-0710-94-11**

Dear Ms. Dewes:

CA Rich Consultants, Inc. (CA RICH) is pleased to submit to the New York State Department of Environmental Conservation (NYSDEC) the following Interim Remedial Measures (IRM) Report.

### 1.0 Introduction

This Report is prepared on behalf of the U.S. Electroplating Corp., the current operator at the property. This Report includes the following items.

- INTRODUCTION
- BACKGROUND
- SUMMARY OF WORK PERFORMED
- SUMMARY AND CONCLUSIONS
- CERTIFICATION
- REFERENCES

### 2.0 BACKGROUND

The U.S. Electroplating Site is located at 100 Field Street in West Babylon, Suffolk County, New York. The property has been owned and operated by the U.S. Electroplating Corp. from 1971 to present. U.S. Electroplating Corp. is a "job shop" metal plater. They receive parts from metal parts fabricators and either electroplate the parts or anodize them.

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The Facility conducts most plating operations in tanks or barrels. Chromium, copper, tin, cadmium, and nickel are the most common plating operations. The barrel line can also accommodate the electroplating of precious metals (i.e. gold and silver). Anodizing is the process in which the surface of the metal, typically aluminum, is dyed with a color -- usually red, yellow, blue, or black.

In the electroplating process, parts are either placed in baskets or hung on racks. They are then dipped into various tanks of alkaline cleaners, acid etch, plating solutions, stripping solutions and rinses. Plating operations generate a significant quantity of wastewater. U.S. Electroplating Corp. minimizes waste generation by careful water conservation, recycling, and process adaptations. The small quantity of waste generated on-site is stored in a tank and is periodically hauled off site by Innovative Recycling Technologies (IRT) for recycling and treatment.

In 1993, a fire occurred at the Facility. Water used to quench the fire allegedly flowed out of the building and into the outside cesspools and storm drains. The water had also reportedly entered the sewer grate adjacent to the building on the west side of Field Street.

## **2.1 Physical Layout of Building**

U.S. Electroplating's facility at 100 Field Street consists of a one story concrete block building. Its site includes a parking lot on the north parcel which is underlain by three storm drains and a septic system. An illustration of these pools is included as Figure 1. Roof leaders and gutters are connected to the storm drains in the parking lot.

## **2.2 Previous Investigations**

Previous investigations at the U.S. Electroplating Site are summarized on the following table. Details of these investigations and the results of any samples collected are included in the NYSDEC's PSA Work Plan and the PSA Investigation Report.

<b><u>Investigations</u></b>	<b><u>Date</u></b>
Phase I Preliminary Investigation (Ref.1)	September 20, 1984
Phase II Investigation (Ref.2)	April 3, 1990
RI Work Plan (Ref.3)	January 1994
RI Report - Part A (Ref.4)	January 30, 1996

## **2.3 Geologic Setting**

U.S. Electroplating is situated upon the glacial outwash soil deposits of Long Island at an elevation of approximately 61 feet above mean sea level (MSL). The elevation of the water table occurring within the underlying upper glacial aquifer is approximately 19 feet below the land surface. Based upon measurements by the SCDHS, the direction of shallow groundwater flow is to the south-southeast.

The Upper Glacial Formation is approximately 100 feet thick and is underlain by the Magothy Formation, the principal water supply aquifer for most of Western Suffolk County. The property is located on the northern boundary of the Gardiners Clay. It is not known at this time whether the clay is present between the Upper Glacial Formation and the Magothy Formation (see Figure 2). The Magothy Aquifer consists of material deposited in marine and fluvial or deltaic environments during the Cretaceous Period. These deposits consist of beds and lenses of sandy clay, clayey sand, silt, and sand and gravel; the coarsest sediments generally are within the basal 50 to 100 ft of the unit (Refs. 5 & 6).

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The Magothy Formation is, in turn, underlain by the Raritan Formation. The Raritan Formation is composed of the upper Raritan Clay, a regional confining layer, followed by the more permeable Lloyd Sand. The Lloyd Sand lies directly upon crystalline bedrock.

## **2.4 Identification of Potential Source Areas**

Based upon the results of previous sample results collected from this property, the following source areas were identified and are illustrated on Figure 1 of this report:

- on-site storm drains numbers 1 and 2;
- cesspools CP-1 and CP-2; and
- off-site street storm drain number 5

In addition to the source areas identified during earlier investigations, on-site storm drain 6 and off-site street drains SG-W and SG-E were identified as potential source areas and voluntarily cleaned out.

## **3.0 SUMMARY OF WORK PERFORMED**

### **3.1 Waste Characterization Analyses**

Waste characterization samples were collected from the storm drains and from the cesspools for the purposes of selecting a waste disposal facility. Profiling and disposal of the excavated materials were arranged by Innovative Recycling Technologies, prior to the start up of the IRM. The material from cesspools CP-1 and CP-2 was classified as septic sludge and was transported to Evergreen Environmental, a TSDF located in Ohio, as a D006 and D007-listed waste. This material consisted of tan sandy soil with green staining. The material from the storm drains was transported to Republic Environmental systems Inc. (dba Philips Environmental Services), a TSDF located in Pennsylvania, as a D006 and D007-listed waste and to Chemical Pollution Control, Inc. (CPC), a TSDF located in Bay Shore, New York. The storm drain material also consisted of tan sandy soil with green staining.

The bottom of each storm drain was filled with storm water that had to be pumped prior to excavation of the drains. The water was sampled for waste characterization purposes and to obtain approval for disposal at the SCDPW Bergen Point treatment plant. The waste characterization analyses and disposal approval were performed by Donnelly Engineering prior to C.A. Rich's involvement on this project.

### **3.2 Clean out of Storm Drains 1, 2, 5, 6, Cesspool and Sewer Grates E & W**

The wastewater and storm water from each storm drain, sewer grate and the cesspools were pumped out by Jarrach Cesspools, Inc. of Deer Park, New York and transported to the SCDPW plant in Bergen Point, NY. Their SCDPW permit # is 52-006 and their DEC permit # is 1A226. The bottom of storm drains 1, 2, 6 and cesspools CP-1 and CP-2 were excavated using a rubber tired back hoe. Soil was excavated from the bottom of the structures and screened using a precleaned, stainless steel hand-operated soil auger and a HNu PID meter. The excavation of storm drains 2 and 6 extended until the soil was visibly clean and the meter reading was zero.

The excavation of SD-1, SD-2, and CP-2 extended until the water table was reached. Once the interface of the visible contamination and the groundwater was reached an end-point sample was collected. The excavation of storm sewer grate west (SG-W), storm sewer grate east (SG-E), and SD-5 were performed using a truck mounted crane with an "orange peel" bucket. The excavation proceeded until the soil was visibly clean and the HNu PID meter reading was zero.

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Screening analysis were performed for cyanide, chromium, and cadmium on an expedited turn-around basis by EcoTest Laboratories, Inc. The results of these screening results, included on Table 5, were used as a guide to determine the final depth of the excavations.

The following table summarizes the excavation activities at this site:

<b>Location:</b>	<b>CP-1</b>	<b>CP-2</b>	<b>SD-1</b>	<b>SD-2</b>	<b>SG-W</b>	<b>SD-6</b>	<b>SG-E</b>	<b>SD-5</b>
Date(s):	1-21-98	3-6-98	3-6-98	3-2-98	3-2-98	3-3-98 & 3-4-98	3-5-98	3-5-98 & 3-6-98
Diameter:	8 Ft.	8 Ft.	8 Ft.	8 Ft.	6 Ft. (est.)	8 Ft.	6 Ft. (est.)	8 Ft.
Est. Volume of Water:	3,000 gal. (est.)	3,000 gal. (est.)	3,600 gal.	6,800 gal. (est.)	4,000 gal. (est.)	3,600 gal.	1,800 gal. (est.)	1,800 gal. (est.)
Disposal Facility: (water)	SCDPW	SCDPW	SCDPW	SCDPW	SCDPW	SCDPW	SCDPW	SCDPW
Beginning Depth of Excavation:	8.5 Ft (est.)	8.5 Ft.	9.2 Ft.	9 Ft. (est.)	8 Ft. (est.)	8.6 Ft.	8.2 Ft.	8 Ft. (est.)
Ending Depth of Excavation:	16 Ft. (est.)	16.1 Ft.	16 Ft.	15.5 Ft.	10.25 Ft.	15.25 Ft.	12 Ft.	10.7 Ft.
Est. Volume of Soil:	40 yds <sup>3</sup>	40 yds <sup>3</sup>	140 yds <sup>3</sup>	100 yds <sup>3</sup>	10 yds <sup>3</sup>	110 yds <sup>3</sup>	10 yds <sup>3</sup>	10 yds <sup>3</sup>
Classification:	D006 & D007 Septic	D006 & D007 Septic	D006 & D007 Non-septic					
Disposal Facility: (soil)	Evergreen	Evergreen	Philips Republic					

All excavated soil was removed and transported under manifest by Freehold Carting Inc. to either Evergreen Environmental or Philips Environmental Services. Copies of the manifests are attached to this Report as Appendix A. A total of 498.05 tons of metals contaminated soil were excavated and disposed of during the IRM.

## **4.0 SUMMARY**

Under supervision of The New York State Department of Environmental Conservation, the areas of potential source contamination were excavated. The water and soil removed during the excavation were transported off-site by permitted transportors. End-point samples were collected from the bottom of each of the excavated structures. The samples were shipped via overnight courier to Accredited Laboratories, Inc. of Carteret, NJ, an ELAB-approved laboratory. The results indicate the following:

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**Volatile Organic Compounds (VOCs)** - There were no detections of VOCs in the end-point samples above the NYSDEC Cleanup Objectives (Ref. 7).

**Semi-Volatile Organic Compounds (SVOCs)** - The concentrations of Benzo(a)Anthracene and Benzo(a)Pyrene, and Chrysene in SG-W exceeded the NYSDEC Cleanup Objectives. However, as these are located in a public street, the source is most likely automobile engine drippings and not the processes of U.S. Electroplating Corp. Benzo(a)Pyrene was detected in on-site storm drain number SD-2 at 90 ug/kg, just above the NYSDEC Cleanup Objective of 61 ug/kg.

**Inorganics** - The results for the inorganic compounds indicate that the concentration of the metals cadmium, chromium, iron and zinc are above the NYSDEC Cleanup Objectives at locations SG-W, SD-2, SD-6, SG-E, SD-1, CP-1 and CP-2. Additionally, beryllium and mercury were reported as undected in all of the samples, however, the detection limits were above the NYSDEC Cleanup Objectives. A summary of these results are included on Tables 1, 2, 3 and 4 of this Report.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The excavations of the storm drains and cesspools were advanced to the depth of the water table and, in some cases, they were further advanced to the limit allowable without endangering the foundation of the building. As such, the excavation phase of the IRM has been completed to the degree allowable based on site conditions. With the completion of this IRM, we recommend monitoring the groundwater to determine the extent of metals contamination in the underlying Upper Glacial Aquifer and to confirm that the storm drain and cesspool removal effort have removed the source of this contamination.

Phase "B" of the Remedial Investigation should now be performed to locate up gradient and down gradient groundwater monitoring points. A program of post-remediation groundwater monitoring should then be conducted. The locations and testing parameters for the groundwater monitoring program will be forwarded to the NYSDEC for approval under separate cover.

## 6.0 CERTIFICATION

We certify that to the best of our knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, that the information submitted in this Report is true, accurate and complete.

  
Eric A. Weinstock  
Associate

8/6/98  
Date

  
Stephen T. Malinowski  
Environmental Scientist

8/6/98  
Date

  
Stephen J. Osmundsen, P.E.  
Project Engineer

8/6/98  
Date



# **CA RICH CONSULTANTS, INC.**

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## **7.0 REFERENCES**

1. Woodward-Clyde Consultants, Inc. 1984. NYSDEC Phase I Preliminary Investigation, U.S. Electroplating Corp., West Babylon, New York. Prepared for the New York State Department of Environmental Conservation, Albany, New York, 1984.
2. Woodward-Clyde Consultants, Inc. 1990. NYSDEC Phase II Investigation, U.S. Electroplating Corp., West Babylon, New York. Prepared for the New York State Department of Environmental Conservation, Albany, New York, 1990.
3. Donnelly Engineering, 1994. Remedial Investigation Work Plan, U.S. Electroplating Corp., West Babylon, New York. Prepared for the New York State Department of Environmental Conservation, Albany, New York, 1994.
4. Donnelly Engineering, 1996. Remedial Investigation, U.S. Electroplating Corp., West Babylon, New York. Prepared for the New York State Department of Environmental Conservation, Albany, New York, 1196.
5. Suffolk County Water Authority, 1971. Results of Subsurface Exploration in the Mid-Island Area of Western Suffolk County Long Island, New York. Soren, Julian, 1971.
6. Department of the Interior United States Geological Survey, 1974. Map: Hydrogeology of Suffolk County, Long Island, New York. Jenson and Soren, 1974.
7. NYSDEC, January 24, 1994, Technical and Administrative Guidance Memorandum No. HWR 94-4046.

## **Tables**

**Table 1**  
**Summary of Analytical Detections In End-Point Soil Samples**  
**for Volatile Organics After Data Validation**  
 U.S. Electroplating Corp.  
 100 Field Street, West Babylon, New York

Sample ID Matrix	SG-W Soil	SD-2 Soil	SD-6 Soil	SD-6DUP Soil	TRIP BLANK Aqueous	SG-E Soil	SD-5 Soil	CP-1* Soil	CP-2 Soil	FIELD BLANK Aqueous	SD-1 Soil	SD-1RE Soil	TRIP BLANK Aqueous	NYSDEC TAGM** Cleanup Objectives
Depth in feet	10.25	15.5	15.25	15.25	NA	12.0	10.7	16.0	16.0	NA	17.0	17.0	NA	
Date Sampled	03/02/98	03/02/98	03/04/98	03/04/98		03/05/98	03/06/98	01/21/98	02/25/98	02/25/98	02/27/98	02/27/98	02/27/98	
<b>Volatile Organics (NYSDOH Method 91-1)</b>														
Acrolein	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L	ug/Kg	ug/Kg	ug/Kg	ug/L	ug/Kg	ug/Kg	ug/Kg	ug/L	ug/Kg
Acrylonitrile	59 UJ	55 UJ	61 UJ	63 UJ	50 UJ	52 UJ	52 U	53 U	57 U	50 U	59 U	59 U	50 U	NA
Chloromethane	59 U	55 U	61 U	63 U	50 U	52 U	52 U	53 U	57 U	50 U	59 U	59 U	50 U	NA
Bromomethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
Vinyl Chloride	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
Chloroethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	200
Methylene Chloride	6 U	6 U	6 U	6 U	2 J	5 U	49	5 U	6 U	3 J	6 U	6 U	5 U	1,800
Acetone	6 UJ	6 UJ	6 UJ	6 UJ	5 J	28	J	5 U	6 U	5 U	6 U	6 U	5 U	100
Carbon Disulfide	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	200
Trichlorofluoromethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
1,1-Dichloroethene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	400
1,1-Dichloroethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	200
trans-1,2-Dichloroethene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	300
Chloroform	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	300
1,2-Dichloroethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	100
2-Butanone	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	300
1,1,1-Trichloroethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	800
Carbon Tetrachloride	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	600
Vinyl Acetate	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
Bromodichloromethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
1,2-Dichloropropane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
cis-1,3-Dichloropropene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
Trichloroethene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	700
Benzene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	60
Dibromo-chloromethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
1,1,2-Trichloroethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
trans-1,3-Dichloropropene	6 UJ	6 UJ	6 UJ	6 UJ	5 UJ	5 UJ	5 UJ	5 UJ	6 UJ	5 UJ	6 UJ	6 UJ	5 UJ	NA
2-Chloroethylvinylether	6 UJ	6 UJ	6 UJ	6 UJ	5 UJ	5 UJ	5 UJ	5 UJ	6 UJ	5 UJ	6 UJ	6 UJ	5 UJ	NA
Bromoform	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
2-Hexanone	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
4-Methyl-2-pentanone	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	1,000
Tetrachloroethene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	1,400
1,1,2,2-Tetrachloroethane	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	800
Toluene	7	6 U	6 U	6 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	2 J	3 J	5 U
Chlorobenzene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	1,500
Ethybenzene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	1,700
Styrene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	5 U	NA
m,p-Xylene	12 U	11 U	12 U	13 U	10 U	10 U	10 U	10 U	11 U	10 U	4 J	6 J	10 U	1,200
o-Xylene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	2 J	3 J	5 U	1,200
cis-1,2-Dichloroethene	6 U	6 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	NA

**Notes:**

B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not found.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.  
 NA - no guideline is reported.  
 ug/kg: micrograms per kilogram - parts per billion  
 Concentration exceeds NYSDEC TAGM\*\*\*

\* The results for sample CP-1 were provided by the client's previous consultant and were not validated.

\*\* NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.



**TABLE 3**  
**Summary of Analytical Detections In End-Point Soil Samples**  
**for TAL Metals After Data Validation**  
**U.S. Electroplating Corp.**  
**100 Field Street, West Babylon, New York**

Sample ID	SG-W	SD-2	SD-6	SD-6DUP	SG-E	SD-5	CP-1*	SD-1	CP-2	Field Blank	NYSDEC
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Aqueous	TAGM**
Depth in Feet	10.3	15.5	15.3	15.3	12.0	10.7	16.0	16.0	16.1	NA	Cleanup
Date Sampled	3/2/98	3/2/98	3/4/98	3/4/98	3/5/98	3/6/98	1/21/98	3/6/98	3/6/98	2/25/98	Objectives
<b>TAL Metals</b>	<b>Units</b>	mg/kg	ug/l	mg/kg							
Aluminum		1740	1620	1290	1390	959	957	2100	934	759	200 U SB
Antimony		6.98 UJ	6.90 UJ	7.80 UJ	7.64 UJ	6.52 UJ	6.88 UJ	6.35 U	7.66 UJ	7.37 UJ	100 U SB
Arsenic		1.48	1.16 U	1.24 U	1.27 U	1.09 U	1.08 U	1.05	1.23 U	1.19 U	8.00 U 7.5
Barium		7.61	4.65	3.72	4.06	3.83	4.21	4.96 U	3.07	2.88	30.0 U 300
Beryllium		0.349 U	0.345 U	0.390 U	0.382 U	0.326 U	0.344 U	0.318 U	0.383 U	0.368 U	5.00 U 0.16 or SB
Cadmium		63.6 J	15.9 J	1.90 J	3.91 J	11.1 J	6.03 J	15.1	17.5 J	17.1 J	30.0 U 1
Calcium		795	967	732	587	234	403	3800	352	465	1000 U SB
Chromium		67.2 J	36.1 J	6.95 J	12.0 J	22.1 J	7.64 J	38.7	94.2 J	75.2 J	30.0 U 10
Cobalt		2.09 U	2.07 U	2.34 U	2.29 U	1.96 U	2.07	1.91 U	2.3 U	2.21 U	30.0 U 30
Copper		18.8 J	5.34 J	2.92 J	3.03 J	10.3 J	3.86 J	3.81	4.32 J	9.80 J	30.0 U 25
Iron		3660	2640	2060	2550	3970	1730	3090	1650	1590	200 U 2,000
Lead		20.9 U	20.7 U	23.4 U	22.9 U	19.6 U	20.7 U	19.1 U	23 U	22.1 U	300 U 200 - 500
Magnesium		469 J	704 J	524 J	505 J	229 J	246 J	2380	296 J	282 J	1000 U SB
Manganese		27.6	42.3	53.6	70.3	25.1	36.6	81.3	15.2	19.7	15.0 U SB
Mercury		0.236 U	0.220 U	0.243 U	0.254 U	0.207 U	0.208 U	0.210 U	0.236 U	0.249 U	0.200 U 0.1
Nickel		7.26	2.76 U	3.12 U	3.52	2.61 U	2.75 U	12.6	5.26	4.47	40.0 U 13
Potassium		140 U	138 U	156 U	153 U	130 U	138 U	127 U	163	147 U	2000 U SB
Selenium		0.781 U	0.722 U	0.775 U	0.793 U	0.682 U	0.675 U	0.326 U	0.766 U	0.741 U	5.00 U 2
Silver		1.24	0.891	0.819	1.26	1.86	0.867	1.69	0.98	0.737 U	10.0 U SB
Sodium		69.8 U	69.0 U	78.0 U	76.4 U	65.2 U	68.8 U	63.5 U	76.6 U	73.7 U	1000 U SB
Thallium		0.781 U	0.722 U	0.775 U	0.793 U	0.682 U	0.675 U	0.667 U	0.766 U	0.741 U	10.0 U SB
Vanadium		3.49 U	3.45 U	3.90 U	3.82 U	3.26 U	3.44 U	3.82	3.83 U	3.76	50.0 U 150
Zinc		110 J	27.3 J	7.80 UJ	9.48 J	24.7 J	10.9 J	20.6	59.9 J	17.8 J	100 U 20
<b>General Chemistry</b>											
Solids, Percent (%)		84.8	91.1	82.2	78.8	96.4	96.2	NA	84.8	80.3	NA NA
Cyanide, Total (mg/Kg)		15.9 J	3.94 J	1.1 UJ	1.26 UJ	2.10 J	0.99 UJ	NA	7.51 J	1.9 J	0.01 U NA

**Notes:**

B - Indicates compound found in associated blank.

J - Indicates compound concentration found below MDL.

U - Indicates compound analyzed for but not found.

E - Indicates result exceeds highest calibration standard.

D - Indicates result is based on a dilution.

SB - Site Background

NA - no guideline is reported.

Concentration exceeds NYSDEC TAGM\*\*

mg/kg - milligrams per kilograms or parts per million

\*\* NYSDEC Technical and Administrative Guidance  
Memorandum: Determination of Soil Cleanup  
Objectives and Cleanup Levels; January 24, 1994.

\* The Results for sample CP-1 were provided by the  
client's previous consultant and were not validated.

**TABLE 4**  
**Summary of Analytical Detections In Non-End-Point Soil Samples**  
**for TAL Metals After Data Validation**  
U.S. Electroplating Corp.  
100 Field Street, West Babylon, New York

Sample ID Matrix	SG-E (8'-3")	CP-2	SD-1	NYSDEC TAGM**
Depth In Feet	Soil	Soil	Soil	Cleanup
Date Sampled	8.3	18.0	17.0	Objectives
TAL Metals	03/05/98	02/25/98	02/27/9	
Aluminum	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	104000	1270	850	SB
Arsenic	51.5 J	7.03 U	7.21 U	SB
Barium	9.60 U	1.08	1.85	7.5
Beryllium	169	5.23	2.96	300
Cadmium	1.46 U	0.351 U	0.360 U	0.16 or SB
Calcium	14900 J	16.6	33.6	1
Chromium	9390	560 J	300 J	SB
Cobalt	10500 J	108	102	10
Copper	8.78 U	2.11 U	2.16 U	30
Iron	559 J	10.3	5.28	25
Lead	17900	2370	937	2,000
Magnesium	951	21.1 U	21.6	200 - 500
Manganese	5380 J	391	208	SB
Mercury	245	54.9 J	19.3 J	SB
Nickel	0.930 U	0.226 U	0.238 U	0.1
Potassium	273	5.34 J	5.45 J	13
Selenium	784	141 U	144	SB
Silver	3.00 U	0.356 U	0.354 U	2
Sodium	11.3	0.703 U	0.721 U	SB
Thallium	497	71.0 J	72.1 UJ	SB
Vanadium	3.00 U	0.711 U	0.708 U	SB
Zinc	53.8	3.51 U	3.6 U	150
Zinc	5120 J	18.1 J	61 J	20
General Chemistry				
Solids, Percent (%)	NA	88.4	84.1	NA
Cyanide, Total (mg/Kg)	NA	2.96	16.8	NA

**Notes:**

B - Indicates compound found in associated blank.  
J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not found.  
E - Indicates result exceeds highest calibration standard.  
D - Indicates result is based on a dilution.  
SB - Site Background  
NA - no guideline is reported.

Concentration exceeds NYSDEC TAGM\*\*  
mg/kg - milligrams per kilograms or parts per million

\*\* NYSDEC Technical and Administrative Guidance  
Memorandum: Determination of Soil Cleanup  
Objectives and Cleanup Levels; January 24, 1994.

**TABLE 5**  
**Summary of Analytical Screening Results in Soil Samples**

U.S. Electroplating Corp.  
 100 Field Street, West Babylon, New York

Sample ID	SD-2	SD-6	CP-2	SD-1	NYSDEC TAGM**
Matrix	Soil	Soil	Soil	Soil	
Date Sampled	03/02/98	03/04/98	02/25/98	02/27/98	
<b>TAL Metals</b>					
	Units	mg/kg	mg/kg	mg/kg	mg/kg
Cadmium		10	0.66	5	20
Chromium		31	5.7	43	100
<b>General Chemistry</b>					
Cyanide, Total (mg/Kg)		< 2	< 2	< 2	15
					NA

*Notes:*

- B - Indicates compound found in associated blank.*
- J - Indicates compound concentration found below MDL.*
- U - Indicates compound analyzed for but not found.*
- E - Indicates result exceeds highest calibration standard.*
- D - Indicates result is based on a dilution.*
- NA - no guideline is reported.*

Concentration exceeds NYSDEC TAGM\*\*

*\*\* NYSDEC Technical and Administrative Guidance  
 Memorandum: Determination of Soil Cleanup  
 Objectives and Cleanup Levels; January 24, 1998.*

mg/kg - milligrams per kilogram or  
 parts per million

## **Figures**

MW-1

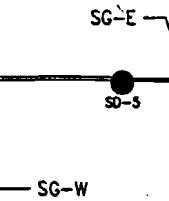


Former Cesspool CP-1  
New Septic Tank

## U.S. ELECTROPLATING

MW-3

FIELD STREET



0 10 20 30 40 50  
Scale (in feet)

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists  
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE	SITE PLAN	DATE
FIGURE	100 FIELD STREET	AS SHOWN
DRAWING NO.	WEST BABYLON, NEW YORK	DESIGN BY
1049-1A	E.A.W.	APPR'D BY



### LEGEND

- Storm Drain w/ Solid Cover
- Storm Drain w/ Slotted Cover
- Septic System
- Storm Sewer Grate
- Monitoring Well
- Septic Tank

○ Roof drain leader

— Roof drain connection to storm drains

— Storm sewer connection to storm drains

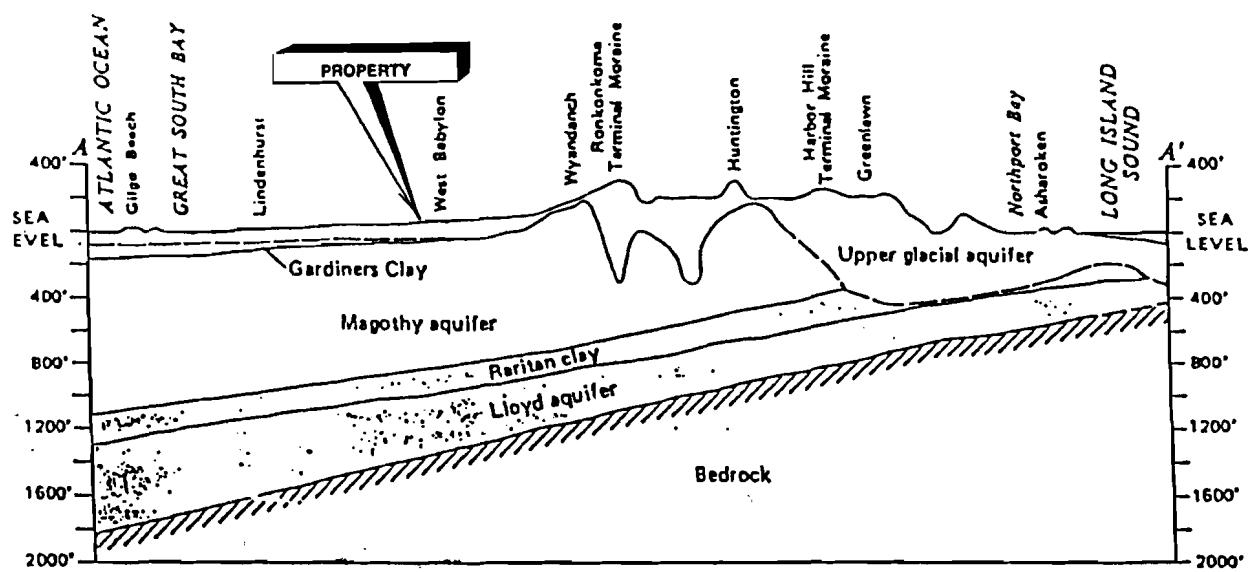
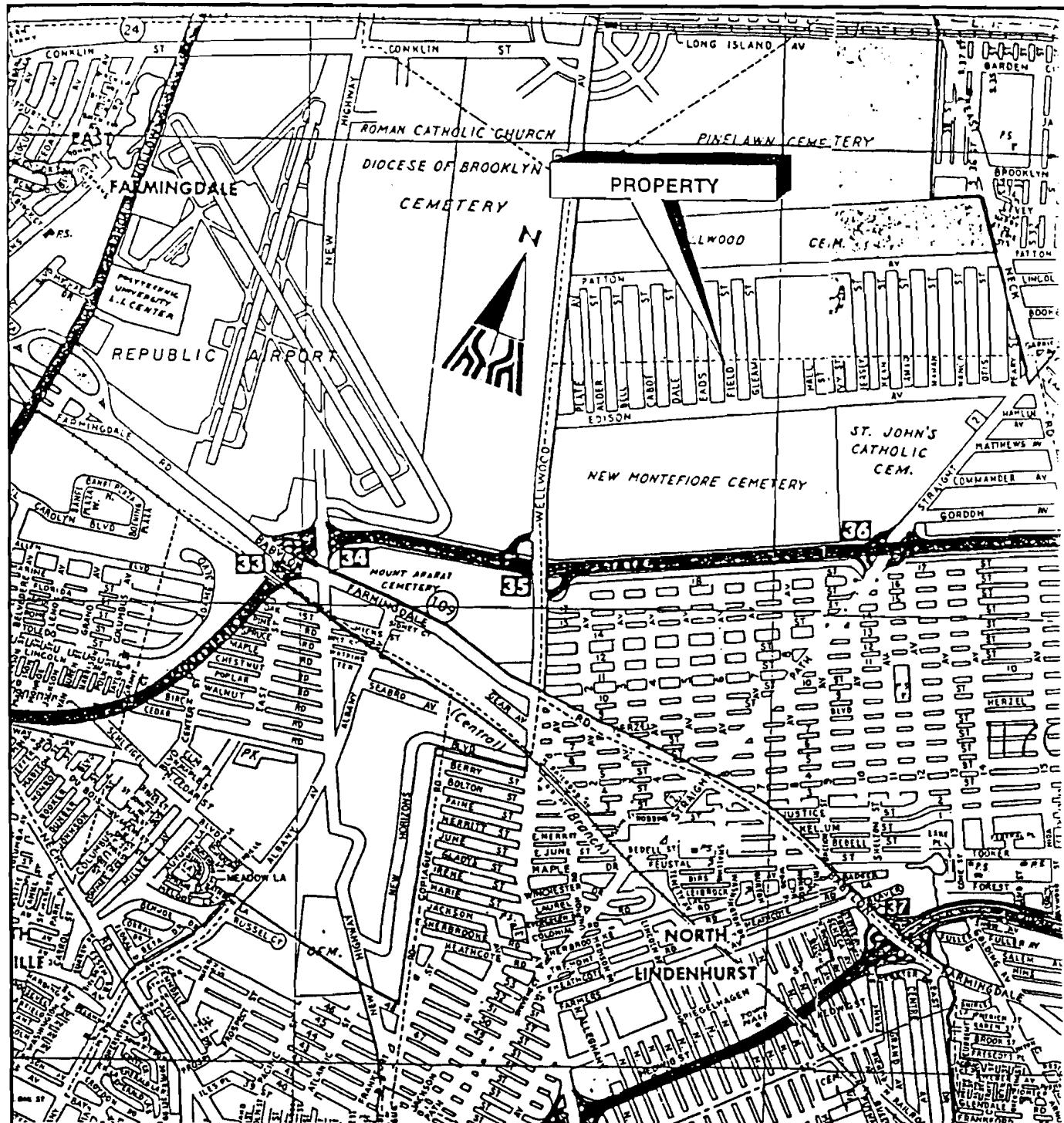


Figure 2. Jensen and Soren, 1974

**CA RICH CONSULTANTS, INC.**

Certified Ground-Water and Environmental Specialists  
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE	DATE
PROFILE OF HYDROGEOLOGIC SECTION	4/22/98
FIGURE	SCALE
2	S.T.M.
DRAFTER IN:	APPL. BY:
100 FIELD STREET	E.A.W.
WEST BABYLON, NEW YORK	



### CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists  
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE	DATE
PROPERTY LOCATION MAP	3/19/98
FIGURE	SCALE
3	As Shown
DRAWING NO.	DRAVED BY
100 FIELD STREET	S.T.M.
WEST BABYLON, NEW YORK	APPR. BY:
	E.A.W.

0 2,000 4,000 6,000

Approximate Scale (in Feet)

## **Appendix**



Suite 410  
366 North Broadway  
Jericho, NY 11753  
Phone: (516) 942-4260

May 6, 1998

Mr. Eric Weinstock  
CA Rich Consultants, Inc.  
404 Glen Cove Avenue  
Sea Cliff, NY 11579

**Re: US Electroplating - Weights for report to NYSDEC.**

Dear Mr. Weinstock:

The following is a list of the manifests numbers and weights of each load shipped from the US Electroplating site as a result of the remedial work performed at the site.

PAE1197545	20.34
PAE1197560	22.24
PAE1197556	20.27
PAE8687114	23.04
PAE8687140	23.95
PAE8687125	24.75
PAE8687011	22.61
PAE8687022	18.18
PAE8687033	23.13
PAE8687044	24.21
PAE8687000	21.90
PAE8686996	24.39
PAE1197685	26.57
NYG0827838	20.65
NYH0044847	22.28
NYH0044856	22.55
NYH0044855	23.13
NYH0044892	24.62
NYG0827856	19.75
PAE1197696	21.32
PAE1197663	12.54
PAE1197700	19.54
PAE1197652	<u>16.09</u>

**Total tons    498.05**



Bureau of Land Recycling and Waste Management  
P.O. Box 8550  
Harrisburg, PA 17105-8550  
OFFICIAL PENNSYLVANIA MANIFEST FORM

Form ap.  
OMB No. .

2500-FM-LRVM0051 REV. 12/96

**UNIFORM HAZARDOUS  
WASTE MANIFEST**

3. Generator's Name and Mailing Address

100 FIELD STREET  
WEST BABYLON NY 11704

4. Generator's Phone ( 516 293-1998 )

5. Transporter 1 Company Name

REPUBLIC ENV SYS (TRANS GROUP) PAD 982661381

7. Transporter 2 Company Name

REPUBLIC ENV SYS (PA), INC.  
2869 SANDSTONE DRIVE  
HATFIELD PA 19440

1. Generator's US EPA ID No.

N Y D 0 6 8 0 1 4 7 1 1

Manifest  
Document No.

187000

2. Page 1  
of

Information within the blue border is  
required by Federal law but may be  
required by State law.

A. State Manifest Document Number

PAE 8687000

B. State Gen. ID SAME

C. State Trans. ID XA5201D

PA-AH 0317

D. Transporter's Phone (215) 822-2672

E. State Trans. ID

PA-AH

F. Transporter's Phone ( ) -

G. State Facility's ID

H. Facility's Phone ( 215 822-8995 )

9. Designated Facility Name and Site Address

10. US EPA ID Number

P A D 0 8 5 6 9 0 5 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077,  
PG III, (CADMIUM, CHROMIUM ), (D006)\*

12. Containers  
No. Type

BD OT

XXI CM 43800 P

D 0 0 6

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

Lab Pack Physical State

a.  S 1S50884

Lab Pack

Physical State

b.

c.

K. Handling Codes for Wastes Listed Above

M111

S03

15. Special Handling Instructions and Additional Information

11A- D007

ERG # 171

EMERGENCY PHONE 516-293-1998

NY- PA158

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Vera Spallie

Signature

03 02 98

Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bruce Heavener

Signature

03 02 98

Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Don Wittman

Signature

03 07 98

18. Discrepancy Indication Space

13a. Actual weight 43840P

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Don Wittman

Signature

03 07 98



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Land Recycling and Waste Management  
P.O. Box 8550  
Harrisburg, PA 17105-8550

2500-FM-LRWM0051 REV. 12/96

Form appr.  
OMB No. 26

## OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information within the blue border is required by Federal law but may be required by State law.	
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON NY 11704</b>		<b>US ELECTROPLATING</b>		A. State Manifest Document Number <b>PAE 8687033</b>		
4. Generator's Phone (516) 293-1998				B. State Gen. ID <b>SAME</b>		
5. Transporter 1 Company Name <b>XREPUBLIC ENV.SYS</b>		5. Transporter 1 Company Name <b>T1975 Group</b>	6. US EPA ID Number <b>PA0982661381</b>	C. State Trans. ID <b>PA-AH 0317</b>		
7. Transporter 2 Company Name				D. Transporter's Phone <b>215 822-2676</b>		
9. Designated Facility Name and Site Address <b>REPUBLIC ENV.SYS (PA), INC. 2869 SANDSTONE DRIVE HATFIELD PA 19440</b>		10. US EPA ID Number <b>PAD085690592</b>		E. State Trans. ID <b>PA-AH</b>		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) <b>RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (CADMIUM, CHROMIUM), (D006)*</b>		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	
		<b>XX1</b>	<b>DT</b>	<b>46,260</b>	<b>D006</b>	
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
Lab Pack      Physical State a. <input type="checkbox"/> <input type="checkbox"/> S 1S50884		Lab Pack	Physical State	MILL a. S03      c.		
b. <input type="checkbox"/> <input type="checkbox"/>		c. <input type="checkbox"/> <input type="checkbox"/>	d. <input type="checkbox"/> <input type="checkbox"/>	b.	d.	
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE 516 293 1998</b>						
<b>EIG #171 NY-PA158</b>						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name <b>Vera Spinelli</b>		Signature <b>Vera Spinelli</b>		MONTH <b>03</b>	DAY <b>02</b>	YEAR <b>98</b>
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>Dean Moyer</b>		Signature <b>Dean Moyer</b>		MONTH <b>03</b>	DAY <b>02</b>	YEAR <b>98</b>
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH	DAY	YEAR
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name <b>Don Wittman</b>		Signature <b>Don Wittman</b>		MONTH <b>03</b>	DAY <b>07</b>	YEAR <b>98</b>

Bureau of Land Recycling and Waste Management  
P.O. Box 8550  
Harrisburg, PA 17105-8550  
OFFICIAL PENNSYLVANIA MANIFEST FORM

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>N Y D 0 6 8 0 1 4 7 1 1</b>	Manifest Document No. <b>187044</b>	2. Page 1 of <b>1</b>	Information within the blue border is required by Federal law but may be required by State law.	
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON NY 11704</b>		US ELECTROPLATING		A. State Manifest Document Number <b>PAE 8687044</b>		
4. Generator's Phone <b>(516) 293-1998</b>		6. US EPA ID Number <b>xPeoPLeic ENV. SYs. (trans Group) IPA D982661381</b>		B. State Gen. ID <b>SAME</b>		
5. Transporter 1 Company Name <b>xPeoPLeic ENV. SYs. (trans Group)</b>		8. US EPA ID Number		C. State Trans. ID <b>TM 68091-A PA-AH 0317</b>		
7. Transporter 2 Company Name		10. US EPA ID Number <b>PAD 085690592</b>		D. Transporter's Phone <b>(215) 822-2676</b>		
9. Designated Facility Name and Site Address <b>REPUBLIC ENV. SYs. (PA), INC. 2869 SANDSTONE DRIVE HATFIELD PA 19440</b>		12. Containers No. <b>XX1</b>		13. Total Quantity <b>DT 48420</b>	14. Unit Wt/Vol <b>P</b>	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) <b>a. RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (CADMIUM, CHROMIUM ), (D006)*</b>				15. Waste No. <b>D 0 0 6</b>		
<b>G E N E R A T O R</b>	b.					
c.						
d.						
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
Lab Pack <b>a. <input type="checkbox"/> S 1S50884</b>		Lab Pack <b>c. <input type="checkbox"/></b>		M111		
Physical State <b>a. <input type="checkbox"/></b>		Physical State <b>c. <input type="checkbox"/></b>		b. <b>S03</b>		
b. <input type="checkbox"/>		d. <input type="checkbox"/>		d. <input type="checkbox"/>		
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE 516-293-1998 11A- D007</b>						
<b>ERG# 171 NY-PA 158</b>						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name <b>Vincent Spinelli</b>		Signature <b>Vincent Spinelli</b>		MONTH <b>03</b>	DAY <b>02</b> YEAR <b>1998</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>Vincent Spinelli</b>		Signature <b>Vincent Spinelli</b>		MONTH <b>03</b>	DAY <b>02</b> YEAR <b>1998</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH	DAY	YEAR
19. Discrepancy Indication Space <b>13a. Actual weight 48580 P</b>						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <b>Don Wittman</b>		Signature <b>Don Wittman</b>		MONTH <b>03</b>	DAY <b>02</b> YEAR <b>1998</b>	



250-FM-LRWM0051 REV. 12/96

P.O. Box 8550  
Harrisburg, PA 17105-8550  
**OFFICIAL PENNSYLVANIA MANIFEST FORM**

Form  
OMB A

GENERATOR	1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information within the blue border required by Federal law but may be required by State law.		
	UNIFORM HAZARDOUS WASTE MANIFEST		N Y D 0 6 8 0 1 4 7 1 1	187114	A. State Manifest Document Number <b>PAE 8687114</b>	
	3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON NY 11704</b>		US ELECTROPLATING		B. State Gen. ID <b>SAME</b>	
	4. Generator's Phone ( 516 ) 293-1998				C. State Trans. ID <b>X A 2 3 1 7 PA PA-AH 0 3 1 7</b>	
	5. Transporter 1 Company Name <b>REPUBLIC ENV SYS (TRANS GROUP)</b>		6. US EPA ID Number <b>P A D 9 8 2 6 6 1 3 8 1</b>		D. Transporter's Phone ( 215 ) 822-2676	
	7. Transporter 2 Company Name		8. US EPA ID Number		E. State Trans. ID <b>PA-AH</b>	
	9. Designated Facility Name and Site Address <b>REPUBLIC ENV SYS (PA), INC. 2869 SANDSTONE DRIVE HATFIELD PA 19440</b>		10. US EPA ID Number <b>P A D 0 8 5 6 9 0 5 9 2</b>		F. Transporter's Phone ( ) -	
	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) <b>RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (CADMIUM, CHROMIUM ), (D006)*</b>		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
			<b>XX1</b>	<b>D T</b>	<b>46080</b>	<b>P D 0 0 6</b>
	d.					
e.						
f.						
g.						
h.						
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
Lab Pack Physical State a. <input type="checkbox"/> <input checked="" type="checkbox"/> \$ 1S50884		Lab Pack	Physical State	<b>M111</b>		
b. <input type="checkbox"/> <input type="checkbox"/> 1		c. <input type="checkbox"/>	<input type="checkbox"/>	b. <input type="checkbox"/> <input type="checkbox"/> S03 c. <input type="checkbox"/>		
15. Special Handling Instructions and Additional Information <b>11A- D007 ERG# 171</b>		EMERGENCY PHONE <b>516-293-1998</b>				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name <b>Vera Spirelli</b>		Signature <b>Vera Spirelli</b>		MONTH <b>12</b>	DAY <b>27</b> YEAR <b>1998</b>	
T R A N S P O R T E R		17. Transporter 1 Acknowledgement of Receipt of Materials <b>Ralph Bowers</b>		Signature <b>Ralph Bowers</b> MONTH <b>10</b> DAY <b>22</b> YEAR <b>1998</b>		
18. Transporter 2 Acknowledgement of Receipt of Materials <b>Printed/Typed Name</b>		Signature		MONTH <b>10</b>	DAY <b>22</b> YEAR <b>1998</b>	
F A C I L I T Y		19. Discrepancy Indication Space <b>(1)</b>				
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Printed/Typed Name <b>Don Whitham</b>		Signature <b>Don Whitham</b> MONTH <b>10</b> DAY <b>30</b> YEAR <b>1998</b>		

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 Bureau of Land Recycling and Waste Management  
 P.O. Box 8550  
 Harrisburg, PA 17105-8550

2500-FM-LRMM0051 REV. 12/98

OFFICIAL PENNSYLVANIA MANIFEST FORM

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information within the box is required by Federal law but not required by State law.	
3. Generator's Name and Mailing Address  100 FIELD STREET WEST BABYLON NY 11704.		IN Y D 0 6 8 0 1 4 7 1 1 187125		A. State Manifest Document Number  PAE 8687125		
4. Generator's Phone ( 516 293-1998 )		6. US EPA ID Number  US ELECTROPLATING		B. State Gen. ID SAME		
5. Transporter 1 Company Name  REPUBLIC ENV SYS (TRANS GROUP)		7. Transporter 2 Company Name		8. US EPA ID Number  P A D 9 8 2 6 6 1 3 8 1		C. State Trans. ID  PA-AH TY03317 0317
9. Designated Facility Name and Site Address  REPUBLIC ENV SYS (PA), INC. 2869 SANDSTONE DRIVE HATFIELD PA 19440		10. US EPA ID Number  P A D 0 8 5 6 9 0 5 9 2		D. Transporter's Phone ( 215 822-2676 )		E. State Trans. ID  PA-AH
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)  a. RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (CADMIUM, CHROMIUM ), (D006)*		12. Containers No. Type		13. Total Quantity	14. Unit Wt/Vol	L. Waste No.
		XXXI DT		49500	P	D006
<b>G E N E R A T O R</b>	a.					
	b.					
	c.					
	d.					
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
Lab Pack	Physical State	Lab Pack	Physical State	MIC	S03	c.
a. <input type="checkbox"/>	5 1S50884	c. <input type="checkbox"/>	<input type="checkbox"/>	b.	d.	d.
15. Special Handling Instructions and Additional Information  11A- D007		EMERGENCY PHONE 516-293-1998				
BR6#171		PA158				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name  Vera Spinelli		Signature  Vera Spinelli		MONTH	DAY	YEAR
TRANSPORTER 1. Acknowledgement of Receipt of Materials  Printed/Typed Name  MIKE BETTS		Signature  Mike Betts		10212719		
TRANSPORTER 2. Acknowledgement of Receipt of Materials  Printed/Typed Name		Signature		MONTH	DAY	YEAR
FACILITY 18. Discrepancy Indication Space  13 cu. Actual weight 49300#				1	1	1
FACILITY 20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.  Printed/Typed Name  Dan Vittman		Signature  Dan Vittman		10212719		



Bureau of Land Recycling and Waste Management  
P.O. Box 8550  
Harrisburg, PA 17105-8550  
OFFICIAL PENNSYLVANIA MANIFEST FORM

Form #  
OMB No. 1

2500-FM-LRWM0051 REV. 12/98

**UNIFORM HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

Information within the blue border is  
required by Federal law but may be  
required by State law.

N Y D O 6 8 0 1 4 7 1 1

8 7 1 4 0

3. Generator's Name and Mailing Address

100 FIELD STREET  
WEST BABYLON NY 11704

US ELECTROPLATING

4. Generator's Phone ( 516 293-1998

5. Transporter 1 Company Name

REPUBLIC ENV SYS (TRANS GROUP)

6. US EPA ID Number  
P A D 9 8 2 6 6 1 3 8 1

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

REPUBLIC ENV SYS (PA), INC.  
2869 SANDSTONE DRIVE  
HATFIELD PA 19440

10. US EPA ID Number  
P A D 0 8 5 6 9 0 5 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077,  
PG III, (CADMIUM, CHROMIUM ), (D006)\*

A. State Manifest Document Number PAE 8687140	B. State Gen. ID SAME	C. State Trans. ID PA-AH 0317	D. Transporter's Phone ( 215 822-2676
E. State Trans. ID PA-AH	F. Transporter's Phone ( ) -	G. State Facility's ID	H. Facility's Phone ( 215 822-8995

I. Waste No.
--------------

12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
----------------------------	-----------------------	--------------------

XXI DT 47900 P D 0 0 6		
------------------------	--	--

a.			
b.			
c.			
d.			

J. Additional Descriptions for Materials Listed Above	K. Handling Codes for Wastes Listed Above
Lab Pack Physical State a. <input type="checkbox"/> 5 1S50884	Lab Pack Physical State a. S03
b. <input type="checkbox"/> <input type="checkbox"/>	c. <input type="checkbox"/> <input type="checkbox"/>
d. <input type="checkbox"/> <input type="checkbox"/>	b. <input type="checkbox"/> <input type="checkbox"/> c. <input type="checkbox"/>

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE 516-293-1998

11A- D007

ERG#171

PA158

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name <i>Vera Spinelli</i>	Signature <i>(V) Vera Spinelli</i>	MONTH DAY YEAR 08 27 98
--	---------------------------------------	----------------------------

17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>Bruce Heavener</i>	Signature <i>Bruce Heavener</i>	MONTH DAY YEAR 08 27 98
--	------------------------------------	----------------------------

18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature	MONTH DAY YEAR
---	-----------	----------------

19. Discrepancy Indication Space 13a. Actual weight 47880P		
---	--	--

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name <i>Don Littman</i>	Signature <i>Don Littman</i>	MONTH DAY YEAR 08 27 98
--	---------------------------------	----------------------------

PAE 8687140



Bureau of Land Recycling and Waste Management  
P.O. Box 8550  
Harrisburg, PA 17105-8550

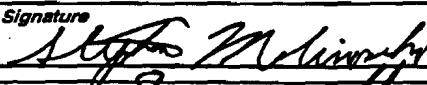
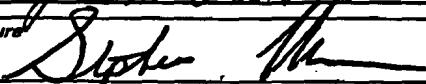
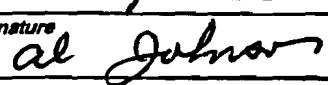
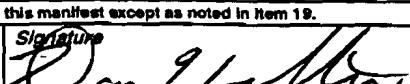
Form app  
OMB No. 21

2500-FM-LRWM0051 REV. 12/98

OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information within the blue border is required by Federal law but may be required by State law.	
3. Generator's Name and Mailing Address <b>US ELECTROPLATING</b> <b>100 FIELD STREET</b> <b>WEST BABYLON NY 11704</b>		N Y D 0 6 8 0 1 4 7 1 1   8 6 9 9 6		A. State Manifest Document Number	PAE 8686996	
4. Generator's Phone ( 516 293-1998		5. Transporter 1 Company Name <b>X Freehold CARTAGE INC N J D 0 5 4 1 3 6 1 6 4</b>		B. State Gen. ID	SAME	
7. Transporter 2 Company Name		6. US EPA ID Number		C. State Trans. ID	AA219G	
9. Designated Facility Name and Site Address <b>REPUBLIC ENV SYS (PA), INC.</b> <b>2869 SANDSTONE DRIVE</b> <b>HATFIELD PA 19440</b>		8. US EPA ID Number		D. Transporter's Phone ( 732 ) - 463-1001		
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		10. US EPA ID Number		E. State Trans. ID	PA-AH	
a. RQ HAZARDOUS WASTE, SOLID, N.O.S., 9,NA3077, PG III, (CADMIUM, CHROMIUM ), (D006)*		P A D 0 8 5 6 9 0 5 9 2		F. Transporter's Phone ( ) -		
b.		12. Containers		G. State Facility's ID		
c.		No.	Type	H. Facility's Phone ( 215 822-8995		
d.		13. Total Quantity		I. Waste No.		
e. 001 CM 00033		T	D 0 0 6			
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
Lab Pack Physical State a. <input type="checkbox"/> S 1S50884		Lab Pack Physical State c. <input type="checkbox"/> <input type="checkbox"/>		a. S03 M111 c.		
b. <input type="checkbox"/> <input type="checkbox"/>		d. <input type="checkbox"/> <input type="checkbox"/>		b. d.		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE <u>516-293-1998</u> 11A- D007						
ERG # 171						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, If I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name <u>Vera Spinelli</u>		Signature		MONTH DAY YEAR <u>03 10 1998</u>		
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <u>DAVE KORG</u>		Signature		MONTH DAY YEAR <u>03 03 98</u>		
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH DAY YEAR		
19. Discrepancy Indication Space <u>13a. 42960F</u>						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name <u>Pat O'neill</u>						
Signature		MONTH DAY YEAR				
		<u>03 10 98</u>				

Form 8700-22 (Rev. 9/88) Previous editions are obsolete

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information within the blue border is required by Federal law but may be required by State law.	
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON NY 11704</b>		<b>US ELECTROPLATING</b>		A. State Manifest Document Number <b>PAE 8687011</b>		
4. Generator's Phone ( 516 293-1998 )		6. US EPA ID Number <b>N Y D 0 6 8 0 1 4 7 1 1 1 8 7 0 1 1</b>		B. State Gen. ID <b>SAME</b>		
5. Transporter 1 Company Name <b>X Freehold Cartage Inc.</b>		8. US EPA ID Number <b>W J D 0 5 4 1 2 6 1 6 4</b>		C. State Trans. ID <b>AA218G NJ PA-AH 0067</b>		
7. Transporter 2 Company Name <b>FREEHOLD CARTAGE INC.</b>		10. US EPA ID Number <b>W J D 0 5 4 1 2 6 1 6 4</b>		D. Transporter's Phone ( 732 ) - 462-1001		
9. Designated Facility Name and Site Address <b>REPUBLIC ENV SYS (PA), INC. 2869 SANDSTONE DRIVE HATFIELD PA 19440</b>		<b>P A D 0 8 5 6 9 0 5 9 2</b>		E. State Trans. ID <b>AA-4102 (WJ)</b>		
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) <b>a. RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (CADMIUM, CHROMIUM ), (D006)*</b>		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
		<b>XX1</b>	<b>C M</b>	<b>EST. XYX22</b>	<b>T D 0 0 6</b>	
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above Lab Pack Physical State				K. Handling Codes for Wastes Listed Above		
a. <input type="checkbox"/> <input checked="" type="checkbox"/> S 1S50884		Lab Pack	Physical State	<b>M111</b>		
b. <input type="checkbox"/> <input type="checkbox"/>		c. <input type="checkbox"/>	<input type="checkbox"/>	a. S03		
c. <input type="checkbox"/> <input type="checkbox"/>		d. <input type="checkbox"/>	<input type="checkbox"/>	b.	c.	
d. <input type="checkbox"/> <input type="checkbox"/>				b.	d.	
15. Special Handling Instructions and Additional Information <b>11A- D007</b>						
<b>EMERGENCY PHONE 516-293-1998</b>						
<b>ERG #171</b>						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name <b>Stephen Molinowski</b>		Signature 		MONTH	DAY	YEAR
				<b>10 22 89</b>		
TRANSPORTER 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>Stephen Klein.</b>		Signature 		MONTH	DAY	YEAR
				<b>02 28 98</b>		
TRANSPORTER 2 Acknowledgement of Receipt of Materials Printed/Typed Name <b>AL JOHNSON</b>		Signature 		MONTH	DAY	YEAR
				<b>10 31 0198</b>		
FACILITY 19. Discrepancy Indication Space <b>13a. 46620P</b>						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name <b>Don Wittman</b>						
Signature 						
MONTH DAY YEAR <b>10 31 0198</b>						

## Bureau of Land Recycling and Waste Management

P.O. Box 8550

Harrisburg, PA 17105-8550

Form  
OMB

2500-FM-LRWM0051 REV. 12/98

## OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS  
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.2. Page 1  
ofInformation within the blue border  
required by Federal law but may be  
required by State law.

N Y D 0 6 8 0 1 4 7 1 1

1 8 7 0 2 2

3. Generator's Name and Mailing Address

100 FIELD STREET

WEST BABYLON NY 11704

4. Generator's Phone ( 516 293-1998

US ELECTROPLATING

A. State Manifest Document Number

PAE 8687022

B. State Gen. ID SAME

5. Transporter 1 Company Name

X. Freehold Cartage Inc INJ D054126164

7. Transporter 2 Company Name

Freehold Cartage Inc INJ D054126164

9. Designated Facility Name and Site Address

REPUBLIC ENV SYS (PA), INC.  
2869 SANDSTONE DRIVE  
HATFIELD PA 19440

6. US EPA ID Number

8. US EPA ID Number

10. US EPA ID Number

C. State Trans. ID

AA411E  
PA-AH 0067

D. Transporter's Phone 732-462-1001

E. State Trans. ID

PA-AH 0067

F. Transporter's Phone 732-462-1001

G. State Facility's ID

H. Facility's Phone ( 215 822-8995

P A D 0 8 5 6 9 0 5 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. RQ HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077,  
PG III, (CADMIUM, CHROMIUM ), (D006)\*

12. Containers

No.

Type

13. Total  
Quantity14. Unit  
Wt/Vol

1. Waste No.

EST 1

XX 1 CM XX X23 T

D 0 0 6

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

Lab Pack Physical State  
a.  S 1S50884Lab Pack Physical State  
c. b.   d.  

K. Handling Codes for Wastes Listed Above

M111  
S03

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE 516-393-1998

11A- D007

ERG# 171

(NYJA 113)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name Stephen Malinowski Signature Stephen Malinowski MONTH DAY YEAR 10 22 8 98

17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Alan K Bossich Signature Alan K Bossich MONTH DAY YEAR 10 22 8 98

18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name PAE 8687022 Signature Stephen Malinowski MONTH DAY YEAR 10 22 8 98

19. Discrepancy Indication Space Printed/Typed Name Don L. Homan Signature Don L. Homan MONTH DAY YEAR 03 11 98

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name Don L. Homan Signature Don L. Homan MONTH DAY YEAR 03 11 98

Form 8700-22 (Rev. 9/88) Previous editions are obsolete

PAE  
8687022

1

## PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bureau of Waste Management

P. O. Box 8550

Harrisburg, PA 17105-8550

ER-WM-51 REV. 1/91

Form appro  
OMB No. 208  
Expires 9-30-98

## OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS  
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.2. Page 1  
of 1Information in the shaded areas  
is not required by Federal law  
but is required by State law.

3. Generator's Name and Mailing Address

US Electroplating  
100 Fields Street  
West Babylon, NY 11704A. State Manifest Document Number  
**PAE 1197545**

4. Generator's Phone ( 516 ) 293-1998

5. Transporter 1 Company Name

Freehold cartage, Inc.

6. US EPA ID Number

N J D 0 5 4 1 2 6 1 6 4

B. State Gen. ID Number

Same

C. State Trans. ID

AA2196 NJ

D. Transporter's Phone

PAE A H 100671

E. State Trans. ID

PA

F. Transporter's Phone

732-1462-1001

G. State Facility's ID

PA

H. Facility's Phone ( 215 ) 822-8995

9. Designated Facility Name and Site Address

10. US EPA ID Number

Republic Environmental Systems (PA), Inc.  
2869 Sandstone Drive  
Hatfield, PA 19440

P A D 0 8 5 6 9 0 5 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. RQ, Hazardous Waste Solids, N.O.S.,  
(Cadmium, Chromium)(D006,D007)  
9,NA3077, PG III

ERG# 171

12. Containers

No.

Type

13. Total  
Quantity14. Unit  
Wt/Vol

Waste No.

X X | 1

C M

X X X | 8

Y

D 0 0 7

D 0 0 6

b.

c.

d.

J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above	
Lab Packag	Physical State	Lab Packag	Physical State
<input checked="" type="checkbox"/> S	IS508B4	<input checked="" type="checkbox"/>	003
<input type="checkbox"/>		<input type="checkbox"/>	

15. Special Handling Instructions and Additional Information Emergency Contact: Bob Birnbaum 516-293-1998

Certificate of Disposal Required!

*Box # 9545*

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name *Vera Spineill* Signature *Keen Spineill* MONTH DAY YEAR *10/26/98*

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name *Dave Morse* Signature *Dee Morse* MONTH DAY YEAR *10/26/98*

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name  Signature  MONTH DAY YEAR 

19. Discrepancy Indication Space

*13x 40700P*

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name *Don Wettman* Signature *Don Wettman* MONTH DAY YEAR *10/26/98*

PAC 1197545

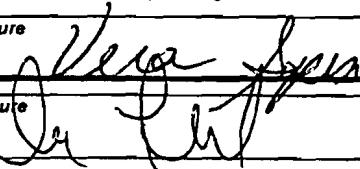
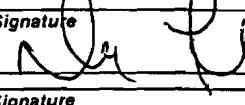
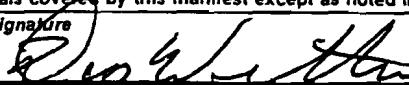
ER-WM-51 REV. 1/91

## OFFICIAL PENNSYLVANIA MANIFEST FORM

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law but is required by State law.	
		N Y D 0 6 8 0 1 4 7 1 1 9 7 5 5 6		A. State Manifest Document Number <b>PAE 1197556</b>		
3. Generator's Name and Mailing Address		US Electroplating 100 Field Street West Babylon, NY 11704				
4. Generator's Phone ( 516 ) 293-1998						
5. Transporter 1 Company Name		6. US EPA ID Number	C. State Trans. ID AA318G NJ PAEAH 1100671			
Freehold Cartage, Inc.		N J D 0 5 4 1 2 6 1 6 4	D. Transporter's Phone ( 732 ) 462-1001			
7. Transporter 2 Company Name		8. US EPA ID Number	E. State Trans. ID PA PA			
9. Designated Facility Name and Site Address		10. US EPA ID Number	F. Transporter's Phone ( 215 ) 822-8995			
Republic Environmental Systems (PA), Inc. 2869 Sandstone Drive Hatfield, PA 19440		P A D 0 8 5 6 9 0 5 9 2	G. State Facility's ID H. Facility's Phone ( 215 ) 822-8995			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers	13. Total Quantity	14. Unit Wt/Vol	Waste No.
RQ, Hazardous Waste Solids, N.O.S., (Cadmium, Chromium)(D006,D007) 9, NA3077, PG III ERG# 171			X X   1 C M	X X X   1 8	Y	D 0 0 7 D 0 0 6
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above						
Lab Packag Physical State		Lab Packag Physical State		K. Handling Codes for Wastes Listed Above		
S 150884				S 01-3		
15. Special Handling Instructions and Additional Information Emergency Contact: Bob Birnbaum 516-293-1998						
Certificate of Disposal Required!						
BOX # 8751 Gross 77020.03						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.						
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		MONTH	DAY	YEAR
Robert Birnbaum		RBM		10	22	1998
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		MONTH	DAY	YEAR
Bill Burns		BB		10	22	1998
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		MONTH	DAY	YEAR
Don Wettman		DW		10	22	1998
19. Discrepancy Indication Space 13a. 39560 f						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		MONTH	DAY	YEAR
Don Wettman		DW		10	22	1998

Bureau of Waste Management  
P. O. Box 8550  
Harrisburg, PA 17105-8550  
**OFFICIAL PENNSYLVANIA MANIFEST FORM**

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded area is not required by Federal law but is required by State law.
		N Y D 0 6 8 0 1 4 7 1 1   9 7 6 9 6		A. State Manifest Document Number <b>PAE 1197696</b>	
3. Generator's Name and Mailing Address		US Electroplating 100 Field Street West Babylon, NY 11704		B. State Gen. ID Same	
4. Generator's Phone ( 516 ) 293-1998		6. US EPA ID Number <b>W E L D I N G C O M P A N Y INC. N J D 0 5 4 1 2 6 1 6 4</b>		C. State Trans. ID <b>PA-AH 10067</b>	
5. Transporter 1 Company Name <b>Freehold CARTAGE INC.</b>		8. US EPA ID Number		D. Transporter's Phone (732) 462-1001	
7. Transporter 2 Company Name				E. State Trans. ID <b>PA-</b>	
9. Designated Facility Name and Site Address Republic Environmental Systems (PA), Inc. 2869 Sandstone Drive Hatfield, PA 19440		10. US EPA ID Number <b>P A D 0 8 5 6 9 0 5 9 2</b>		F. Transporter's Phone ( )	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Special Waste No.
a. RQ, Hazardous Waste Solids, N.O.S., (Cadmium, Chromium)(D006,D007) 9, NA3077, PG III		ERG# 171	X X 1	<b>C M 0 0 0 1 8</b>	D 0 3 0 7 D 0 0 6
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above		Lab Pack Physical State		K. Handling Codes for Wastes Listed Above	
a. <input type="checkbox"/> S IS50884		Lab Pack	Physical State	a. <b>SOL</b>	c.
b. <input type="checkbox"/>		d.		b.	d.
15. Special Handling Instructions and Additional Information		Emergency Contact: Robert Birnbaum 516-293-1998 <b>NY Handling Code T</b>			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name <b>Vera Spirelli</b>		Signature 		MONTH DAY YEAR <b>03 05 98</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>M. Murphy</b>		Signature 		MONTH DAY YEAR <b>03 05 98</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH DAY YEAR	
19. Discrepancy Indication Space <b>Box 427008</b>					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name <b>Donald W. Birnbaum</b>		Signature 		MONTH DAY YEAR <b>03 07 98</b>	

## PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bureau of Waste Management

P. O. Box 8550

Harrisburg, PA 17105-8550

ER-WM-51 REV. 1/91

Form 8700-22  
OMB No. 2590-0101  
Expires 9-30-98

## OFFICIAL PENNSYLVANIA MANIFEST FORM

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded area is not required by Federal law but is required by State law.		
		N Y D 0 6 8 0 1 4 7 1 1   9 7 5 6 0		A. State Manifest Document Number		PAE 1197560	
3. Generator's Name and Mailing Address		US Electroplating 100 Field Street West Babylon, NY 11704		B. State Gen. ID		Same	
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Trans. ID		A A 4 1 0 E N J PA- A H 1 0 0 6 7	
Freehold Cartage, Inc.		N J D 0 5 4 1 2 6 1 6 4		D. Transporter's Phone		(732) 462-1001	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Trans. ID		PA-	
9. Designated Facility Name and Site Address		10. US EPA ID Number		F. Transporter's Phone		( )	
Republic Environmental Systems (PA), Inc. 2869 Sandstone Drive Hatfield, PA 19440		P A D 0 8 5 6 9 0 5 9 2		G. State Facility's ID			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.		
a. RQ, Hazardous Waste Solids, N.O.S., (Cadmium, Chromium)(D006,D007) 9, NA3077, PG III		ERG# 171	X X 1	C M	X X X 1 8	Y	D 0 0 7 D 0 0 6
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above					
Lab Pack	Physical State	Lab Pack	Physical State	a.	1400	c.	
s.	1S5084	c.		a.	SO-3	c.	
b.		d.		b.		d.	
15. Special Handling Instructions and Additional Information		Emergency Contact: Bob Birnbaum 516-293-1998					
Certificate of Disposal!							
Box # 9365							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.							
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name		Signature		MONTH	DAY	YEAR	
Vera Spinelli		Vera Spinelli		10	26	98	PAE 1197560
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		MONTH	DAY	YEAR	
AL Johnson		al jones		10	26	98	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		MONTH	DAY	YEAR	
19. Discrepancy Indication Space							
134-433108							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name		Signature		MONTH	DAY	YEAR	
Don Wittenay		Don Wittenay		10	30	99	

**UNIFORM HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No. N.Y.D.0.6.8.0.1.4.7.1.1|9.7.6.8.5

Manifest  
Document No.2. Page 1  
of 1Information in the shaded areas  
is not required by Federal law  
but is required by State law.

3. Generator's Name and Mailing Address    US Electroplating  
100 Fields Street  
West Babylon, NY 11704

4. Generator's Phone ( 516) 293-1998

5. Transporter 1 Company Name

Freehold CARTAGE INC NJ D054126164

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address    10. US EPA ID Number

Republic Environmental Systems (PA), Inc.

2869 Sandstone Drive

Hatfield, PA 19440

P.A.D.0.8.5.6.9.0.5.9.2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. RQ, Hazardous Waste Solids, N.O.S.  
(Cadmium, Chromium)(D006,D007)  
9, NA3077, PG III

ERG# 171

12. Containers

No.

Type

13. Total  
Quantity14. Unit  
Wt/Vol

Waste No.

1 CM X X X I 8 Y

D.0.0.7

D.0.0.6

b.

1 1 1 1 1 1

S.0.0.5

c.

1 1 1 1 1 1

S.0.0.6

d.

1 1 1 1 1 1

S.0.0.7

J. Additional Descriptions for Materials Listed Above

Lab Pack Physical State    Lab Pack Physical State

K. Handling Codes for Wastes Listed Above

1 S 1S50884

15. Special Handling Instructions and Additional Information    Emergency Contact: Robert Birnbaum 516-293-1998

11a) 1S50884

NY JA-113

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name    Signature    MONTH DAY YEAR  
Vera Spinelli    Vera Spinelli 10.3.19.8

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name    Signature    MONTH DAY YEAR  
Devin J. Higgins    Devin J. Higgins 10.3.10.98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name    Signature    MONTH DAY YEAR  
Don Wittman    Don Wittman 03.11.98

19. Discrepancy Indication Space

13a. 471604

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name    Signature    MONTH DAY YEAR  
Don Wittman    Don Wittman 03.11.98

PAE 1197685



## PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bureau of Waste Management

P. O. Box 8550

Harrisburg, PA 17105-8550

## OFFICIAL PENNSYLVANIA MANIFEST FORM

Form appr.

OMB No. 2050

Expires 9-30-94

WM-51 REV. 1/91

UNIFORM HAZARDOUS  
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.2. Page 1  
of 1Information in the shaded areas  
is not required by Federal law  
but is required by State law.

3. Generator's Name and Mailing Address

US Electroplating

100 Fields Street

West Babylon, NY 11704

4. Generator's Phone ( 516 ) 293-1998

5. Transporter 1 Company Name

Freehold cartage, Inc.

6. US EPA ID Number

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

10. US EPA ID Number

Republic Environmental Systems (PA), Inc.  
2869 Sandstone Drive  
Hatfield, PA 19440

P A D 0 8 5 6 9 0 5 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

No.

Type

13.  
Total  
Quantity14.  
Unit  
Wt/Vol

Waste No.

a. RQ, Hazardous Waste Solids, N.O.S.,  
(Cadmium, Chromium)(D006,D007)  
9, NA3077, PG III ERG# 171

D 0 0 7

D 0 0 6

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

Lab Pack Physical State

Lab Pack Physical State

K. Handling Codes for Wastes Listed Above

M 01

S 03

15. Special Handling Instructions and Additional Information

Emergency Contact: Robert Birnbaum  
516-293-1998

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

MONTH DAY YEAR

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed/Typed Name

Signature

MONTH DAY YEAR

Timothy S Conklin

Vera Spinelli

Timothy S Conklin

Vera Spinelli

M 01 09 98

M 01 09 98

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed/Typed Name

Signature

MONTH DAY YEAR

19. Discrepancy Indication Space

134.193607

(P)

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

MONTH DAY YEAR

Don Littman

Don Littman

M 01 09 98

A Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

PAE 1197663 C99

## PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bureau of Waste Management

P. O. Box 8550

Harrisburg, PA 17105-8550

## OFFICIAL PENNSYLVANIA MANIFEST FORM

ER-WM-51 REV. 1/91

Form app.  
OMB No. 20  
Expires 9-30-94

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law but is required by State law.	
3. Generator's Name and Mailing Address		US Electroplating 100 Field Street West Babylon, NY 11704				
4. Generator's Phone ( 516 ) 293-1998						
5. Transporter 1 Company Name		6. US EPA ID Number	A. State Manifest Document Number <b>PAE 1197700</b>			
Freehold Cartage Inc		NJ D 0 54 1 2 6 1 6 4	B. State Gen. ID Same			
7. Transporter 2 Company Name		8. US EPA ID Number	C. State Trans. ID PA - JAH 100671			
9. Designated Facility Name and Site Address		10. US EPA ID Number	D. Transporter's Phone ( 732 ) 462-1001			
Republic Environmental Systems (PA), Inc. 2869 Sandstone Drive Hatfield, PA 19440		P A D 0 8 5 6 9 0 5 9 2	E. State Trans. ID PA			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers	13. Total Quantity	14. Unit Wt/Vol	F. Transporter's Phone	
RQ, Hazardous Waste SOLIDS, N.O.S. (Cadmium, Chromium)(D006,D007) 9, NA3077, PG III		ERG# 171	X X   1	C MAXXII 5	Y	D 0 0 7 E 0 0 6
d.						
c.						
b.						
a.						
j. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
a. Lab Pack 1 Physical State		b. Lab Pack 2 Physical State				
S1 LS508B4						
b.						
15. Special Handling Instructions and Additional Information		Emergency Contact: Robert Birnbaum 516-293-1998				
(11A)						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.						
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		MONTH DAY YEAR		
Vera Spinelli		Vera Spinelli		03 08 98		
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		MONTH DAY YEAR		
Bob Birnbaum		Bob Birnbaum		03 09 98		
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		MONTH DAY YEAR		
19. Discrepancy Indication Space						
136-338208						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		MONTH DAY YEAR		
PAT Owens		PAT Owens		03 11 98		

PAE 1197700

NYH 0044847

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALSHAZARDOUS WASTE MANIFEST  
P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

[Rev. 3/97]

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <i>NYDQ6801471144347</i>	Manifest Doc. No. <i>44347</i>	2. Page 1 of <i>1</i>	Information within heavy bold line is not required by Federal Law.	
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON, NY 11704</b>		A. <b>NYH 0044847</b>				
4. Generator's Telephone Number ( <b>516 293-1488</b> )		B. Generator's ID				
5. Transporter 1 (Company Name) <b>SEPARATIC PVC SVCS (TRANSPORT CORP)</b>		C. State Transporter's ID <i>NY 152</i>				
6. US EPA ID Number <i>DAB121613381</i>		D. Transporter's Telephone ( <b>516 522-2676</b> )				
7. Transporter 2 (Company Name)		E. State Transporter's ID				
8. US EPA ID Number		F. Transporter's Telephone ( )				
9. Designated Facility Name and Site Address <b>CHEMICAL POLLUTION CONTROL 120 SOUTH FOURTH STREET BAYSHORE, NY 11708</b>		G. State Facility ID				
10. US EPA ID Number		H. Facility Telephone ( <b>516 536-0333</b> )				
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) <b>a. 80 HAZARDOUS WASTE, SOLID, N.O.S., 9, HAZC077 PG III (CADMIUM, CHROMIUM), (D008)*</b>		12. Containers Number <i>1</i>	Type <i>DR</i>	13. Total Quantity <i>1</i>	14. Unit Wt/Vol <i>1</i>	I. Waste No. <b>EPA STATE</b> <i>5006*</i>
b.						EPA STATE
c.						EPA STATE
d.						EPA STATE
J. Additional Descriptions for Materials listed Above		K. Handling Codes for Wastes Listed Above				
a. <b>NY51019</b>		c	d	b	c	
b		d		b	d	
15. Special Handling Instructions and Additional Information <b>*11A- 0007</b>						EMERGENCY PHONE <i>516 536-0333</i>
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name <i>✓</i>		Signature <i>✓</i>		Mo. <i>12</i>	Day <i>14</i>	Year <i>1998</i>
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name <i>✓</i>		Signature <i>✓</i>		Mo. <i>12</i>	Day <i>14</i>	Year <i>1998</i>
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name <i>✓</i>		Signature <i>✓</i>		Mo. <i>12</i>	Day <i>14</i>	Year <i>1998</i>
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of Receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <i>TIM CARR</i>		Signature <i>✓</i>		Mo. <i>10</i>	Day <i>14</i>	Year <i>1998</i>

NYH0044856

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

## HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

(Rev. 3/97)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>N.Y.D.O.6.8.0.1.4.7.1.1</b>	Manifest Doc. No. <b>44-856</b>	2. Page 1 of <b>1</b>	Information within heavy bold line is not required by Federal Law.		
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON, NY 11704</b>		A. <b>NYH0044856</b>					
4. Generator's Telephone Number ( <b>516</b> ) <b>293-1998</b>		B. Generator's ID <b>SAME</b>					
5. Transporter 1 (Company Name) <b>REPUBLIC ENV SYST (TRANS GROUP)</b>		6. US EPA ID Number <b>R.A.D.9.3.2.6.5.1.3.8.1</b>	C. State Transporter's ID <b>TY03311</b>				
7. Transporter 2 (Company Name)		8. US EPA ID Number	D. Transporter's Telephone ( <b>215</b> ) <b>822-2376</b>				
9. Designated Facility Name and Site Address <b>CHEMICAL POLLUTION CONTROL 120 SOUTH FOURTH STREET DAYSHORE, NY 11706</b>		10. US EPA ID Number <b>N.Y.D.O.6.2.7.6.5.4.2.9</b>	E. State Transporter's ID				
			F. Transporter's Telephone ( )				
			G. State Facility ID				
			H. Facility Telephone ( <b>516</b> ) <b>586-0333</b>				
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers Number <b>001</b>	Type <b>DT</b>	13. Total Quantity <b>1</b>	14. Unit Wt/Vol <b>1</b>	I. Waste No. <b>EPA D006</b>	
a. <b>RC HAZARDOUS WASTE, SOLID, N.O.S., S, NAQ077, PG 111 (CALCIUM, CHROMIUM), (DD005)*</b>						STATE	
b.						EPA	
c.						STATE	
d.						EPA	
e.						STATE	
f.						EPA	
g.						STATE	
J. Additional Descriptions for Materials listed Above		K. Handling Codes for Wastes Listed Above					
a. <b>S 1X51019</b>		c		a. <b>NY</b>	<input checked="" type="checkbox"/> <b>TR</b>	<input type="checkbox"/>	
b.		d		b. <input type="checkbox"/>	<input type="checkbox"/>	d <input type="checkbox"/>	
15. Special Handling Instructions and Additional Information <b>*11A- D007</b>		<b>EMERGENCY PHONE 516-213-1178</b>					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.							
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name <b>V.</b>		Signature			Mo. <b>10</b>	Day <b>10</b>	Year <b>1998</b>
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>J. H. E. E.</b>		Signature			Mo. <b>10</b>	Day <b>10</b>	Year <b>1998</b>
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature			Mo. <b>10</b>	Day <b>10</b>	Year <b>1998</b>
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of Receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name <b>TIM CARP</b>		Signature			Mo. <b>10</b>	Day <b>10</b>	Year <b>1998</b>

NYH 3044865

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALSHAZARDOUS WASTE MANIFEST  
P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

(Rev. 1/97)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		Generator's US EPA No. NY D 06 8 0 1 4 7	Manifest Doc. No. <b>44865</b>	2. Page 1 of 1	Information within heavy bold line is not required by Federal Law.
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON, NY 11704</b>		A. Generator's ID: <b>NYH 0044865</b>			
4. Generator's Telephone Number ( ) <b>516 293 1998</b>		B. Generator's ID's for other facilities served by this manifest: <b>SAME</b>			
5. Transporter 1 (Company Name) <b>AMERICAN ENV SIS (TRANS GROUP)</b>		C. State Transporter's ID: <b>XC 93579 (PA)</b>			
7. Transporter 2 (Company Name)		D. Transporter's Telephone: <b>215 822-2676</b>			
9. Designated Facility Name and Site Address <b>CHEMICAL POLLUTION CONTROL 120 SOUTH FOURTH STREET BAYSIDE, NY 11706</b>		E. State Transporter's ID: <b>215 822-2676</b>			
10. US EPA ID Number <b>NY D 0 8 2 7 8 5 4 7 2</b>		F. Transporter's Telephone ( )			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		G. State Facility ID: <b>516 586-0333</b>			
a. <b>RC HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III (CADMIUM, CHROMIUM), (D005)8</b>		12. Containers Number <b>001</b>	Type <b>DT</b>	13. Total Quantity <b>00.023</b>	14. Unit Wt/Vol <b>EPA STATE</b> <b>D 0 0 6 *</b>
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE
J. Additional Descriptions for Materials listed Above <b>8-1X51019</b>		K. Handling Codes for Wastes Listed Above <b>NY PTT</b>			
15. Special Handling Instructions and Additional Information <b>*11A- D007 NET WT. 46.260165 ERG 171</b>		EMERGENCY PHONE <b>(516) 293-1998</b>			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.					
Printed/typed Name <b>Vera C. Rabin</b>		Signature			
17. Transporter's Acknowledgement of Receipt of Materials					
Printed/typed Name <b>Ronen Rabin</b>		Signature			
18. Transporter's Acknowledgement of Receipt of Materials					
Printed/typed Name <b>Ronen Rabin</b>		Signature			
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of Receipt of hazardous materials covered by this manifest except as noted in Item 19					
Printed/typed Name <b>Ronen Rabin</b>		Signature			

NYH 0044892

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

# HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

(Rev. 3/97)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>N Y D O 6 8 0 1 4 7 1 1</b>	Manifest Doc. No. <b>12820-77</b>	2. Page 1 of <b>1</b>	Information within heavy bold line is not required by Federal Law.		
3. Generator's Name and Mailing Address <b>100 FIELD STREET WEST BABYLON, NY 11704</b>		US ELECTROPLATING		A. <b>NYH 0044892</b>			
4. Generator's Telephone Number ( <b>516) 293-1998</b> )				B. Generator's ID <b>SAM E</b>			
5. Transporter 1 (Company Name) <b>REPUBLIC ENV SYS(TRANS GROUP)</b>		6. US EPA ID Number <b>P A D 9 8 2 6 6 1 3 8 1</b>			C. State Transporter's ID <b>12820-71</b>		
7. Transporter 2 (Company Name)		8. US EPA ID Number			D. Transporter's Telephone ( <b>215) 822-2676</b> )		
9. Designated Facility Name and Site Address <b>CHEMICAL POLLUTION CONTROL 120 SOUTH FOURTH STREET BAYSIDE, NY 11706</b>		10. US EPA ID Number <b>N Y D O 8 2 7 8 5 4 2 9</b>			E. State Transporter's ID		
					F. Transporter's Telephone ( )		
					G. State Facility ID <b>SAM E</b>		
					H. Facility Telephone ( <b>516) 586-0333</b> )		
<b>GENERATOR</b>	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) <b>a. HQ HAZARDOUS WASTE, SOLID, N.O.S., Y, UN3077, PG III (CADMIUM, CHROMIUM), (D006)*</b>		12. Containers Number <b>Y X 1</b>	Type <b>C-H</b>	13. Total Quantity <b>Y Y X Z Y</b>	14. Unit Wt/Vol <b>T</b>	I. Waste No. <b>EPA D 0 0 6 *</b>
							STATE
							EPA
							STATE
							EPA
<b>TRANSPORTER</b>	J. Additional Descriptions for Materials listed Above <b>a S 1X51019</b>				K. Handling Codes for Wastes Listed Above <b>a NY R b</b>		
<b>FACILITY</b>	15. Special Handling Instructions and Additional Information <b>*11A- DC07 EMERGENCY PHONE 516 293-1998 103105198</b>						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.							
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name <b>X HERMAN</b>		Signature <b>X</b>		Mo. <b>10</b>	Day <b>31</b>	Year <b>1993</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials <b>BED</b>		Signature <b>BED</b>		Mo. <b>10</b>	Day <b>31</b>	Year <b>1993</b>	
Printed/Typed Name <b>BED</b>		Signature <b>BED</b>		Mo. <b>10</b>	Day <b>31</b>	Year <b>1993</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials <b>TM/AKR</b>		Signature <b>TM/AKR</b>		Mo. <b>10</b>	Day <b>31</b>	Year <b>1993</b>	
Printed/Typed Name <b>TM/AKR</b>		Signature <b>TM/AKR</b>		Mo. <b>10</b>	Day <b>31</b>	Year <b>1993</b>	
19. Discrepancy Indication Space <b>K) REVERSE HANDLING TO "T"</b>							
20. Facility Owner or Operator: Certification of Receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name <b>TM/AKR</b>		Signature <b>TM/AKR</b>		Mo. <b>10</b>	Day <b>31</b>	Year <b>1993</b>	

(NY) 417336

COPY 7 TRANSPORTED COPY

## OFFICIAL PENNSYLVANIA MANIFEST FORM

**UNIFORM HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No.2. Page 1  
of 1Information in the shaded areas  
is not required by Federal law  
but is required by State law.

3. Generator's Name and Mailing Address

US Electroplating  
100 Field Street

4. State Manifest Document Number

PAE 1197652

4. Generator's Phone ( 516 ) 293-1998

5. Transporter 1 Company Name

Freehold Cartage, Inc.

6. US EPA ID Number

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

10. US EPA ID Number

REPUBLIC ENVIRONMENTAL SYSTEM (PA), INC.  
2869 Sandstone Drive  
Hatfield, PA 19440

PAI D O 8 5 6 9 0 5 9 2

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

13. Total  
Quantity14. Unit  
Wt/Vola. RQ, Hazardous Waste Solids, N.O.S.,  
(Cadmium, Chromium) (D006,D007)

9, NA3077, PG III

ERG# 171

XIX

1

CM

XXIX

1

5

Y

D D O

D D O S O G

b.

c.

d.

e.

f.

g.

15. Special Handling Instructions and Additional Information **EMERGENCY CONTACT: 516-293-1998**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Vera Spicelli

Signature

MONTH DAY YEAR

03 09 1988

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed/Typed Name

AL JOHNSON

Signature

MONTH DAY YEAR

10 31 06 1988

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed/Typed Name

John W. Wittman

Signature

MONTH DAY YEAR

08 16 1988

19. Discrepancy Indication Space

13A 26340P

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

John W. Wittman

Signature

MONTH DAY YEAR

08 16 1988

PAAE 1197652

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

NYG 0827856

**HAZARDOUS WASTE MANIFEST**  
P.O. Box 12820, Albany, New York 12212

(Rev. 3/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

GENERATOR		<b>UNIFORM HAZARDOUS WASTE MANIFEST</b> 1. Generator's US EPA No. <b>N Y D 0 6 8 0 1 4 7 1 1 2 7 8 5 6</b> Manifest Doc. No. <b>1</b> 2. Page 1 of <b>1</b> Information within heavy bold line is not required by Federal Law.										
		3. Generator's Name and Mailing Address    US Electroplating 100 Fields Street West Babylon, NY 11704					A. <b>NYG 0827856</b>					
		4. Generator's Telephone Number (516) 293-1998					B. Generator's ID <b>Same</b>					
		5. Transporter 1 (Company Name) <b>Freehold Cartage, Inc.</b>		6. US EPA ID Number <b>N J D 0 5 4 1 2 6 1 6 4</b>			C. State Transporter's ID <b>TAE 1980 NJ</b>					
		7. Transporter 2 (Company Name)		8. US EPA ID Number			D. Transporter's Telephone (732) 462-1001					
		9. Designated Facility Name and Site Address Evergreen Environmental Group, INC. 33 Indusry Drive Bedford, OH 44146					E. State Transporter's ID					
		10. US EPA ID Number <b>O H D 0 5 5 5 2 2 4 2 9</b>					F. Transporter's Telephone ( )					
		11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) a. RQ, Hazardous Waste Solids, N.O.S., (Cadmium, Chromium)(D006, D007) 9, NA3077, PG III ERG# 171					12. Containers		13. Total Quantity		14. Unit Wt/Vol	I. Waste Na.
							Number	Type	Quantity			EPA D006
							X	X	1	C	M	D007
												STATE
												EPA
												STATE
												EPA
												STATE
		J. Additional Descriptions for Materials listed Above a. Cadmium, Chromium					K. Handling Codes for Wastes Listed Above a. <input checked="" type="checkbox"/> <input type="checkbox"/> c. <input type="checkbox"/> <input checked="" type="checkbox"/> b. <input type="checkbox"/> <input type="checkbox"/> d. <input type="checkbox"/> <input checked="" type="checkbox"/>					
		15. Special Handling Instructions and Additional Information 11a) HS21270 <i>PCX 4036</i>					Emergency Contact: 516-293-1998					
		16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.										
TRANSPORTER		Printed/Typed Name <b>Vera Spinelli</b> Signature <b>Vera Spinelli</b> Mo. <b>10</b> Day <b>30</b> Year <b>1998</b>										
		17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>ROBERT SMITH</b> Signature <b>Robert Smith</b> Mo. <b>10</b> Day <b>30</b> Year <b>1998</b>										
FACILITY		18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name    Signature										
		19. Discrepancy Indication Space										
		20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										
		Printed/Typed Name <b>Javier Bucell IN BEHALFOREZZI</b> Signature <b>Javier Bucell</b> Mo. <b>10</b> Day <b>30</b> Year <b>1998</b>										

COPY 1 -- Disposer State - Mailed by TSD Facility



NYG 0827838

**HAZARDOUS WASTE MANIFEST**  
P.O. Box 12820, Albany, New York 12212

(Rev. 3/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>N Y D 0 6 8 0 1 4 7 1 1 2 7 8 3 8</b>	Manifest Doc. No.	2. Page 1 of <b>1</b>	Information within heavy bold line is not required by Federal Law.	
3. Generator's Name and Mailing Address		US Electroplating 100 Field Street West Babylon, NY 11704		A. <b>NYG 0827838</b>		
4. Generator's Telephone Number (516) 293-1998				B. Generator's ID <b>Same</b>		
5. Transporter 1 (Company Name) <b>Freehold Cartage, Inc.</b>		6. US EPA ID Number <b>N J D 0 5 4 1 2 6 1 6 4</b>		C. State Transporter's ID <b>A A 4 1 1 E</b>		
7. Transporter 2 (Company Name)		8. US EPA ID Number		D. Transporter's Telephone (732) 462-1001		
9. Designated Facility Name and Site Address Evergreen Environmental Group, Inc. 33 Industry Drive Bedford, OH 44146		10. US EPA ID Number <b>O H D 0 5 5 5 2 2 4 2 9</b>		E. State Transporter's ID		
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	
a. RQ, Hazardous Waste Solids, N.O.S., (Cadmium, Chromium) (D006, D007) 9, NA3077, PG TTT		ERG# 171	X X 1 C M X X X 1 8	Y	EPA D006 D007 STATE	
b.					EPA STATE	
c.					EPA STATE	
d.					EPA STATE	
J. Additional Descriptions for Materials listed Above		K. Handling Codes for Wastes Listed Above				
a. Cadmium, Chromium		c	b	a	T c	
b		d	1	b	d	
15. Special Handling Instructions and Additional Information		Emergency Contact: 516-293-1998				
11a) HS21270  NYJA113 0410#333HW						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.						
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Printed/Typed Name <b>Vera Spinelli</b>		Signature <i>Vera Spinelli</i>		Mo. <b>0</b>	Day <b>3</b>	Year <b>19</b>
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name <b>Alan K Bossick</b>		Signature <i>Alan K Bossick</i>		Mo. <b>0</b>	Day <b>3</b>	Year <b>19</b>
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Mo.	Day	Year
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <b>Bruce J. Williams</b>		Signature <i>Bruce J. Williams</i>		Mo. <b>0</b>	Day <b>3</b>	Year <b>19</b>

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## **Data Validation Report**

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# Premier Environmental Services, Inc.

## DATA VALIDATION SUMMARY OF THE U.S. ELECTROPLATING SITE

### ORGANIC AND INORGANIC ANALYSES

#### ACCREDITED LABORATORIES, INC. LABORATORY CASE NUMBERS

8529, 8600

July 20, 1998

Prepared for  
C. A. Rich Consultants  
Sea Cliff, New York

Prepared by  
Premier Environmental Services  
2815 Covered Bridge Road  
Merrick, New York 11566  
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566  
(516) 223-9761 • FAX (516) 223-0983 • NEW JERSEY (908) 750-8783

# Premier Environmental Services, Inc.

## ORGANIC DATA VALIDATION

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566  
(516) 223-9761 • FAX (516) 223-0983 • NEW JERSEY (908) 750-8783

# Premier Environmental Services, Inc.

## DATA VALIDATION FOR: ORGANICS ANALYSIS

SITE: U.S. ELECTROPLATING.

CASE NO.: 8529, 8600

CONTRACT LAB: ACCREDITED LABORATORIES, INC..

REVIEWER: JANET JOSHER

REVIEW COMPLETED: JULY 17,1998

MATRIX: SOIL AND WATER

The data validation was performed according to the USEPA Contract Laboratory Program National Functional Guidelines for Organic and Inorganic Data Review, February, 1994 and NYSDEC-ASP validation criteria. All data are considered valid and acceptable except for those analytes which have been qualified as detailed in this report. A "J" qualification indicates an estimated value. A "UJ" qualification indicates an undetected analyte with the detection limit estimated. A "JN" qualification indicates presumptive data. An "R" qualification indicates that the result is rejected and does not meet minimum QA/QC criteria. Any results that are rejected should not be used. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results were generated within the requirements of the methods employed.

This data assessment is for the samples listed below:

SG-W

SD-2

SD-6

SD-6 DUP

SG-E 8-3

SG-E

SD-5

SD-1

CP-2

FIELD BLANK

TRIP BLANK

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Volatile organics analysis is required to be performed within 10 days of validated time of sample receipt (VTSR) for preserved water and soil samples. Extraction of water and soil samples for base neutral /acid extractable analysis must be started within five days of VTSR and completed within 7 days. Analysis must be completed within 40 days.

VOA: All samples were analyzed within the required holding time.

BNA: All samples were extracted and analyzed within the required holding time.

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 2. BLANK CONTAMINATION:

Quality assurance blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Positive results of less than ten times the method detection limit for common laboratory solvents such as Methylene Chloride, Acetone, and 2-Butanone and less than five times the method detection limit for other volatile compounds that are found in the samples for compounds that are also found in the method, field and trip blanks are negated with the qualification "U". The following samples were qualified for blank contamination.

#### A.) Method blank contamination

VOA: No contamination was found in the method blanks.

BNA: No contamination was found in the method blanks.

#### B.) Field blank contamination

VOA: Methylene Chloride was found in the field blank, therefore, Methylene Chloride was negated in samples SG-W, SD-2, SD-6, SD-6DUP, and SG-E.

BNA: No contamination was found in the field blank.

#### C.) Trip blank

VOA: Methylene Chloride was found in the trip blank associated with these samples. The samples were previously qualified for field blank contamination. No further action was taken.

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 3. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

If the mass calibration is in error or missing, all associated data will be classified as unusable, "R".

VOA: The tuning criteria were met.

BNA: The tuning criteria were met.

### 4. RESPONSE FACTOR:

The response factor measures the instrument's response to specific chemical compounds. A value outside that criteria indicates a serious detection and quantitation problem, or poor sensitivity.

VOA: Response factor criteria were met.

BNA: Response factor criteria were not met for 2,4-Dinitrophenol and 4-Nitrophenol, therefore, associated results in samples SD-1, CP-2, SG-W, SG-W(DL), SD-2, SD-6, SD-6DUP, SG-E, and SD-5 were qualified "UJ" for non-detects and "J" for positive results.

Response factor criteria was not met for Hexachlorocyclopentadiene, therefore, associated results in the field blank were qualified "UJ".

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 5. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of performing satisfactorily at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is performing satisfactorily on a daily basis.

Percent relative standard deviation (RSD) is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent difference (%D) compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance.

### INITIAL CALIBRATION:

VOA: %RSD criteria was exceeded for 2-Chloroethylvinyl ether, therefore, associated results in sample SD-5, CP-2, SG-W, SD-2, SD-6, and the field and trip blanks were qualified "UJ".

%RSD criteria was exceeded for trans-1,3-Dichloropropene, therefore, associated results in samples SG-W, SD-2, SD-6, SD-5, and the trip blank were qualified "UJ".

BNA: %RSD criteria was exceeded for Benzoic Acid, therefore, associated results in samples SD-1, CP-2, SG-W, SD-2, SD-6, SD-6DUP, SG-E, SD-5 and the field blank were qualified "UJ" for nondetects and "P" for positive results.

%RSD criteria was exceeded for Dibenzo(a,h)Anthracene, Benzo(g,h,i) Perylene, and Indeno(1,2,3-ed)Pyrene, therefore, associated results in samples SD-1, CP-2, SD-W(DL) and the field blank were qualified "UJ".

%RSD criteria was exceeded for 2,4-Dinitrophenol, however, since all associated samples were previously qualified for response factor failure, no further action was required.

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### CONTINUING CALIBRATION:

VOA: %D criteria was exceeded for Acrolein, therefore, associated results in samples SG-W, SD-2, SD-6, SD-6DUP, SG-E, SD-5, and the trip blank were qualified , "UJ".

%D criteria was exceeded for Acetone, therefore, associated results in samples SG-W, SD-2, SD-6, SD-5, and the trip blank were qualified "UJ" for nondetects and "J" for positive results.

BNA: %D criteria was exceeded for Dibenzo(a,h) anthracene, 3,3'-Dichlorobenzidine, Benzo(a)anthracene, and Chrysene, therefore, associated results in samples SG-W, SD-2, SD-6, and SD-6(DUP) were qualified "UJ" for nondetects and "J" for positive results.

%D criteria for Indeno(1,2,3-cd)Pyrene was exceeded , therefore, associated results in samples CP-2, SG-W, SD-2, SD-6, and SD-6(DUP) were qualified "UJ" for nondetects, and "J" for positive results.

%D criteria was exceeded for 4,6-Dinitro-2-methyl phenol, therefore, associated results in samples CP-2, SD-1, and SG-W(DL) were qualified "UJ" for nondetects and "J" for positive results.

%D criteria was exceeded for N-Nitrosodimethylamine and bis(2-Chloroisopropyl)ether, therefore, associated results in samples CP-2 and SD-1 "UJ" for nondetects and "J" for positive results.

%D criteria for Benzo(g,h,i)perylene was exceeded , therefore, associated results in samples CP-2, SG-W, SG-E, SD-1, SD-2, SD-6, SD-6(DUP) and the field blank were qualified "UJ" for nondetects, and "J" for positive results.

%D criteria was exceeded for Butylbenzylphthalate, therefore, associated results in the field blank were qualified "UJ".

%D criteria was exceeded for 2-Nitroaniline , therefore, associated results in sample SG-W(DL) were qualified "UJ".

%D criteria was exceeded for 2,4-Dintrophenol , however, since all associated samples were previously qualified for response factor failure, no further action was taken.

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 6. SURROGATES/SYSTEM MONITORING COMPOUNDS (SMC):

All samples are spiked with surrogate/SMC compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate/SMC concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

VOA: Percent recoveries for all surrogates were within QC limits.

BNA: Percent recoveries for all surrogates in the samples were within QC limits. The recovery for Phenol-d5 in the spike blank duplicate was high. No action was taken.

### 7. INTERNAL STANDARD PERFORMANCE

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +150%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than  $\pm 30$  seconds from the associated continuing calibration standard..

VOA: %Recovery for Chlorobenzene-d5 was low in sample SD-1. The sample was reanalyzed and low recovery was confirmed. Sample results quantitated using this internal standard were qualified "J" for positive results and "UJ" for nondetects.

BNA: %Recovery for Perylene-d6 was low in sample SG-W. The sample was diluted and reanalyzed. Low recovery was confirmed. Sample results quantitated using this internal standard were qualified "J" for positive results and "UJ" for nondetects.

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 8. COMPOUND IDENTIFICATION:

#### VOLATILE FRACTION:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$  RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. For tentatively identified compounds (TIC), the ion spectra must match accurately.

VOA: Identification criteria were met .

BNA: Identification criteria were met .

### 9. MATRIX SPIKE/ SPIKE DUPLICATE ANALYSIS

The MS/SD and blank spike/spike duplicate are generated to determine the precision and accuracy of the analytical method. This data may be used in conjunction with the other QC criteria for additional qualification of data. The following results were noted for MS/SD analysis:

VOA: %Recoveries and RPDs for the blank spike and spike duplicate and the matrix spike and matrix spike duplicate were within the QC limits of the method employed..

BNA: %Recovery for 4-Chloro-3-methylphenol was high in the soil blank spike.  
%Recovery for 2,4-Dinitrophenol in the matrix spike was high. All other recoveries and RPDs were within the QC limits of the method employed.

# Premier Environmental Services, Inc.

## ORGANIC DATA ASSESSMENT

### 10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT:

VOA: Methylene Chloride was found in the trip blank associated with these samples, therefore, all concentrations less than ten times the method detection limit of Methylene Chloride were negated from the results. One internal standard response was low in one sample. %RSD and %D criteria were not met for several compounds during instrument calibration. Samples were appropriately qualified to reflect these deficiencies. Tuning requirements and response factor criteria were met. All samples were analyzed within required holding times. Surrogate recoveries were within the acceptable QC limits.

BNA:

One internal standard response was low in one sample. %RSD, %D, and response factor criteria were not met for several compounds during instrument calibration. Samples were appropriately qualified to reflect these deficiencies. Tuning requirement were met. All samples were analyzed within required holding times. Surrogate recoveries were within the acceptable QC limits.

Overall this data is usable with the appropriate data validation qualifiers.

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8529
SAMPLE NUMBER	9602096
DATA FILE	>04822
CLIENT NAME	CARDI
FIELD ID	FIELD BLANK

MATRIX	Aqueous
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	03/04/98
ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107028	Acrolein	U	50	78875	1,2-Dichloropropane	U	5
107151	Acrylonitrile	U	50	10061015	cis-1,3-Dichloropropene	U	5
74873	Chloromethane	U	5	79016	Trichloroethene	U	5
74859	Bromomethane	U	5	71432	Benzene	U	5
75014	Vinyl Chloride	U	5	124481	Dibromochloromethane	U	5
75003	Chloroethane	U	5	79005	1,1,2-Trichloroethane	U	5
75092	Methylene Chloride	3.0	5	10061026	trans-1,3-Dichloropropene	U	5
67641	Acetone	U	5	110758	2-Chloroethylvinylether	U	5
75150	Carbon Disulfide	U	5	75252	Bromoform	U	5
75694	Trichlorofluoromethane	U	5	591786	2-Hexanone	U	5
75554	1,1-Dichloroethene	U	5	108101	4-Methyl-2-pentanone	U	5
75343	1,1-Dichloroethane	U	5	127184	Tetrachloroethene	U	5
156605	trans-1,2-Dichloroethene	U	5	79345	1,1,2,2-Tetrachloroethane	U	5
57663	Chloroform	U	5	108883	Toluene	U	5
107062	1,2-Dichloroethane	U	5	108907	Chlorobenzene	U	5
78933	2-Butanone	U	5	100414	Ethylbenzene	U	5
71556	1,1,1-Trichloroethane	U	5	100425	Styrene	U	5
56235	Carbon Tetrachloride	U	5	1330207	m,p-Xylene	U	10
108054	Vinyl Acetate	U	5	95476	o-Xylene	U	5
75274	Bromodichloromethane	U	5	156592	cis-1,2-Dichloroethene	U	5

SURROGATE COMPOUNDS

1,2-Dichloroethane-d4	
Toluene-d8	
Bromofluorobenzene	

RECOVERY	LIMITS	STATUS
94 %	76-114	OK
93 %	88-110	OK
96 %	86-115	OK

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Indicates result exceeds highest calibration standard

V-25

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8529
SAMPLE NUMBER	7802097
DATA FILE	>04852
CLIENT NAME	CARCI
FIELD ID	SD-1

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	03/04/98
ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	0	59	78875	1,2-Dichloropropane	0	5
107131	Acrylonitrile	0	59	10061015	cis-1,3-Dichloropropene	0	5
74873	Chloromethane	0	6	79016	Trichloroethene	0	5
74839	Bromomethane	0	6	71432	Benzene	0	5
75014	Vinyl Chloride	0	5	124481	Dibromochloromethane	0	5
75003	Chloroethane	0	5	79005	1,1,2-Trichloroethane	0	5
75092	Methylene Chloride	0	6	10061026	trans-1,3-Dichloropropene	0	5
67641	Acetone	0	6	110758	2-Chloroethylvinylether	0	5
75150	Carbon Disulfide	0	6	75252	Bromoform	0	5
75694	Trichlorofluoromethane	0	5	591755	2-Hexanone	0	5
75354	1,1-Dichloroethene	0	6	108101	4-Methyl-2-pentanone	0	5
75343	1,1-Dichloroethane	0	6	127184	Tetrachloroethene	0	5
156605	trans-1,2-Dichloroethene	0	6	79345	1,1,2,2-Tetrachloroethane	0	5
67663	Chloroform	0	6	108883	Toluene	2	5
107062	1,2-Dichloroethane	0	6	108907	Chlorobenzene	0	5
13933	2-Butanone	0	6	100414	Ethylbenzene	4	5
71556	1,1,1-Trichloroethane	0	6	100425	Styrene	0	5
56235	Carbon Tetrachloride	0	6	1330207	m,p-Xylene	4	5
108054	Vinyl Acetate	0	6	95476	o-Xylene	2	5
75274	Bromodichloromethane	0	6	156592	cis-1,2-Dichloroethene	0	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	104 %	70-121	OK
Toluene-d8	95 %	81-117	OK
Bromofluorobenzene	36 %	74-121	OK

Percent solid of 84.1 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected,  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Indicates result exceeds highest calibration standard

V-26

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8529  
 SAMPLE NUMBER 9802097  
 DATA FILE >D4845  
 CLIENT NAME CARCI  
 FIELD ID SD-1

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 03/05/98  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	U	59	78875	1,2-Dichloropropane	U	5
107131	Acrylonitrile	U	59	10061015	cis-1,3-Dichloropropene	U	5
74873	Chloromethane	U	6	79016	Trichloroethene	U	5
74839	Bromomethane	U	6	71432	Benzene	U	5
75014	Vinyl Chloride	U	6	124481	Dibromochloromethane	U	5
75003	Chloroethane	U	6	79005	1,1,2-Trichloroethane	U	5
75092	Methylene Chloride	U	6	10061026	trans-1,3-Dichloropropene	U	6
67641	Acetone	U	6	110758	2-Chloroethylvinylether	U	6
75150	Carbon Disulfide	U	6	75252	Bromoform	U	5
75694	Trichlorofluoromethane	U	6	591786	2-Hexanone	U	5
75354	1,1-Dichloroethene	U	6	108101	4-Methyl-2-pentanone	U	5
75343	1,1-Dichloroethane	U	6	127184	Tetrachloroethene	U	6
156605	trans-1,2-Dichloroethene	U	6	79345	1,1,2,2-Tetrachloroethane	U	5
67663	Chloroform	U	5	108883	Toluene	3 2	0
107062	1,2-Dichloroethane	U	6	108907	Chlorobenzene	U	5
78933	2-Butanone	U	6	100414	Ethylbenzene	6 J	5
71556	1,1,1-Trichloroethane	U	6	100425	Styrene	U	6
56235	Carbon Tetrachloride	U	6	1330207	m,p-Xylene	6 J	12
108054	Vinyl Acetate	U	6	95476	o-Xylene	3 J	6
75274	Bromodichloromethane	U	6	156592	cis-1,2-Dichloroethene	U	6

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	102 %	70-121	OK
Toluene-d8	95 %	81-117	OK
Bromofluorobenzene	88 %	74-121	OK

Percent solid of 84.1 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8529  
 SAMPLE NUMBER 9802098  
 DATA FILE 3D4823  
 CLIENT NAME CARCI  
 FIELD ID TRIP BLANK

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED  
 DATE ANALYZED 03/04/98  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107028	Acrolein	U	50	78875	1,2-Dichloropropane	U	5
107151	Acrylonitrile	U	50	10061015	cis-1,3-Dichloropropene	U	5
74873	Chloromethane	U	5	79016	Trichloroethene	U	5
74839	Bromomethane	U	5	71432	Benzene	U	5
75014	Vinyl Chloride	U	5	124481	Dibromochloromethane	U	5
75003	Chloroethane	U	5	79005	1,1,2-Trichloroethane	U	5
75092	Methylene Chloride	U	5	10061026	trans-1,3-Dichloropropene	U	5
67641	Acetone	U	5	110758	2-Chloroethylvinylether	U	5
75150	Carbon Disulfide	U	5	75252	Bromoform	U	5
75694	Trichlorofluoromethane	U	5	591786	2-Hexanone	U	5
75354	1,1-Dichloroethene	U	5	108101	4-Methyl-2-pentanone	U	5
75343	1,1-Dichloroethane	U	5	127194	Tetrachloroethene	U	5
156605	trans-1,2-Dichloroethene	U	5	79345	1,1,2,2-Tetrachloroethane	U	5
67663	Chloroform	U	5	108883	Toluene	U	5
107062	1,2-Dichloroethane	U	5	108907	Chlorobenzene	U	5
78935	2-Butanone	U	5	100414	Ethylbenzene	U	5
71556	1,1,1-Trichloroethane	U	5	100425	Styrene	U	5
56235	Carbon Tetrachloride	U	5	1330207	m,p-Xylene	U	10
108054	Vinyl Acetate	U	5	95476	o-Xylene	U	5
75274	Bromo dichloromethane	U	5	156592	cis-1,2-Dichloroethene	U	5

SURROGATE COMPOUNDS

1,2-Dichloroethane-d4	RECOVERY	LIMITS	STATUS
Toluene-d8	96 %	76-114	OK
Bromofluorobenzene	93 %	88-110	OK
	93 %	86-115	OK

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard

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ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	9802361
DATA FILE	>F4616
CLIENT NAME	CARCI
FIELD ID	SG-W

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/11/98
DATE ANALYZED	03/12/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	390	534521	4,6-Dinitro-2-methylphenol	U	390
208968	Acenaphthylene	U	390	51285	2,4-Dinitrophenol	U	390
120127	Anthracene	110 J	390	121142	2,4-Dinitrotoluene	U	390
56553	Benz(a)Anthracene	640	390	606202	2,6-Dinitrotoluene	U	390
50328	Benz(a)Pyrene	640	390	117840	Di-n-octyl phthalate	350 XJ	390
205992	Benz(b)fluoranthene	990 J	390	206440	Fluoranthene	1400	390
191242	Benz(g,h,i)Perylene	180 XJ	390	86737	Fluorene	67 J	390
207089	Benz(k)Fluoranthene	830 J	390	118741	Hexachlorobenzene	U	390
65850	Benzoic Acid	U	2000	87683	Hexachlorobutadiene	U	390
100516	Benzyl Alcohol	U	390	77474	Hexachlorocyclopentadiene	U	390
111444	bis(-2-Chloroethyl)Ether	U	390	67721	Hexachloroethane	U	390
108601	bis(2-Chloroisopropyl)ether	U	390	193395	Indeno(1,2,3-cd)Pyrene	180 XJ	390
117817	Bis(2-Ethylhexyl)Phthalate	1500	390	78591	Isophorone	U	390
111911	bis(-2-Chloroethoxy)Methane	U	390	91576	2-Methylnaphthalene	U	390
101553	4-Bromophenyl-phenylether	U	390	95487	2-Methylphenol	U	390
85687	Butylbenzylphthalate	U	390	108394	3,4-Methylphenol	U	390
106478	4-Chloroaniline	U	390	91203	Naphthalene	U	390
91587	2-Chloronaphthalene	U	390	88744	2-Nitroaniline	U	390
59507	4-Chloro-3-methylphenol	U	390	99092	3-Nitroaniline	U	390
95578	2-Chlorophenol	U	390	100016	4-Nitroaniline	U	390
7005723	4-Chlorophenyl-phenylether	U	390	98953	Nitrobenzene	U	390
218019	Chrysene	910 J	390	88755	2-Nitrophenol	U	390
53703	Dibenzo(a,h)Anthracene	U	390	100027	4-Nitrophenol	U	390
132649	Dibenzofuran	U	390	62759	N-Nitrosodimethylamine	U	390
95501	1,2-Dichlorobenzene	U	390	86306	N-Nitrosodiphenylamine	U	390
541731	1,3-Dichlorobenzene	U	390	621647	N-Nitroso-Di-n-propylamine	U	390
106467	1,4-Dichlorobenzene	U	390	87865	Pentachlorophenol	U	390
91941	3,3'-Dichlorobenzidine	U	390	85018	Phenanthrene	730	390
120832	2,4-Dichlorophenol	U	390	108952	Phenol	U	390
84662	Diethylphthalate	U	390	129000	Pyrene	1600	390
105679	2,4-Dimethylphenol	U	390	120821	1,2,4-Trichlorobenzene	U	390
131113	Dimethyl Phthalate	U	390	95954	2,4,5-Trichlorophenol	U	390
84742	Di-n-Butylphthalate	U	390	88062	2,4,6-Trichlorophenol	U	390

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	85 %	23-120	OK
2-Fluorobiphenyl	86 %	30-115	OK
Terphenyl-d14	135 %	18-137	OK
Phenol-d5	91 %	24-113	OK
2-Fluorophenol	77 %	25-121	OK
2,4,6-Tribromophenol	78 %	19-122	OK

2-10-23

Percent solid of 84.8 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

SV-19

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 8600  
 SAMPLE NUMBER 98U2361DL  
 DATA FILE >B2914  
 CLIENT NAME CARCI  
 FIELD ID SG-W

MATRIX Sp1  
 DILUTION FACTOR 5  
 DATE EXTRACTED 03/11/98  
 DATE ANALYZED 03/13/98  
 ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	2000	51285	2,4-Dinitrophenol	U	2000
208968	Acenaphthylene	U	2000	121142	2,4-Dinitrotoluene	U	2000
120127	Anthracene	U	2000	606202	2,6-Dinitrotoluene	U	2000
56553	Benz(a)Anthracene	560 J D	2000	117840	Di-n-octyl phthalate	U	2000
50328	Benz(a)Pyrene	500 J D	2000	206440	Fluoranthene	1400 J D	2000
205992	Benz(b)fluoranthene	910 J D	2000	86737	Fluorene	U	2000
191242	Benz(g,h,i)Perylene	U	2000	118741	Hexachlorobenzene	U	2000
207089	Benz(k)Fluoranthene	430 J D	2000	87683	Hexachlorobutadiene	U	2000
65850	Benzoic Acid	U	9800	77474	Hexachlorocyclopentadiene	U	2000
100516	Benzyl Alcohol	U	2000	67721	Hexachloroethane	U	2000
111444	bis(-2-Chloroethyl)Ether	U	2000	193395	Indeno(1,2,3-cd)Pyrene	U	2000
108601	bis(2-Chloroisopropyl)ether	U	2000	78591	Isophorone	U	2000
112817	Bis(2-Ethylhexyl)Phthalate	1000 J D	2000	91576	2-Methylnaphthalene	U	2000
111911	bis(-2-Chloroethoxy)Methane	U	2000	95487	2-Methylphenol	U	2000
101553	4-Bromophenyl-phenylether	U	2000	108394	3&4-Methylphenol	U	2000
85687	Butylbenzylphthalate	U	2000	91203	Naphthalene	U	2000
106478	4-Chloroaniline	U	2000	88744	2-Nitroaniline	U	2000
91587	2-Chloronaphthalene	U	2000	99U92	3-Nitroaniline	U	2000
59502	4-Chloro-3-methylphenol	U	2000	100016	4-Nitroaniline	U	2000
95578	2-Chlorophenol	U	2000	98953	Nitrobenzene	U	2000
7005723	4-Chlorophenyl-phenylether	U	2000	88755	2-Nitrophenol	U	2000
218019	Chrysene	520 J D	2000	100027	4-Nitrophenol	U	2000
53703	Dibenzo(a,h)Anthracene	U	2000	62759	N-Nitrosodimethylamine	U	2000
132649	Dibenzofuran	U	2000	86306	N-Nitrosodiphenylamine	U	2000
95501	1,2-Dichlorobenzene	U	2000	621647	N-Nitroso-Di-n-propylamine	U	2000
541731	1,3-Dichlorobenzene	U	2000	87865	Pentachlorophenol	U	2000
106467	1,4-Dichlorobenzene	U	2000	85018	Phenanthrene	680 J D	2000
91941	3,3'-Dichlorobenzidine	U	2000	108952	Phenol	U	2000
120832	2,4-Dichlorophenol	U	2000	129000	Pyrene	930 J D	2000
84662	Diethylphthalate	U	2000	120821	1,2,4-Trichlorobenzene	U	2000
105679	2,4-Dimethylphenol	U	2000	95954	2,4,5-Trichlorophenol	U	2000
131113	Dimethyl Phthalate	U	2000	88062	2,4,6-Trichlorophenol	U	2000
84742	Di-n-Butylphthalate	U	2000	92875	Benzidine	U	2000
534521	4,6-Dinitro-2-methylphenol	U	2000	122667	1,2-Diphenylhydrazine	U	2000

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	83 %	23-120	OK
2-Fluorobiphenyl	97 %	30-115	OK
Terphenyl-d14	94 %	18-137	OK
Phenol-d5	72 %	24-113	OK
2-Fluorophenol	65 %	25-121	OK
2,4,6-Tribromophenol	86 %	19-122	OK

Percent solid of 84.8 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

11 9-10-98  
 SV-20

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	9802362
DATA FILE	>F4617
CLIENT NAME	CARCI
FIELD ID	SD-2

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/11/98
DATE ANALYZED	03/12/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	41 J	370	534521	4,6-Dinitro-2-methylphenol	U	370
208968	Acenaphthylene	U	370	51285	2,4-Dinitrophenol	U	370
120127	Anthracene	40 J	370	121142	2,4-Dinitrotoluene	U	370
56553	Benzo(a)Anthracene	88 J	370	6062U2	2,6-Dinitrotoluene	U	370
50328	Benzo(a)Pyrene	90 J	370	117840	Di-n-octyl phthalate	U	370
205992	Benzo(b)fluoranthene	120 J	370	206440	Fluoranthene	210 J	370
191242	Benzo(g,h,i)Perylene	41 J	370	86737	Fluorene	U	370
207089	Benzo(k)Fluoranthene	57 J	370	118741	Hexachlorobenzene	U	370
65850	Benzoic Acid	U	1800	87683	Hexachlorobutadiene	U	370
100516	Benzyl Alcohol	U	370	77474	Hexachlorocyclopentadiene	U	370
111444	bis(-2-Chloroethyl)Ether	U	370	67721	Hexachloroethane	U	370
108601	bis(2-Chloroisopropyl)ether	U	370	193395	Indeno(1,2,3-cd)Pyrene	43 J	370
117817	Bis(2-Ethylhexyl)Phthalate	150 J	370	78991	Isophorone	U	370
111911	bis(-2-Chloroethoxy)Methane	U	370	91576	2-Methylnaphthalene	U	370
101553	4-Bromophenyl-phenylether	U	370	95487	2-Methylphenol	U	370
85687	Butylbenzylphthalate	U	370	108394	3&4-Methylphenol	U	370
106478	4-Chloroaniline	U	370	91203	Naphthalene	U	370
91587	2-Chloronaphthalene	U	370	88744	2-Nitroaniline	U	370
59507	4-Chloro-3-methylphenol	U	370	99092	3-Nitroaniline	U	370
95578	2-Chlorophenol	U	370	100016	4-Nitroaniline	U	370
7005723	4-Chlorophenyl-phenylether	U	370	98953	Nitrobenzene	U	370
218019	Chrysene	120 J	370	88755	2-Nitrophenol	U	370
53203	Dibenzo(a,h)Anthracene	U	370	100027	4-Nitrophenol	U	370
132649	Dibenzofuran	U	370	62759	N-Nitrosodimethylamine	U	370
95501	1,2-Dichlorobenzene	U	370	86306	N-Nitrosodiphenylamine	U	370
541731	1,3-Dichlorobenzene	U	370	621647	N-Nitroso-Di-n-propylamine	U	370
106467	1,4-Dichlorobenzene	U	370	87865	Pentachlorophenol	U	370
91941	3,3'-Dichlorobenzidine	U	370	85018	Phenanthrene	110 J	370
120832	2,4-Dichlorophenol	U	370	108952	Phenol	U	370
84662	Diethylphthalate	38 J	370	129000	Pyrene	180 J	370
105679	2,4-Dimethylphenol	U	370	120821	1,2,4-Trichlorobenzene	U	370
131113	Dimethyl Phthalate	U	370	95954	2,4,5-Trichlorophenol	U	370
84742	Di-n-Butylphthalate	U	370	88062	2,4,6-Trichlorophenol	U	370

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	77 %	23-120	OK
2-Fluorobiphenyl	75 %	30-115	OK
Terphenyl-d14	104 %	18-137	OK
Phenol-d5	83 %	24-113	OK
2-Fluorophenol	71 %	25-121	OK
2,4,6-Tribromophenol	77 %	19-122	OK

Percent solid of 91.1 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

SV-21

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	9802363
DATA FILE	>F4618
CLIENT NAME	CARCI
FIELD ID	SD-6

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/11/98
DATE ANALYZED	03/12/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	410	534521	4,6-Dinitro-2-methylphenol	U	410
208968	Acenaphthylene	U	410	51285	2,4-Dinitrophenol	U	410
120127	Anthracene	U	410	121142	2,4-Dinitrotoluene	U	410
56553	Benz(a)Anthracene	U	410	606202	2,6-Dinitrotoluene	U	410
50328	Benz(a)Pyrene	U	410	117840	Di-n-octyl phthalate	U	410
205992	Benz(b)Fluoranthene	U	410	206440	Fluoranthene	U	410
191242	Benz(g,h,i)Perylene	U	410	86737	Fluorene	U	410
207089	Benz(k)Fluoranthene	U	410	118741	Hexachlorobenzene	U	410
65850	Benzoic Acid	U	2000	87683	Hexachlorobutadiene	U	410
100516	Benzyl Alcohol	U	410	77474	Hexachlorocyclopentadiene	U	410
111444	bis(-2-Chloroethyl)Ether	U	410	67721	Hexachloroethane	U	410
108601	bis(2-Chloroisopropyl)ether	U	410	193395	Indeno(1,2,3-cd)Pyrene	U	410
117817	Bis(2-Ethylhexyl)Phthalate	U	410	78591	Isophorone	U	410
111911	bis(-2-Chloroethoxy)Methane	U	410	91576	2-Methylnaphthalene	U	410
101553	4-Bromophenyl-phenylether	U	410	95487	2-Methylphenol	U	410
85687	Butylbenzylphthalate	U	410	108394	3&4-Methylphenol	U	410
106478	4-Chloroaniline	U	410	91203	Naphthalene	U	410
91587	2-Chloronaphthalene	U	410	88744	2-Nitroaniline	U	410
59502	4-Chloro-3-methylphenol	U	410	99092	3-Nitroaniline	U	410
95578	2-Chlorophenol	U	410	100016	4-Nitroaniline	U	410
7005723	4-Chlorophenyl-phenylether	U	410	98953	Nitrobenzene	U	410
218019	Chrysene	U	410	88755	2-Nitrophenol	U	410
53703	Dibenz(a,h)Anthracene	U	410	100027	4-Nitrophenol	U	410
132649	Dibenzofuran	U	410	62759	N-Nitrosodimethylamine	U	410
95501	1,2-Dichlorobenzene	U	410	86306	N-Nitrosodiphenylamine	U	410
541731	1,3-Dichlorobenzene	U	410	621647	N-Nitroso-Di-n-propylamine	U	410
106467	1,4-Dichlorobenzene	U	410	87865	Pentachlorophenol	U	410
91941	3,3'-Dichlorobenzidine	U	410	85018	Phenanthrene	U	410
120832	2,4-Dichlorophenol	U	410	108952	Phenol	U	410
84662	Diethylphthalate	U	410	129000	Pyrene	U	410
105679	2,4-Dimethylphenol	U	410	120821	1,2,4-Trichlorobenzene	U	410
131113	Dimethyl Phthalate	U	410	95954	2,4,5-Trichlorophenol	U	410
84742	Di-n-Butylphthalate	U	410	88062	2,4,6-Trichlorophenol	U	410

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	77 %	23-120	OK
2-Fluorobiphenyl	73 %	30-115	OK
Terphenyl-d14	110 %	18-137	OK
Phenol-d5	76 %	24-113	OK
2-Fluorophenol	68 %	25-121	OK
2,4,6-Tribromophenol	71 %	19-122	OK

4-10-98

Percent solid of 82.2 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

SV-22

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	9802364
DATA FILE	>F4619
CLIENT NAME	CARCI
FIELD ID	SD-6DUP

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/11/98
DATE ANALYZED	03/12/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	420	534521	4,6-Dinitro-2-methylphenol	U	420
208968	Acenaphthylene	U	420	51285	2,4-Dinitrophenol	U J	420
120127	Anthracene	U	420	121142	2,4-Dinitrotoluene	U	420
56553	Benz(a)Anthracene	U J	420	606202	2,6-Dinitrotoluene	U	420
50328	Benz(a)Pyrene	U	420	117840	Di-n-octyl phthalate	U	420
205992	Benz(b)Fluoranthene	U	420	206440	Fluoranthene	U	420
191242	Benz(g,h,i)Perylene	U J	420	86737	Fluorene	U	420
207089	Benz(k)Fluoranthene	U	420	118741	Hexachlorobenzene	U	420
65850	Benzoic Acid	U J	2100	87683	Hexachlorobutadiene	U	420
100516	Benzyl Alcohol	U	420	77474	Hexachlorocyclopentadiene	U J	420
111444	bis(-2-Chloroethyl)Ether	U	420	67721	Hexachloroethane	U	420
108601	bis(2-Chloroisopropyl)ether	U	420	193395	Indeno(1,2,3-cd)Pyrene	U J	420
117817	Bis(2-Ethylhexyl)Phthalate	U	420	78591	Isophorone	U	420
111911	bis(-2-Chloroethoxy)Methane	U	420	91576	2-Methylnaphthalene	U	420
101593	4-Bromophenyl-phenylether	U	420	95487	2-Methylphenol	U	420
85687	Butylbenzylphthalate	U	420	108394	3&4-Methylphenol	U	420
106478	4-Chloroaniline	U	420	91203	Naphthalene	U	420
91587	2-Chloronaphthalene	U	420	88744	2-Nitroaniline	U	420
59507	4-Chloro-3-methylphenol	U	420	99092	3-Nitroaniline	U	420
95578	2-Chlorophenol	U	420	100016	4-Nitroaniline	U	420
7005723	4-Chlorophenyl-phenylether	U	420	98953	Nitrobenzene	U	420
218019	Chrysene	U J	420	88755	2-Nitrophenol	U	420
53703	Dibenzo(a,h)Anthracene	U J	420	100027	4-Nitrophenol	U J	420
132649	Dibenzofuran	U	420	62759	N-Nitrosodimethylamine	U	420
95501	1,2-Dichlorobenzene	U	420	86306	N-Nitrosodiphenylamine	U	420
541731	1,3-Dichlorobenzene	U	420	621647	N-Nitroso-Di-n-propylamine	U	420
106467	1,4-Dichlorobenzene	U	420	87865	Pentachlorophenol	U	420
91941	3,3'-Dichlorobenzidine	U J	420	85018	Phenanthrene	U	420
120832	2,4-Dichlorophenol	U	420	108952	Phenol	U	420
84662	Diethylphthalate	U	420	129000	Pyrene	U	420
105679	2,4-Dimethylphenol	U	420	120821	1,2,4-Trichlorobenzene	U	420
131113	Dimethyl Phthalate	U	420	95954	2,4,5-Trichlorophenol	U	420
84742	Di-n-Butylphthalate	U	420	88062	2,4,6-Trichlorophenol	U	420

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	84 %	23-120	OK
2-Fluorobiphenyl	75 %	30-115	OK
Terphenyl-d14	106 %	18-137	OK
Phenol-d5	79 %	24-113	OK
2-Fluorophenol	69 %	25-121	OK
2,4,6-Tribromophenol	79 %	19-122	OK

Percent solid of 78.8 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

SV-23

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	9802367
DATA FILE	>F4620
CLIENT NAME	CARCI
FIELD ID	SG-E

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/11/98
DATE ANALYZED	03/12/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	350	534521	4,6-Dinitro-2-methylphenol	U	350
208968	Acenaphthylene	U	350	51285	2,4-Dinitrophenol	U	350
120127	Anthracene	U	350	121142	2,4-Dinitrotoluene	U	350
56553	Benz(a)Anthracene	U	350	606202	2,6-Dinitrotoluene	U	350
50328	Benzo(a)Pyrene	U	350	117840	Di-n-octyl phthalate	U	350
205992	Benzo(b)fluoranthene	U	350	206440	Fluoranthene	U	350
191242	Benzo(g,h,i)Perylene	U	350	86737	Fluorene	U	350
207089	Benzo(k)Fluoranthene	U	350	118741	Hexachlorobenzene	U	350
65850	Benzoic Acid	U	1700	87683	Hexachlorobutadiene	U	350
100516	Benzyl Alcohol	U	350	77474	Hexachlorocyclopentadiene	U	350
111444	bis(-2-Chloroethyl)Ether	U	350	67721	Hexachloroethane	U	350
108601	bis(2-Chloroisopropyl)ether	U	350	193395	Indeno(1,2,3-cd)Pyrene	U	350
117817	Bis(2-Ethylhexyl)Phthalate	78.3	350	78591	Isophorone	U	350
111911	bis(-2-Chloroethoxy)Methane	U	350	91576	2-Methylnaphthalene	U	350
101553	4-Bromophenyl-phenylether	U	350	95487	2-Methylphenol	U	350
85687	Butylbenzylphthalate	U	350	108394	3&4-Methylphenol	U	350
106478	4-Chloroaniline	U	350	91203	Naphthalene	U	350
91587	2-Chloronaphthalene	U	350	88744	2-Nitroaniline	U	350
59507	4-Chloro-3-methylphenol	U	350	99092	3-Nitroaniline	U	350
95578	2-Chlorophenol	U	350	100016	4-Nitroaniline	U	350
7005723	4-Chlorophenyl-phenylether	U	350	98953	Nitrobenzene	U	350
218019	Chrysene	U	350	88755	2-Nitrophenol	U	350
53703	Dibenzo(a,h)Anthracene	U	350	100027	4-Nitrophenol	U	350
132649	Dibenzofuran	U	350	62759	N-Nitrosodimethylamine	U	350
95501	1,2-Dichlorobenzene	U	350	86306	N-Nitrosodiphenylamine	U	350
541731	1,3-Dichlorobenzene	U	350	621647	N-Nitroso-Di-n-propylamine	U	350
106467	1,4-Dichlorobenzene	U	350	87865	Pentachlorophenol	U	350
91941	3,3'-Dichlorobenzidine	U	350	85018	Phenanthrene	U	350
120832	2,4-Dichlorophenol	U	350	108952	Phenol	U	350
84662	Diethylphthalate	U	350	129000	Pyrene	U	350
105679	2,4-Dimethylphenol	U	350	120821	1,2,4-Trichlorobenzene	U	350
131113	Dimethyl Phthalate	U	350	95954	2,4,5-Trichlorophenol	U	350
84742	Di-n-Butylphthalate	U	350	88062	2,4,6-Trichlorophenol	U	350

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	78 %	23-120	OK
2-Fluorobiphenyl	76 %	30-115	OK
Terphenyl-d14	107 %	18-137	OK
Phenol-d5	84 %	24-113	OK
2-Fluorophenol	73 %	25-121	OK
2,4,6-Tribromophenol	76 %	19-122	OK

Percent solid of 96.4 is used for all target compounds.

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J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

SV-24

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	98U2368
DATA FILE	>F4621
CLIENT NAME	CARCI
FIELD ID	SD-5

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/11/98
DATE ANALYZED	03/12/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	350	534521	4,6-Dinitro-2-methylphenol	U	350
208968	Acenaphthylene	U	350	51285	2,4-Dinitrophenol	U	350
120127	Anthracene	U	350	121142	2,4-Dinitrotoluene	U	350
56553	Benz(a)Anthracene	U	350	6062U2	2,6-Dinitrotoluene	U	350
50328	Benz(a)Pyrene	U	350	11784U	Di-n-octyl phthalate	U	350
205992	Benz(b)Fluoranthene	U	350	206440	Fluoranthene	U	350
191242	Benz(g,h,i)Perylene	U	350	86737	Fluorene	U	350
207089	Benz(k)Fluoranthene	U	350	118741	Hexachlorobenzene	U	350
65850	Benzoic Acid	U	1700	87683	Hexachlorobutadiene	U	350
100516	Benzyl Alcohol	U	350	77474	Hexachlorocyclopentadiene	U	350
111444	bis(-2-Chloroethyl)Ether	U	350	67721	Hexachloroethane	U	350
108601	bis(2-Chloroisopropyl)ether	U	350	193395	Indeno(1,2,3-cd)Pyrene	U	350
117817	Bis(2-Ethylhexyl)Phthalate	43	350	78591	Isophorone	U	350
111911	bis(-2-Chloroethoxy)Methane	U	350	91576	2-Methylnaphthalene	U	350
101553	4-Bromophenyl-phenylether	U	350	95487	2-Methylphenol	U	350
85687	Butylbenzylphthalate	U	350	108394	3&4-Methylphenol	U	350
106478	4-Chloroaniline	U	350	91203	Naphthalene	U	350
91587	2-Chloronaphthalene	U	350	88744	2-Nitroaniline	U	350
59507	4-Chloro-3-methylphenol	U	350	99092	3-Nitroaniline	U	350
95578	2-Chlorophenol	U	350	100016	4-Nitroaniline	U	350
7005723	4-Chlorophenyl-phenylether	U	350	98953	Nitrobenzene	U	350
218019	Chrysene	U	350	88755	2-Nitrophenol	U	350
53703	Dibenz(a,h)Anthracene	U	350	100027	4-Nitrophenol	U	350
132649	Dibenzofuran	U	350	62759	N-Nitrosodimethylamine	U	350
95501	1,2-Dichlorobenzene	U	350	86306	N-Nitrosodiphenylamine	U	350
541731	1,3-Dichlorobenzene	U	350	621647	N-Nitroso-Di-n-propylamine	U	350
106467	1,4-Dichlorobenzene	U	350	87865	Pentachlorophenol	U	350
91941	5,5'-Dichlorobenzidine	U	350	85018	Phenanthrene	U	350
120832	2,4-Dichlorophenol	U	350	108952	Phenol	U	350
84662	Diethylphthalate	570	350	129000	Pyrene	U	350
105679	2,4-Dimethylphenol	U	350	120821	1,2,4-Trichlorobenzene	U	350
131113	Dimethyl Phthalate	U	350	95954	2,4,5-Trichlorophenol	U	350
84742	Di-n-Butylphthalate	U	350	88062	2,4,6-Trichlorophenol	U	350

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	72 %	23-120	OK
2-Fluorobiphenyl	70 %	30-115	OK
Terphenyl-d14	108 %	18-137	OK
Phenol-d5	78 %	24-113	OK
2-Fluorophenol	62 %	25-121	OK
2,4,6-Tribromophenol	77 %	19-122	OK

Percent solid of 96.2 is used for all target compounds.

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J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

SV-25

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	9802361
DATA FILE	>04910
CLIENT NAME	CACI
FIELD ID	SG-W

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	05/11/98
ANALYZED BY	WILLIAM

CRS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	3	59	78875	1,2-Dichloropropene	0	5
107131	Acrylonitrile	0	59	10061015	cis-1,3-Dichloropropene	0	5
74873	Chloromethane	0	6	77916	Trichloroethene	0	5
74839	Bromomethane	0	6	71452	Benzene	0	5
75014	Vinyl Chloride	0	5	124481	Dibromochloromethane	0	5
75003	Chloroethane	0	6	79005	1,1,2-Trichloroethane	0	5
75092	Methylene Chloride	0	6	10061026	trans-1,3-Dichloropropene	0	5
67641	Acetone	0	5	110758	2-Chloroethylvinylether	0	5
75150	Carbon Disulfide	0	6	75252	Bromoform	0	5
75694	Trichlorofluoromethane	0	5	591786	2-Hexanone	0	5
75554	1,1-Dichloroethene	0	5	108101	4-Methyl-2-pentanone	0	5
75345	1,1-Dichloroethane	0	5	127184	Tetrachloroethene	0	5
156605	trans-1,2-Dichloroethene	0	5	79345	1,1,2,2-Tetrachloroethane	0	5
67565	Chloroform	0	6	108893	Toluene	7	5
107062	1,2-Dichloroethane	0	6	108907	Chlorobenzene	0	5
78933	2-Butanone	0	5	100414	Ethylbenzene	0	5
71556	1,1,1-Trichloroethane	0	6	100425	Styrene	0	5
56255	Carbon Tetrachloride	0	6	1530207	m,p-Xylene	0	12
108054	Vinyl Acetate	0	6	95476	o-Xylene	0	5
75274	Bromodichloromethane	0	6	156592	cis-1,2-Dichloroethene	0	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	97 %	70-121	OK
Toluene-d8	97 %	81-117	OK
Bromofluorobenzene	87 %	74-121	OK

Percent solid of 84.8 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
J - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.  
I - Result exceeds industrial surface soil standards.\*

B - Indicates compound found in associated blank.  
E - Indicates result exceeds highest calibration standard.  
R - Result exceeds residential surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

V-17

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8600
SAMPLE NUMBER	7802362
DATA FILE	104911
CLIENT NAME	CARC
FIELD ID	SD-2

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	07/11/98
ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107023	Acrolein	U	J	55	78975	1,2-Dichloropropane	5
107131	Acrylonitrile	0	55	10061015	cis-1,3-Dichloropropene	5	5
71377	Chloromethane	0	6	73016	Trichloroethene	5	5
74859	Bromomethane	0	6	71432	Benzene	5	5
75014	Vinyl Chloride	0	6	124481	Dibromochloromethane	5	5
75003	Chloroethane	0	6	79005	1,1,2-Trichloroethane	5	5
75092	Methylene Chloride	U	5	10061026	trans-1,3-Dichloropropene	5	5
57541	Acetone	0	J	110758	2-Chloroethylvinylether	5	5
75150	Carbon Disulfide	0	5	75252	Bromoform	5	5
75694	Trichlorofluoromethane	0	5	591786	2-Hexanone	5	5
75354	1,1-Dichloroethene	0	5	108101	4-Methyl-2-pentanone	5	5
75343	1,1-Dichloroethane	0	6	127184	Tetrachloroethene	5	5
156605	trans-1,2-Dichloroethene	0	6	79345	1,1,2,2-Tetrachloroethane	5	5
57563	Chloroform	0	6	106883	Toluene	5	5
107162	1,2-Dichloroethane	0	6	108907	Chlorobenzene	5	5
73955	2-Butanone	0	6	100414	Ethylbenzene	5	5
71556	1,1,1-Trichloroethane	0	6	100425	Styrene	5	5
56255	Carbon Tetrachloride	0	6	1330207	m,p-Xylene	5	11
109054	Vinyl Acetate	0	6	95476	o-Xylene	5	5
75274	Bromochloromethane	0	6	156572	cis-1,2-Dichloroethene	5	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	93 %	70-121	OK
Toluene-d8	96 %	81-117	OK
Bromofluorobenzene	94 %	74-121	OK

Percent solid of 91.1 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
J - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.  
I - Result exceeds industrial surface soil standards.\*

G - Indicates compound found in associated blank.  
E - Indicates result exceeds highest calibration standard  
R - Result exceeds residential surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8600  
 SAMPLE NUMBER 9802363  
 DATA FILE 84812  
 CLIENT NAME GARC  
 FIELD ID 60-6

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED  
 DATE ANALYZED 05/11/98  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
117028	Acrolein	0	61	78875	1,2-Dichloropropane	0	5
107151	Acrylonitrile	0	61	10061015	cis-1,3-Dichloropropene	0	5
74973	Chloromethane	0	6	79016	Trichloroethene	0	5
74839	Bromomethane	0	3	71452	Benzene	0	5
75014	Vinyl Chloride	0	5	124481	Dibromochloromethane	0	5
75003	Chloroethane	0	6	79005	1,1,2-Trichloroethane	0	5
75092	Methylene Chloride	1-5	5	10061026	trans-1,3-Dichloropropene	1	5
67641	Acetone	0	6	110758	2-Chloroethylvinylether	0	5
75150	Carbon Disulfide	0	6	75252	Bromoform	0	5
75694	Trichlorofluoromethane	0	6	591786	2-Hexanone	0	5
75364	1,1-Dichloroethene	0	5	108101	4-Methyl-2-pentanone	0	5
75543	1,1-Dichloroethane	0	6	127184	Tetrachloroethene	0	5
156605	trans-1,2-Dichloroethene	0	6	79345	1,1,2,2-Tetrachloroethane	0	6
57663	Chloroform	0	6	108823	Toluene	0	6
107062	1,2-Dichloroethane	0	6	108907	Chlorobenzene	0	5
18935	2-Butanone	0	5	100414	Ethylbenzene	0	5
71556	1,1,1-Trichloroethane	0	6	100425	Styrene	0	5
56035	Carbon Tetrachloride	0	6	1330207	m,p-Xylene	0	12
108054	Vinyl Acetate	0	6	95476	o-Xylene	0	5
75174	Bromodichloromethane	0	6	156592	cis-1,2-Dichloroethene	0	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	103 %	70-121	OK
Toluene-d8	96 %	81-117	OK
Bromofluorobenzene	94 %	74-121	OK

Percent solid of 32.2 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 J - Indicates compound analyzed for but not detected.  
 J - Indicates result is based on a dilution.  
 I - Result exceeds industrial surface soil standards.\*

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard  
 R - Result exceeds residential surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

7-12-98

V-19

SOUTHERN INSTRUMENTS, INC.  
PARTICLE SIZE/CONTAMINANT ANALYSIS DATA

SAMPLE NUMBER 9800  
SAMPLE NUMBER 9802504  
DATA FILE 07417  
CLIENT NAME DREC  
FIELD ID 90-100P

MATRIX Soil  
DILUTION FACTOR 1.0  
DATE EXTRACTED  
DATE ANALYZED 05/12/98  
ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/KG	MOL
67-61-9	Acrolein	0	0
107-11-1	Acrylonitrile	0	0
74-87-3	Bromomethane	0	0
71-55-7	Bromomethane	0	0
7501-0	Vinyl Chloride	0	0
7500-5	Chloroethane	0	0
7500-2	Methylene Chloride	0	0
67-34-1	Acetone	0	0
73-13-0	Carbon Disulfide	0	0
73-07-4	Trichlorofluoromethane	0	0
75-55-4	1,1-Dichloroethene	0	0
75-54-5	1,1-Dichloroethane	0	0
150-06-5	trans-1,2-Dichloroethene	0	0
57-05-3	Chloroform	0	0
107-06-2	1,2-Dichloroethane	0	0
73-93-5	1-Butanone	0	0
71-55-6	1,1,1-Trichloroethane	0	0
66-23-5	Carbon Tetrachloride	0	0
108-05-4	Vinyl Acetate	0	0
7517-4	Bromodichloromethane	0	0

CAS #	COMPOUND	UG/KG	MOL
78-87-5	1,2-Dichloropropane	0	0
100-61-5	cis-1,3-Dichloropropene	0	0
79-01-6	Trichloroethene	0	0
71-43-2	Benzene	0	0
104-61-1	Dibromochloromethane	0	0
73-96-5	1,1,2-Trichloroethane	0	0
100-61-026	trans-1,3-Dichloropropene	0	0
110-73-9	2-Chloroethylvinylether	0	0
75-25-2	Bromoform	0	0
59-17-6	2-Hexanone	0	0
108-10-1	4-Methyl-2-pentanone	0	0
107-18-4	Tetrachloroethene	0	0
73-54-5	1,1,1,2-Tetrachloroethane	0	0
108-88-5	Toluene	0	0
108-90-7	Chlorobenzene	0	0
100-41-4	Ethylibenzene	0	0
100-42-5	Styrene	0	0
133-02-07	m,p-Xylene	0	0
95-47-6	p-Xylene	0	0
15-6592	cis-1,2-Dichloroethene	0	0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane- <sup>-14</sup>	90.4	70-121	OK
Toluene- <sup>-13</sup>	95.4	81-117	OK
Bromofluorobenzene	23.1	74-121	OK

Percent solid of 70.6 is used for all target compounds.

B - Indicates compound concentration found below MOL.  
D - Indicates compound analyzed for but not detected.  
0 - Indicates result is based on a dilution.  
E - Result exceeds industrial surface soil standards.\*

B - Indicates compound found in associated blank.  
E - Indicates result exceeds highest calibration standard.  
X - Result exceeds residential surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

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7-10-13

V-20

INNOVATION LABORATORIES, INC.  
MOBILE ORGANIC ANALYSIS DATA

OPPE NUMBER      P500  
 SAMPLE NUMBER    9801365  
 DATA FILE        104302  
 CLIENT NAME     EBRCT  
 FIELD ID        TRIP BLANK

MATRIX           Aqueous  
 DILUTION FACTOR    1.0  
 DATE EXTRACTED  
 DATE ANALYZED    07/11/98  
 ANALYZED BY      WILLIAM

CAS #	COMPOUND	UG/L	DL
107-128	Acrolein	0.5	50
107-131	Acrylonitrile	0	50
74-87-3	Chloromethane	1	5
74-39-9	Bromomethane	0	5
76014	Vinyl Chloride	0	5
75003	Chloroethane	0	5
75012	Methylene Chloride	2.3	5
67-64-1	Acetone	0.5	5
75-150	Carbon Disulfide	0	5
75-92-4	Trichlorofluoromethane	0	5
113-88-4	1,1-Dichloroethene	0	5
75-93-5	1,1-Dichloroethane	0	5
115-00-5	trans-1,2-Dichloroethene	0	5
67-66-9	Chloroform	0	5
117-01-2	1,2-Dichloroethane	0	5
123-35-5	3-Butanone	0	5
71-50-5	1,1,1-Trichloroethane	0	5
56-25-5	Carbon Tetrachloride	0	5
106-05-4	Vinyl Acetate	0	5
75-27-4	Bromodichloromethane	0	5

CAS #	COMPOUND	UG/L	DL
78875	1,2-Dichloropropane	0	5
10061015	cis-1,3-Dichloropropene	0	5
79019	Trichloroethene	0	5
71-52-2	Benzene	0	5
124481	3Bromochloromethane	0	5
78925	1,1,2-Trichloroethane	0	5
10061016	trans-1,3-Dichloropropene	0	5
110758	2-Chloroethylvinylether	0	5
75252	Bromoform	0	5
591786	2-Hexanone	0	5
108101	4-Methyl-2-pentanone	0	5
127184	Tetrachloroethane	0	5
79345	1,1,1,2-Tetrachloroethane	0	5
108823	Toluene	0	5
108907	Chlorobenzene	0	5
100414	Ethylbenzene	0	5
100425	Styrene	0	5
1339207	m,p-Xylene	0	5
95476	o-Xylene	0	5
156592	cis-1,2-Dichloroethene	0	5

SUBROGATE COMPOUNDS

	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	90 %	26-114	OK
Toluene-d8	93 %	59-110	OK
Bromofluorocentane	92 %	36-115	OK

B - Indicates compound concentration found below DL.  
 D - Indicates compound analyzed for but not detected.  
 0 - Indicates result is based on a dilution.

S - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard  
 X - Result exceeds specific ground water quality criteria.

\* Flags are based on Specific Ground Water Quality Criteria from New Jersey Register dated February 1, 1993.

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8529
SAMPLE NUMBER	9802095
DATA FILE	204631
CLIENT NAME	CARCI
FIELD ID	CP-2

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	03/04/98
ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107028	Ecrolein	U	57	78875	1,2-Dichloropropane	U	5
107151	Acrylonitrile	U	57	10061015	cis-1,3-Dichloropropene	U	5
74873	Chloromethane	U	6	79016	Trichloroethene	U	5
74839	Bromomethane	U	6	71432	Benzene	U	5
75014	Vinyl Chloride	U	6	124481	Dibromoethylmethane	U	6
75003	Chloroethane	U	6	79005	1,1,2-Trichloroethane	U	5
75092	Methylene Chloride	U	6	10061026	trans-1,3-Dichloropropene	U	5
67641	Acetone	U	6	110758	2-Chloroethylvinylether	U	5
75150	Carbon Disulfide	U	6	75252	Bromoform	U	5
75694	Trichlorofluoromethane	U	6	591783	2-Hexanone	U	5
75354	1,1-Dichloroethene	U	6	108101	4-Methyl-2-pentanone	U	6
75343	1,1-Dichloroethane	U	6	127184	Tetrachloroethene	U	6
156605	trans-1,2-Dichloroethene	U	6	79345	1,1,2,2-Tetrachloroethane	U	6
67663	Chloroform	U	6	108883	Toluene	U	5
107062	1,2-Dichloroethane	U	6	108907	Chlorobenzene	U	5
78933	2-Butanone	U	6	100414	Ethylbenzene	U	5
71556	1,1,1-Trichloroethane	U	6	100425	Styrene	U	5
56235	Carbon Tetrachloride	U	6	1530207	m,p-Xylene	U	11
108054	Vinyl Acetate	U	6	95476	o-Xylene	U	6
75074	Bromodichloromethane	U	6	156592	cis-1,2-Dichloroethene	U	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	100 %	70-121	OK
Toluene-d8	91 %	81-117	OK
Bromofluorobenzene	96 %	74-121	OK

Percent solid of 88.4 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected,  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Indicates result exceeds highest calibration standard

ACREDITED LABORATORIES, INC.  
GOLDFIELD CHEMICAL ANALYSIS DATA

CASE NUMBER 8600  
SAMPLE NUMBER 86028c7  
DATA FILE 07403  
CLIENT NAME CARC  
FIELD ID SG-E

MATRIX Soil  
DILUTION FACTOR 1.0  
DATE EXTRACTED  
DATE ANALYZED 06/12/98  
ANALYZED BY WILLIAM

CRS #	COMPOUND	UG/KG	MOL
107013	Acetone	0	52
107151	Acrylonitrile	0	52
14673	Chloromethane	0	5
14679	Bromomethane	0	5
76014	Vinyl Chloride	0	5
76003	Chloroethane	0	5
76002	Methylene Chloride	0	5
57641	Acetone	0	5
78150	Carbox Disulfide	0	5
77074	Trichlorofluoromethane	0	5
77584	1,1-Dichloroethene	0	5
77545	1,1-Dichloroethane	0	5
76005	trans-1,2-Dichloroethene	0	5
57627	Chloroform	0	5
107052	1,2-Dichloroethane	0	5
76953	1-Butanone	0	5
71556	1,1,1-Trichloroethane	0	5
56150	Carbox Tetrachloride	0	5
106054	Vinyl Acetate	0	5
76074	Bromodichloromethane	0	5

CRS #	COMPOUND	UG/KG	MOL
78975	1,2-Dichloropropane	0	5
10061015	cis-1,2-Dichloropropane	0	5
79013	Trichloroethene	0	5
71452	Benzene	0	5
104481	Bromochloromethane	0	5
79005	1,1,2-Trichloroethane	0	5
10061013	trans-1,3-Dichloropropene	0	5
110758	1-Chloroethylvinylether	0	5
76252	Bromoform	0	5
581735	2-Hexanone	0	5
108101	4-Methyl-2-pentanone	0	5
127134	Tetrachloroethene	0	5
78545	1,1,1,2-Tetrachloroethane	0	5
108885	Toluene	0	5
108907	Chlorobenzene	0	5
100414	Ethybenzene	0	5
100426	Styrene	0	5
1550207	m,p-Xylene	0	10
95476	o-Xylene	0	5
150592	cis-1,2-Dichloroethene	0	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	91 %	70-121	OK
Toluene-d8	100 %	81-117	OK
Bromofluorobenzene	92 %	74-121	OK

Percent solid of 96.4 is used for all target compounds.

B - Indicates compound concentration found below MOL.  
D - Indicates compound analyzed for but not detected.  
L - Indicates result is based on a dilution.  
E - Result exceeds industrial surface soil standards.\*

B - indicates compound found in associated blank.  
E - indicates result exceeds highest calibration standard  
R - Result exceeds residential surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 6 Number 1.

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SOCIETY OF LABORATORY SCIENCE  
VOLATILE ORGANIC ANALYSIS 0474

SAMPLE NUMBER	030
SAMPLE NUMBER	9202363
TEST FILE	162815
TEST DATE	1/9/93
TEST ID	33-5

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	1/7/93
ANALYZED BY	BLJ/AM

DET #	COMPOUND	UG/KG	MDL	OQ#	COMPOUND	UG/KG	MDL
162823	Acrolein	1	52	16375	1,1-Dichloroethane	3	3
162870	Acrylonitrile	0	52	10061015	cis-1,3-Dichloropropene	0	0
162877	Chloromethane	0	5	17016	Trichloroethane	0	0
162878	Bromomethane	0	5	71452	Benzene	0	0
162879	Vinyl Chloride	0	5	104481	0-Bromo-1-chloroethane	0	0
162885	Chloroethane	0	5	78005	1,1,2-Trichloroethane	0	0
162892	Metavylene Chloride	19	5	10061026	trans-1,3-Dichloropropene	3	3
162841	Acetone	28	5	110768	2-Chloroethylvinylether	0	0
162850	Carbon Disulfide	0	5	75252	Bromoform	0	0
162894	Trichlorofluoromethane	0	5	591780	2-hexanone	0	0
162854	1,1-Dichloroethene	0	5	108101	1-Methyl-2-pentanone	0	0
162857	1,1-Dichloroethane	1	5	127134	Tetrachloroethene	0	0
162858	trans-1,1-Dichloroethene	0	5	78345	1,1,1,2-Tetrachloroethene	0	0
162859	Chloroform	0	5	108883	Toluene	0	0
162862	1,1-Dichloroethane	0	5	103967	Chlorobenzene	0	0
162855	2-Butanone	0	5	100419	Ethylbenzene	0	0
162863	1,1,1-Trichloroethane	0	5	161425	Styrene	0	0
162855	Carbon Tetrachloride	0	5	1650207	m,p-Xylene	0	0
162874	Vinyl Acetate	0	5	75475	o-Xylene	0	0
162874	Bromodichloromethane	0	5	156592	cis-1,2-Dichloroethane	0	0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,1-Dichloroethane-d4	105%	70-121	OK
Toluene-d8	25%	81-117	OK
Bromofluorobenzene	5%	74-121	OK

Percent索引 of 95.0 is used for all target compounds.

0 - Indicates compound concentration found below MDL.  
 - Indicates compound analyzed for but not detected.  
 \* - Indicates result is based on a dilution.  
 # - Result exceeds industrial surface soil standards.\*

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard.  
 R - Result exceeds residential surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 96 Number 1.

N  
7-10-93

V-23

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 8529  
 SAMPLE NUMBER 9802095  
 DATA FILE 182845  
 CLIENT NAME CARC1  
 FIELD ID CP-2

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 03/04/98  
 DATE ANALYZED 03/08/98  
 ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	380	534521	4,6-Dinitro-2-methylphenol	U	380
208968	Acenaphthylene	U	380	51285	2,4-Dinitrophenol	U	380
120127	Anthracene	U	380	121142	2,4-Dinitrotoluene	U	380
56553	Benzo(a)Anthracene	U	380	606202	2,6-Dinitrotoluene	U	380
50328	Benzo(a)Pyrene	U	380	117840	Di-n-octyl phthalate	U	380
205992	Benzo(b)fluoranthene	U	380	206440	Fluoranthene	U	380
191242	Benzo(g,h,i)Perylene	U	380	86737	Fluorene	U	380
207089	Benzo(k)Fluoranthene	U	380	118741	Hexachlorobenzene	U	380
65850	Benzoic Acid	U	1900	87683	Hexachlorobutadiene	U	380
100516	Benzyl Alcohol	U	380	77474	Hexachlorocyclopentadiene	U	380
111444	bis(-2-Chloroethyl)Ether	U	380	67721	Hexachloroethane	U	380
108601	bis(2-Chloroisopropyl)ether	U	380	193395	Indeno(1,2,3-cd)Pyrene	U	380
117817	Bis(2-Ethylhexyl)Phthalate	U	380	78591	Isophorone	U	380
111911	bis(-2-Chloroethoxy)Methane	U	380	91576	2-Methylnaphthalene	U	380
101553	4-Bromophenyl-phenylether	U	380	95487	2-Methylphenol	U	380
85687	Butylbenzylphthalate	U	380	108394	3&4-Methylphenol	U	380
106478	4-Chloroaniline	U	380	91203	Naphthalene	U	380
91587	2-Chloronaphthalene	U	380	88744	2-Nitroaniline	U	380
59507	4-Chloro-3-methylphenol	U	380	99092	3-Nitroaniline	U	380
95578	2-Chlorophenol	U	380	100016	4-Nitroaniline	U	380
7005723	4-Chlorophenyl-phenylether	U	380	98953	Nitrobenzene	U	380
218019	Chrysene	U	380	88755	2-Nitrophenol	U	380
53703	Dibenz(a,h)Anthracene	U	380	100027	4-Nitrophenol	U	380
132649	Dibenzofuran	U	380	62759	N-Nitrosodimethylamine	U	380
95501	1,2-Dichlorobenzene	U	380	86306	N-Nitrosodiphenylamine	U	380
541731	1,3-Dichlorobenzene	U	380	621647	N-Nitroso-Di-n-propylamine	U	380
106467	1,4-Dichlorobenzene	U	380	87865	Pentachlorophenol	U	380
91941	3,3'-Dichlorobenzidine	U	380	85018	Phenanthrene	U	380
120832	2,4-Dichlorophenol	U	380	108952	Phenol	U	380
84662	Diethylphthalate	U	380	129000	Pyrene	U	380
105679	2,4-Dimethylphenol	U	380	120821	1,2,4-Trichlorobenzene	U	380
131113	Dimethyl Phthalate	U	380	95954	2,4,5-Trichlorophenol	U	380
84742	Di-n-Butylphthalate	U	380	88062	2,4,6-Trichlorophenol	U	380

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	79 %	23-120	OK
2-Fluorobiphenyl	52 %	30-115	OK
Terphenyl-d14	44 %	18-137	OK
Phenol-d5	65 %	24-113	OK
2-Fluorophenol	52 %	25-121	OK
2,4,6-Tribromophenol	63 %	19-122	OK

Percent solid of 88.4 is used for all target compounds.

4/10/93

J - Indicates compound concentration found below MDL.

U - Indicates compound analyzed for but not detected.

D - Indicates result is based on a dilution.

I - Results exceed industrial surface soil standards.\*

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

R - Result exceeds residential surface soil standards.\*

SV-33

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8529
SAMPLE NUMBER	9802096
DATA FILE	>F4575
CLIENT NAME	CARCI
FIELD ID	FIELD BLANK

MATRIX	Aqueous
DILUTION FACTOR	1.0
DATE EXTRACTED	03/04/98
DATE ANALYZED	03/04/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
83329	Acenaphthene	U	10	534521	4,6-Dinitro-2-methylphenol	U	10
208968	Acenaphthylene	U	10	51285	2,4-Dinitrophenol	U	10
120127	Anthracene	U	10	121142	2,4-Dinitrotoluene	U	10
56553	Benz(a)Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
50328	Benz(a)Pyrene	U	10	117840	Di-n-octyl phthalate	U	10
205992	Benz(b)fluoranthene	U	10	206440	Fluoranthene	U	10
191242	Benz(g,h,i)Perylene	U	10	86737	Fluorene	U	10
207089	Benz(k)Fluoranthene	U	10	118741	Hexachlorobenzene	U	10
65850	Benzoic Acid	U	50	87683	Hexachlorobutadiene	U	10
100516	Benzyl Alcohol	U	10	77474	Hexachlorocyclopentadiene	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	67721	Hexachloroethane	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	78591	Isophorone	U	10
111911	bis(-2-Chloroethoxy)Methane	U	10	91576	2-Methylnaphthalene	U	10
101553	4-Bromophenyl-phenylether	U	10	95487	2-Methylphenol	U	10
85687	Butylbenzylphthalate	U	10	108394	3&4-Methylphenol	U	10
106478	4-Chloroaniline	U	10	91203	Naphthalene	U	10
91587	2-Chloronaphthalene	U	10	88744	2-Nitroaniline	U	10
59507	4-Chloro-3-methylphenol	U	10	99092	3-Nitroaniline	U	10
95578	2-Chlorophenol	U	10	100016	4-Nitroaniline	U	10
7005723	4-Chlorophenyl-phenylether	U	10	98953	Nitrobenzene	U	10
218019	Chrysene	U	10	88755	2-Nitrophenol	U	10
53703	Dibenz(a,h)Anthracene	U	10	100027	4-Nitrophenol	U	10
132649	Dibenzofuran	U	10	62759	N-Nitrosodimethylamine	U	10
95501	1,2-Dichlorobenzene	U	10	86306	N-Nitrosodiphenylamine	U	10
541731	1,3-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
106467	1,4-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
91941	3,3'-Dichlorobenzidine	U	10	85018	Phenanthrene	U	10
120832	2,4-Dichlorophenol	U	10	108952	Phenol	U	10
84662	Diethylphthalate	U	10	129000	Pyrene	U	10
105679	2,4-Dimethylphenol	U	10	120821	1,2,4-Trichlorobenzene	U	10
131113	Dimethyl Phthalate	U	10	95954	2,4,5-Trichlorophenol	U	10
84742	Di-n-Butylphthalate	U	10	88062	2,4,6-Trichlorophenol	U	10

SURROGATE COMPOUNDS

RECOVERY	LIMITS	STATUS
83 %	35-114	OK
80 %	43-116	OK
111 %	33-141	OK
48 %	10- 94	OK
57 %	21-100	OK
65 %	10-123	OK

110/103

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.  
W - Result exceeds specific ground water quality criteria.\*

\* Flags are based on Specific Ground Water Quality Criteria from New Jersey Register dated February 1, 1993.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

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ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER	8529
SAMPLE NUMBER	9802097
DATA FILE	>B2846
CLIENT NAME	CARCI
FIELD ID	SD-1

MATRIX	Soil
DILUTION FACTOR	1.0
DATE EXTRACTED	03/04/98
DATE ANALYZED	03/09/98
ANALYZED BY	JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	400	534521	4,6-Dinitro-2-methylphenol	U J	400
208968	Acenaphthylene	U	400	51285	2,4-Dinitrophenol	U J	400
120127	Anthracene	U	400	121142	2,4-Dinitrotoluene	U	400
56553	Benzo(a)Anthracene	42 J	400	606202	2,6-Dinitrotoluene	U	400
50328	Benzo(a)Pyrene	U	400	112840	Di-n-octyl phthalate	U	400
205992	Benzo(b)Fluoranthene	110 J	400	206440	Fluoranthene	190 J	400
191242	Benzo(g,h,i)Perylene	U J	400	86737	Fluorene	U	400
207089	Benzo(k)Fluoranthene	41 J	400	118741	Hexachlorobenzene	U	400
65850	Benzoic Acid	U	2000	87683	Hexachlorobutadiene	U	400
100516	Benzyl Alcohol	U	400	77474	Hexachlorocyclopentadiene	U	400
111444	bis(-2-Chloroethyl)Ether	U	400	67721	Hexachloroethane	U	400
108601	bis(2-Chloroisopropyl)ether	U J	400	193395	Indeno(1,2,3-cd)Pyrene	U J	400
117817	Bis(2-Ethylhexyl)Phthalate	220 J	400	78591	Isophorone	U	400
111911	bis(-2-Chloroethoxy)Methane	U	400	91576	2-Methylnaphthalene	U	400
101553	4-Bromophenyl-phenylether	U	400	95487	2-Methylphenol	U	400
85687	Butylbenzylphthalate	U	400	108394	3&4-Methylphenol	U	400
106478	4-Chloroaniline	U	400	91203	Naphthalene	U	400
91587	2-Chloronaphthalene	U	400	88744	2-Nitroaniline	U	400
59507	4-Chloro-3-methylphenol	U	400	99092	3-Nitroaniline	U	400
99578	2-Chlorophenol	U	400	100016	4-Nitroaniline	U	400
7005723	4-Chlorophenyl-phenylether	U	400	98953	Nitrobenzene	U	400
218019	Chrysene	78 J	400	88755	2-Nitrophenol	U	400
53703	Dibenzo(a,h)Anthracene	U J	400	100027	4-Nitrophenol	U J	400
132649	Dibenzofuran	U	400	62759	N-Nitrosodimethylamine	U J	400
95501	1,2-Dichlorobenzene	U	400	86306	N-Nitrosodiphenylamine	U	400
541731	1,3-Dichlorobenzene	U	400	621647	N-Nitroso-Di-n-propylamine	U	400
106467	1,4-Dichlorobenzene	U	400	87865	Pentachlorophenol	U	400
91941	3,3'-Dichlorobenzidine	U	400	85018	Phenanthrene	72 J	400
120832	2,4-Dichlorophenol	U	400	108952	Phenol	U	400
84662	Diethylphthalate	U	400	129000	Pyrene	110 J	400
105679	2,4-Dimethylphenol	U	400	120821	1,2,4-Trichlorobenzene	U	400
131113	Dimethyl Phthalate	U	400	95954	2,4,5-Trichlorophenol	U	400
84742	Di-n-Butylphthalate	U	400	88062	2,4,6-Trichlorophenol	U	400

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	65 %	23-120	OK
2-Fluorobiphenyl	48 %	30-115	OK
Terphenyl-d14	46 %	18-137	OK
Phenol-d5	53 %	24-113	OK
2-Fluorophenol	51 %	25-121	OK
2,4,6-Tribromophenol	60 %	19-122	OK

Percent solid of 84.1 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.  
I - Results exceed industrial surface soil standards.\*

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.  
R - Result exceeds residential surface soil standards.\*

SV-35

\* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

# Premier Environmental Services, Inc.

## **INORGANIC DATA VALIDATION**

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566  
(516) 223-9761 • FAX (516) 223-0983 • NEW JERSEY (908) 750-8783

# Premier Environmental Services, Inc.

DATA VALIDATION FOR: INORGANIC ANALYSIS (TAL METALS and CYANIDE)

SITE: U.S. ELECTROPLATING

CASE NUMBER: 8529, 8600

CONTRACT LAB: ACCREDITED LABORATORIES, INC.

REVIEWER: RENEE COHEN

DATE REVIEW COMPLETED: JULY 17, 1998

MATRIX: SOIL AND WATER

The data validation was performed according to the guidelines in the "National Functional Guidelines for Inorganic Data Review, February 1994. Protocols for the NYSDEC ASP were incorporated when performing this data review. All data are considered valid and acceptable except those analytes which have been qualified as detailed in this report.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results were generated within the requirements for NYS ASP inorganic analysis.

This data assessment is for (2) soil samples and (1) field blank as listed below, collected on February 25-27, 1998 and (9) soil samples as listed below, collected on March 2-6, 1998 and shipped to Accredited Laboratories, Inc. located in Carteret, New Jersey.

CLIENT ID:

Received 3/7/98

CP-2  
Field Blank  
SD-1

Received 3/7/98

SG-W  
SD-2  
SD-6  
SD-6DUP  
SG-E (8'-3")  
SG-E  
SD-5  
SD-1  
CP-2

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Metals with the exception of Mercury are required to be digested and analyzed within 180 days of VTSR. Mercury samples are digested and analyzed within 26 days of VTSR. Cyanide samples are distilled and analyzed within 12 days of VTSR. Contractual holding times vary from technical holding times specified in the validation documents.

The following analytes in the samples shown were qualified because of holding time:

Case 8600 - Cyanide: Samples SG-W, SD-2, SD-6, SD-6DUP, SG-E (8"-3"""), SG-E, SD-5, SD-1 and CP-2 have been qualified "UJ/J", estimated. Samples were collected as early as March 2, 1998 and received at the laboratory on March 7, 1998. Samples were reviewed using the technical holding time specified in the method. The technical holding time for this analysis is 14 days from date of collection. The laboratory analyzed all samples, with the exception of, SD-1 and CP-2, within the contractual holding time. Based upon the exceedance of the technical holding time sample results may be biased low.

All sample analyses associated with Case 8529 were prepared and analyzed within the proper holding time.

### 2. CRDL Standard

The CRDL standard is used for the verification of instrument linearity near the CRDL. The CRDL standard control limits are 80%-120% recovery. If the CRDL standard falls outside of the control limits, associated data less than or equal to the 10X the CRDL are qualified estimated (J or UJ) or rejected (R) depending on the recovery of the CRDL standard and the concentration of the analyte in the sample. When the CRDL standard exceeds the control limit, indicating a high bias samples are qualified estimated (J or UJ). For Mercury, a CRDL standard is not required, but where it has been analyzed by the laboratory and the recovery is found to be outside 80%-120%, a professional judgment is exercised in qualifying associated data.

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 2. CRDL Standard (Cont'd)

Accredited Laboratories, Inc. did not report CRDL data on the required summary form associated with this sample set. The CRDL standard is part of the calibration sequence for both ICP and GFAA analyses. The CRDL standard is also known as the calibration check standard for non-CLP work. This data was not included with the raw sequence to review. Data was not qualified based upon this anomaly alone.

### 3. MATRIX SPIKE ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are 75%-125% when the sample concentration is less than four (4) times the spike added. If the matrix spike recoveries fall in the range of 30%-74%, the sample results are may be biased low and are qualified as estimated (J or UJ). If the matrix spike recoveries fall in the range of 126%-200%, sample results may be biased high. Positive results are qualified estimated (J). If the spike recovery is greater than 125% and the reported sample results are less than the IDL the data point is acceptable for use. If the matrix spike recovery is greater than 200%, the associated sample data are unusable and are rejected (R). If matrix spike results are less than 30%, the associated non-detect results are qualified unusable and rejected (R), and the results reported above the IDL are qualified estimated (J).

Accredited Laboratories, Inc. performed matrix spike, matrix spike duplicate analysis on sample CP-2 in case 8529. The matrix spike analysis associated with Case 8529 met all QC criteria.

Accredited Laboratories, Inc. performed matrix spike, matrix spike duplicate analysis on sample SG-E in case 8600. The matrix spike recovery of all analytes met QC criteria with the exception of Cadmium (<10%), Chromium (42.9%), Copper (57.7%), Magnesium (136.7%) and Zinc (69.6%). For these analytes the results of the MSD analysis were also reported. Qualification of data was made where necessary based on the results of the initial MS analysis with the exception of Cadmium in which the MSD percent recovery was 70.0%. Cadmium results were qualified "J/UJ" based on the recovery of the MSD sample.

Accredited Laboratories, Inc. performed the Cyanide MS analysis on a sample not associated with either data set. Batch QC met all QC criteria. No action was taken based upon these MS analyses.

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 4. POST DIGESTION SPIKE ANALYSIS

The post digestion spike sample analysis provides additional information about the effect of the sample matrix upon the digestion and measurement methodology. The post digestion spike is performed for each analyte that the pre-digestion spike recovery falls outside the 75-125% control limit.

Post digestion spike analysis was not performed with these analyses. Data qualification was based upon the recovery of the MS and MSD sample.

### 5. DUPLICATE SAMPLE ANALYSIS

The duplicate sample analysis is used to evaluate the precision of the methods for each parameter. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD or +/- CRDL, whichever is appropriate depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Accredited Laboratories, Inc. performed duplicate analysis on sample CP-2 in Case 8529. The RPD of Calcium (23.%) and Manganese (22.3%) exceeded QC limits. These analytes have been qualified "J" estimated in the associated soil samples. All precision data met QC criteria.

Accredited Laboratories, Inc. performed duplicate analysis on sample SG-E in Case 8600. All precision data met QC criteria.

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 6. ICP SERIAL DILUTION

The serial dilution analysis indicates whether significant physical or chemical interference's exist due to the sample matrix. If the concentration of any analyte in the original sample is greater than 50 times the instrument detection limit (IDL), an analysis of a 5-fold dilution samples must yield results which have a percent difference (%D) of less than or equal to 10 with the original sample results. If the %D of the serial dilution exceeds the 10% (and is not greater than 100%) for a particular analyte, all the associated sample results are qualified estimated (J).

Accredited Laboratories, Inc. performed the serial dilution analysis on sample CP-2 in Case 8529. The % D of all analytes met QC criteria with the exception of Nickel (30.3%), Sodium (67.3%) and Zinc (21.7.6%). The data associated with these analytes has been qualified "UJ/J" based upon this anomaly.

Accredited Laboratories, Inc. performed the serial dilution analysis on sample SG-E in Case 8600. The % D of all analytes met QC criteria with the exception of Chromium (30.7%), Cadmium (18.2%) and Zinc (24.6%). The data associated with these analytes has been qualified "UJ/J" based upon this anomaly.

### 7. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not effecting other data.

All preparation blanks and continuing calibration blanks associated with these datum meet QC criteria.

The Field Blank collected on 2/25/98 was free from contamination.

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 8. LABORATORY CONTROL SAMPLE ANALYSIS

The laboratory control sample (LCS) analysis provides information about the efficiency of the digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine if data should be qualified or rejected.

Accredited Laboratories, Inc. prepared and analyzed an LCS sample with each soil digestion batch. Commercial percent recoveries were not listed on the summary form, therefore, an acceptable recovery range of 80-120% was used to evaluate the data. All percent recoveries met QC criteria with the exception of Antimony (76%) in the 3/12/98 digestion batch. All Antimony results associated with this digestion batch/LCS have been qualified "UJ/J" estimated due to the volatility of Antimony during the sample digestion.

### 9. INTERFERENCE CHECK STANDARD

The Interference Check Standard (ICS) is used to verify the laboratories interelement and background correction factors. Two solutions comprise the ICS A and AB. Solution A consists of the interferent metals while solution AB is a group of analytes mixed with the interferents. An ICS analysis consists of analyzing both solutions consecutively for all wavelengths used for each analyte reported by ICP.

The ICS analyses summarized on pages I-19 and I20 of the data report (Case 8600) do not match the raw data associated with these samples and listed on the run logs. The raw data associated with these samples was included in the data package and reviewed for compliance with acceptance criteria.

All ICSA and ICSAB recoveries associated with the analyses in Case 8529 and 8600 meet QC criteria.

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 10. FIELD DUPLICATE SAMPLE ANALYSIS

Sample SD-6 was collected in duplicate. Below is a summary of these data results.

<u>Analyte</u>	<u>Result</u> mg/kg	<u>Result</u> mg/kg	<u>RPD%</u>
Aluminum	1290	1390	0.77
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Barium	3.72	4.06	8.7
Beryllium	ND	ND	NC
Cadmium	1.90	3.91	69
Calcium	732	587	22
Chromium	6.95	12.0	53
Cobalt	ND	ND	NC
Copper	2.92	3.03	3.7
Iron	2060	2550	21
Lead	ND	ND	NC
Magnesium	524	505	3.7
Manganese	53.6	70.3	27
Mercury	ND	ND	NC
Nickel	ND	3.52	NC
Potassium	ND	ND	NC
Selenium	ND	ND	NC
Silver	0.891	1.26	34
Sodium	ND	ND	NC
Thallium	ND	ND	NC
Vanadium	ND	ND	NC
Zinc	ND	9.48	NC

ND denotes Not Detected

NC denotes Not Calculated

The precision between these field duplicates is acceptable for all analytes with the exception of Cadmium and Chromium. Both of these analytes displayed matrix effect/interference from other QC sample results that are explained in the above report.

# Premier Environmental Services, Inc.

## INORGANIC DATA ASSESSMENT

### 11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The Chain of Custody documentation associated Case 8529 indicated that receipt at the laboratory occurred on 2/28/98, however, all paperwork indicates a receipt date of 3/3/98. The laboratory was contacted and they stated that the sample receipt occurred on Saturday, however, login did not occur until Monday 3/2/98. The definition of VTSR marks a Saturday (2/28/98) receipt. This discrepancy did not effect any data results.

The Chain of Custody documentation associated Case 8600 indicated that receipt at the laboratory occurred on 3/7/98, however, all paperwork indicates a receipt date of 3/9/98. The laboratory was contacted and they stated that the sample receipt occurred on Saturday, however, login did not occur until Monday 3/9/98. The definition of VTSR marks a Saturday (3/7/98) receipt. This receipt discrepancy effects Cyanide analysis of samples SD-1 and CP-2, however all sample results were previously qualified due to review based upon technical holding time.

Initial calibration data and sample raw data associated with the Cyanide analysis associated with Case 8600 were not included in the laboratory report. The laboratory was contacted and the data was forwarded via FAX for review. The data was added to the laboratory report.

Manual raw data logs are included with the final report. The raw data instrument logs associated with these analyses do not include date and time of analysis and are not accurate of the sequence of data that is provided in the raw data set. Raw data was used to determine proper sequence during this review.

The laboratory analyzed multiple wash samples prior to the analysis of the CCV/CCB for the ICP analysis. This is not good laboratory practice unless contamination of the system is suspected. This suspected contamination is typically noted on the run log. These wash runs were not indicated on the run sequence and samples analyzed previous to them were not highly contaminated.

Sample results are reported on a dry weight basis to the method detection limit as required by the method.

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8529  
 Sample #: 9802095  
 Field ID: CP-2  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/02/98

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7429-90-5	Aluminum	1270	14.1	1	P	03/05/98
7440-36-0	Antimony	ND	7.03	1	P	03/05/98
7440-38-2	Arsenic	1.08	.569	1	F	03/11/98
7440-39-3	Barium	5.23	2.11	1	P	03/05/98
7440-41-7	Beryllium	ND	.351	1	P	03/05/98
7440-43-9	Cadmium	16.6	2.11	1	P	03/05/98
7440-70-2	Calcium	560 <u>T</u>	70.3	1	P	03/05/98
7440-47-3	Chromium	108	2.11	1	P	03/05/98
7440-48-4	Cobalt	ND	2.11	1	P	03/05/98
7440-50-8	Copper	10.3	2.11	1	P	03/05/98
7439-89-6	Iron	2370	14.1	1	P	03/05/98
7439-92-1	Lead	ND	21.1	1	P	03/05/98
7439-95-4	Magnesium	391	70.3	1	P	03/05/98
7439-96-5	Manganese	54.9 <u>T</u>	1.05	1	P	03/05/98
7439-97-6	Mercury	ND	.226	1	CV	03/04/98
7440-02-0	Nickel	5.34 <u>T</u>	2.81	1	P	03/05/98
7440-09-7	Potassium	ND	141	1	P	03/05/98
7782-49-2	Selenium	ND	.356	1	F	03/09/98
7440-22-4	Silver	ND	.703	1	P	03/05/98
7440-23-5	Sodium	71.0 <u>T</u>	70.3	1	P	03/05/98
7440-28-0	Thallium	ND	.711	1	F	03/06/98
7440-62-2	Vanadium	ND	3.51	1	P	03/05/98
7440-66-6	Zinc	18.1 <u>T</u>	7.03	1	P	03/05/98

Percent Solid of 88.4 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

RE  
7/10/98

I-1

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8529  
 Sample #: 9802097  
 Field ID: SD-1  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/02/98

CAS No.	Element	Result	MDL	Dilution	Date Analyzed	
		MG/KG	MG/KG	Factor	Method	
7429-90-5	Aluminum	850	14.4	1	P	03/05/98
7440-36-0	Antimony	ND	7.21	1	P	03/05/98
7440-38-2	Arsenic	1.85	.566	1	F	03/09/98
7440-39-3	Barium	2.96	2.16	1	P	03/05/98
7440-41-7	Beryllium	ND	.360	1	P	03/05/98
7440-43-9	Cadmium	33.6	2.16	1	P	03/05/98
7440-70-2	Calcium	300 <u>J</u>	72.1	1	P	03/05/98
7440-47-3	Chromium	102	2.16	1	P	03/05/98
7440-48-4	Cobalt	ND	2.16	1	P	03/05/98
7440-50-8	Copper	5.28	2.16	1	P	03/05/98
7439-89-6	Iron	937	14.4	1	P	03/05/98
7439-92-1	Lead	ND	21.6	1	P	03/05/98
7439-95-4	Magnesium	208	72.1	1	P	03/05/98
7439-96-5	Manganese	19.3 <u>J</u>	1.08	1	P	03/05/98
7439-97-6	Mercury	ND	.238	1	CV	03/04/98
7440-02-0	Nickel	5.45 <u>J</u>	2.88	1	P	03/05/98
7440-09-7	Potassium	ND	144	1	P	03/05/98
7782-49-2	Selenium	ND	.354	1	F	03/09/98
7440-22-4	Silver	ND	.721	1	P	03/05/98
7440-23-5	Sodium	ND <u>J</u>	72.1	1	P	03/05/98
7440-28-0	Thallium	ND	.708	1	F	03/06/98
7440-62-2	Vanadium	ND	3.60	1	P	03/05/98
7440-66-6	Zinc	61.0 <u>J</u>	7.21	1	P	03/05/98

Percent Solid of 84.1 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

RE  
7/11/98

I-3

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8529  
Sample #: 9802095  
Client Name: CARCI  
Field Number: CP-2

Matrix: Soil  
Date Received: 03/02/98  
% Moisture: 11.6

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	88.4	0.10	%	1.			03/06/98
Cyanide, Total	2.96	1.20	mg/Kg	1.	ND	0.01	03/12/98

2C  
7/10/98

WC-1

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8529  
Sample #: 9802097  
Client Name: CARCI  
Field Number: SD-1

Matrix: Soil  
Date Received: 03/02/98  
% Moisture: 15.9

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	84.1	0.10	%	1.			03/06/98
Cyanide, Total	16.8	1.15	mg/Kg	1.	ND	0.01	03/12/98

RE  
7/10/98

WC-3

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802361  
 Field ID: SG-W  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result	MDL	Dilution	Date Analyzed	
		MG/KG	MG/KG	Factor	Method	Analyzed
7429-90-5	Aluminum	1740	14.0	1	P	03/12/98
7440-36-0	Antimony	ND <u>U.S.</u>	6.98	1	P	03/12/98
7440-38-2	Arsenic	1.48	1.25	2	F	03/19/98
7440-39-3	Barium	7.61	2.09	1	P	03/12/98
7440-41-7	Beryllium	ND	.349	1	P	03/12/98
7440-43-9	Cadmium	63.6 <u>S</u>	.698	1	P	03/12/98
7440-70-2	Calcium	795	69.8	1	P	03/12/98
7440-47-3	Chromium	67.2 <u>S</u>	2.09	1	P	03/15/98
7440-48-4	Cobalt	ND	2.09	1	P	03/12/98
7440-50-8	Copper	18.8 <u>S</u>	2.09	1	P	03/12/98
7439-89-6	Iron	3660	6.98	1	P	03/12/98
7439-92-1	Lead	ND	20.9	1	P	03/12/98
7439-95-4	Magnesium	469 <u>S</u>	34.9	1	P	03/12/98
7439-96-5	Manganese	27.6	1.05	1	P	03/12/98
7439-97-6	Mercury	ND	.236	1	CV	03/12/98
7440-02-0	Nickel	7.26	2.79	1	P	03/12/98
7440-09-7	Potassium	ND	140	1	P	03/12/98
7782-49-2	Selenium	ND	.781	2	F	03/16/98
7440-22-4	Silver	1.24	.698	1	P	03/12/98
7440-23-5	Sodium	ND	69.8	1	P	03/12/98
7440-28-0	Thallium	ND	.781	1	F	03/16/98
7440-62-2	Vanadium	ND	3.49	1	P	03/12/98
7440-66-6	Zinc	110 <u>S</u>	6.98	1	P	03/12/98

Percent Solid of 84.8 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

RC  
7/10/98

I-1

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802362  
 Field ID: SD-2  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7429-90-5	Aluminum	1620	13.8	1	P	03/12/98
7440-36-0	Antimony	ND <u>.5</u>	6.90	1	P	03/12/98
7440-38-2	Arsenic	ND	1.16	2	F	03/16/98
7440-39-3	Barium	4.65	2.07	1	P	03/12/98
7440-41-7	Beryllium	ND	.345	1	P	03/12/98
7440-43-9	Cadmium	15.9 <u>.5</u>	.690	1	P	03/12/98
7440-70-2	Calcium	967	69.0	1	P	03/12/98
7440-47-3	Chromium	36.1 <u>.5</u>	2.07	1	P	03/15/98
7440-48-4	Cobalt	ND	2.07	1	P	03/12/98
7440-50-8	Copper	5.34 <u>.5</u>	2.07	1	P	03/12/98
7439-89-6	Iron	2640	6.90	1	P	03/12/98
7439-92-1	Lead	ND	20.7	1	P	03/12/98
7439-95-4	Magnesium	704 <u>.5</u>	34.5	1	P	03/12/98
7439-96-5	Manganese	42.3	1.04	1	P	03/12/98
7439-97-6	Mercury	ND	.220	1	CV	03/12/98
7440-02-0	Nickel	ND	2.76	1	P	03/12/98
7440-09-7	Potassium	ND	138	1	P	03/12/98
7782-49-2	Selenium	ND	.722	2	F	03/16/98
7440-22-4	Silver	.891	.690	1	P	03/12/98
7440-23-5	Sodium	ND	69.0	1	P	03/12/98
7440-28-0	Thallium	ND	.722	1	F	03/16/98
7440-62-2	Vanadium	ND	3.45	1	P	03/12/98
7440-66-6	Zinc	27.3 <u>.5</u>	6.90	1	P	03/12/98

Percent Solid of 91.1 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP                            CV - Analyzed by Cold Vapor  
 F - Analyzed by GFA                            A - Analyzed by flame AA

I-2

RE  
11C,95

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802363  
 Field ID: SD-6  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7429-90-5	Aluminum	1290	15.6	1	P	03/12/98
7440-36-0	Antimony	ND <u>T</u>	7.80	1	P	03/12/98
7440-38-2	Arsenic	ND	1.24	2	F	03/16/98
7440-39-3	Barium	3.72	2.34	1	P	03/12/98
7440-41-7	Beryllium	ND	.390	1	P	03/12/98
7440-43-9	Cadmium	1.90 <u>T</u>	.780	1	P	03/12/98
7440-70-2	Calcium	732	78.0	1	P	03/12/98
7440-47-3	Chromium	6.95 <u>T</u>	2.34	1	P	03/15/98
7440-48-4	Cobalt	ND	2.34	1	P	03/12/98
7440-50-8	Copper	2.92 <u>T</u>	2.34	1	P	03/12/98
7439-89-6	Iron	2060	7.80	1	P	03/12/98
7439-92-1	Lead	ND	23.4	1	P	03/12/98
7439-95-4	Magnesium	524 <u>T</u>	39.0	1	P	03/12/98
7439-96-5	Manganese	53.6	1.17	1	P	03/12/98
7439-97-6	Mercury	ND	.243	1	CV	03/12/98
7440-02-0	Nickel	ND	3.12	1	P	03/12/98
7440-09-7	Potassium	ND	156	1	P	03/12/98
7782-49-2	Selenium	ND	.775	2	F	03/16/98
7440-22-4	Silver	.819	.780	1	P	03/12/98
7440-23-5	Sodium	ND	78.0	1	P	03/12/98
7440-28-0	Thallium	ND	.775	1	F	03/16/98
7440-62-2	Vanadium	ND	3.90	1	P	03/12/98
7440-66-6	Zinc	ND <u>T</u>	7.80	1	P	03/12/98

Percent Solid of 82.2 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP	CV - Analyzed by Cold Vapor
F - Analyzed by GFA	A - Analyzed by flame AA

2C  
7/16/98

I-3

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802364  
 Field ID: SD-6DUP  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result	MDL	Dilution	Date Analyzed	
		MG/KG	MG/KG	Factor	Method	Analyzed
7429-90-5	Aluminum	1390	15.3	1	P	03/12/98
7440-36-0	Antimony	ND $\pm$	7.64	1	P	03/12/98
7440-38-2	Arsenic	ND	1.27	2	F	03/16/98
7440-39-3	Barium	4.06	2.29	1	P	03/12/98
7440-41-7	Beryllium	ND	.382	1	P	03/12/98
7440-43-9	Cadmium	3.91 $\pm$	.764	1	P	03/12/98
7440-70-2	Calcium	587	76.4	1	P	03/12/98
7440-47-3	Chromium	12.0 $\pm$	2.29	1	P	03/15/98
7440-48-4	Cobalt	ND	2.29	1	P	03/12/98
7440-50-8	Copper	3.03 $\pm$	2.29	1	P	03/12/98
7439-89-6	Iron	2550	7.64	1	P	03/12/98
7439-92-1	Lead	ND	22.9	1	P	03/12/98
7439-95-4	Magnesium	505 $\pm$	38.2	1	P	03/12/98
7439-96-5	Manganese	70.3	1.15	1	P	03/12/98
7439-97-6	Mercury	ND	.254	1	CV	03/12/98
7440-02-0	Nickel	3.52	3.06	1	P	03/12/98
7440-09-7	Potassium	ND	153	1	P	03/12/98
7782-49-2	Selenium	ND	.793	2	F	03/16/98
7440-22-4	Silver	1.26	.764	1	P	03/12/98
7440-23-5	Sodium	ND	76.4	1	P	03/12/98
7440-28-0	Thallium	ND	.793	1	F	03/16/98
7440-62-2	Vanadium	ND	3.82	1	P	03/12/98
7440-66-6	Zinc	9.48 $\pm$	7.64	1	P	03/12/98

Percent Solid of 78.8 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

2e  
711CF23

I-4

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802366  
 Field ID: SG-E 8-3  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result	MDL	Dilution	Date Analyzed	
		MG/KG	MG/KG	Factor	Method	Analyzed
7429-90-5	Aluminum	104000	58.5	1	P	03/12/98
7440-36-0	Antimony	51.5	29.3	1	P	03/12/98
7440-38-2	Arsenic	ND	9.60	4	F	03/19/98
7440-39-3	Barium	169	8.78	1	P	03/12/98
7440-41-7	Beryllium	ND	1.46	1	P	03/12/98
7440-43-9	Cadmium	14900	2.93	1	P	03/12/98
7440-70-2	Calcium	9390	293	1	P	03/12/98
7440-47-3	Chromium	10500	8.78	1	P	03/15/98
7440-48-4	Cobalt	ND	8.78	1	P	03/12/98
7440-50-8	Copper	559	8.78	1	P	03/12/98
7439-89-6	Iron	17900	29.3	1	P	03/12/98
7439-92-1	Lead	951	87.8	1	P	03/12/98
7439-95-4	Magnesium	5380	146	1	P	03/12/98
7439-96-5	Manganese	245	4.39	1	P	03/12/98
7439-97-6	Mercury	ND	.930	1	CV	03/12/98
7440-02-0	Nickel	273	11.7	1	P	03/12/98
7440-09-7	Potassium	784	585	1	P	03/12/98
7782-49-2	Selenium	ND	3.00	2	F	03/16/98
7440-22-4	Silver	11.3	2.93	1	P	03/12/98
7440-23-5	Sodium	497	293	1	P	03/12/98
7440-28-0	Thallium	ND	3.00	1	F	03/16/98
7440-62-2	Vanadium	53.8	14.6	1	P	03/12/98
7440-66-6	Zinc	5120	29.3	1	P	03/12/98

Percent Solid of 21.5 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

I-5

REC'D  
11/2/98

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802367  
 Field ID: SG-E  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result	MDL	Dilution	Date	
		MG/KG	MG/KG	Factor	Method	Analyzed
7429-90-5	Aluminum	959	13.0	1	P	03/16/98
7440-36-0	Antimony	ND <u>J</u>	6.52	1	P	03/16/98
7440-38-2	Arsenic	ND	1.09	2	F	03/16/98
7440-39-3	Barium	3.83	1.96	1	P	03/15/98
7440-41-7	Beryllium	ND	.326	1	P	03/15/98
7440-43-9	Cadmium	11.1 <u>J</u>	.652	1	P	03/15/98
7440-70-2	Calcium	234	65.2	1	P	03/15/98
7440-47-3	Chromium	22.1 <u>J</u>	1.96	1	P	03/15/98
7440-48-4	Cobalt	ND	1.96	1	P	03/15/98
7440-50-8	Copper	10.3 <u>J</u>	1.96	1	P	03/15/98
7439-89-6	Iron	3970	6.52	1	P	03/15/98
7439-92-1	Lead	ND	19.6	1	P	03/15/98
7439-95-4	Magnesium	229 <u>J</u>	32.6	1	P	03/15/98
7439-96-5	Manganese	25.1 <u>R</u>	.979	1	P	03/15/98
7439-97-6	Mercury	ND	.207	1	CV	03/12/98
7440-02-0	Nickel	ND	2.61	1	P	03/15/98
7440-09-7	Potassium	ND	130	1	P	03/15/98
7782-49-2	Selenium	ND	.682	2	F	03/16/98
7440-22-4	Silver	1.86	.652	1	P	03/15/98
7440-23-5	Sodium	ND	65.2	1	P	03/15/98
7440-28-0	Thallium	ND	.682	1	F	03/16/98
7440-62-2	Vanadium	ND	3.26	1	P	03/16/98
7440-66-6	Zinc	24.7 <u>J</u>	6.52	1	P	03/15/98

Percent Solid of 96.4 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

3/10/98

I-6

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802368  
 Field ID: SD-5  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7429-90-5	Aluminum	957	13.8	1	P	03/12/98
7440-36-0	Antimony	ND <u>J</u>	6.88	1	P	03/12/98
7440-38-2	Arsenic	ND	1.08	2	F	03/16/98
7440-39-3	Barium	4.21	2.07	1	P	03/12/98
7440-41-7	Beryllium	ND	.344	1	P	03/12/98
7440-43-9	Cadmium	6.03 <u>J</u>	.688	1	P	03/12/98
7440-70-2	Calcium	403	68.8	1	P	03/12/98
7440-47-3	Chromium	7.64 <u>J</u>	2.07	1	P	03/15/98
7440-48-4	Cobalt	ND	2.07	1	P	03/12/98
7440-50-8	Copper	3.86 <u>J</u>	2.07	1	P	03/12/98
7439-89-6	Iron	1730	6.88	1	P	03/12/98
7439-92-1	Lead	ND	20.7	1	P	03/12/98
7439-95-4	Magnesium	246 <u>J</u>	34.4	1	P	03/12/98
7439-96-5	Manganese	36.6	1.03	1	P	03/12/98
7439-97-6	Mercury	ND	.208	1	CV	03/12/98
7440-02-0	Nickel	ND	2.75	1	P	03/12/98
7440-09-7	Potassium	ND	138	1	P	03/12/98
7782-49-2	Selenium	ND	.675	2	F	03/16/98
7440-22-4	Silver	.867	.688	1	P	03/12/98
7440-23-5	Sodium	ND	68.8	1	P	03/12/98
7440-28-0	Thallium	ND	.675	1	F	03/16/98
7440-62-2	Vanadium	ND	3.44	1	P	03/12/98
7440-66-6	Zinc	10.9 <u>J</u>	6.88	1	P	03/12/98

Percent Solid of 96.2 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

150144  
110194

I-7

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802369  
 Field ID: SD-1  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Date Method	Analyzed
7429-90-5	Aluminum	934	15.3	1	P	03/12/98
7440-36-0	Antimony	ND <u>J</u>	7.66	1	P	03/12/98
7440-38-2	Arsenic	ND	1.23	2	F	03/16/98
7440-39-3	Barium	3.07	2.30	1	P	03/12/98
7440-41-7	Beryllium	ND	.383	1	P	03/12/98
7440-43-9	Cadmium	17.5 <u>J</u>	.766	1	P	03/12/98
7440-70-2	Calcium	352	76.6	1	P	03/12/98
7440-47-3	Chromium	94.2 <u>J</u>	2.30	1	P	03/15/98
7440-48-4	Cobalt	ND	2.30	1	P	03/12/98
7440-50-8	Copper	4.32 <u>J</u>	2.30	1	P	03/12/98
7439-89-6	Iron	1650	7.66	1	P	03/12/98
7439-92-1	Lead	ND	23.0	1	P	03/12/98
7439-95-4	Magnesium	296 <u>J</u>	38.3	1	P	03/12/98
7439-96-5	Manganese	15.2	1.15	1	P	03/12/98
7439-97-6	Mercury	ND	.236	1	CV	03/12/98
7440-02-0	Nickel	5.26	3.06	1	P	03/12/98
7440-09-7	Potassium	163	153	1	P	03/12/98
7782-49-2	Selenium	ND	.766	2	F	03/16/98
7440-22-4	Silver	.980	.766	1	P	03/12/98
7440-23-5	Sodium	ND	76.6	1	P	03/12/98
7440-28-0	Thallium	ND	.766	1	F	03/16/98
7440-62-2	Vanadium	ND	3.83	1	P	03/12/98
7440-66-6	Zinc	59.9 <u>J</u>	7.66	1	P	03/12/98

Percent Solid of 84.8 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

EC  
7/10/98

I-8

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8600  
 Sample #: 9802370  
 Field ID: CP-2  
 Client Name: CARCI

Matrix: Soil  
 Date Received: 03/09/98

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7429-90-5	Aluminum	759	14.7	1	P	03/12/98
7440-36-0	Antimony	ND $\pm$	7.37	1	P	03/12/98
7440-38-2	Arsenic	ND	1.19	2	F	03/16/98
7440-39-3	Barium	2.88	2.21	1	P	03/12/98
7440-41-7	Beryllium	ND	.368	1	P	03/12/98
7440-43-9	Cadmium	17.1 $\pm$	.737	1	P	03/12/98
7440-70-2	Calcium	465	73.7	1	P	03/12/98
7440-47-3	Chromium	75.2 $\pm$	2.21	1	P	03/15/98
7440-48-4	Cobalt	ND	2.21	1	P	03/12/98
7440-50-8	Copper	9.80 $\pm$	2.21	1	P	03/12/98
7439-89-6	Iron	1590	7.37	1	P	03/12/98
7439-92-1	Lead	ND	22.1	1	P	03/12/98
7439-95-4	Magnesium	282 $\pm$	36.8	1	P	03/12/98
7439-96-5	Manganese	19.7	1.11	1	P	03/12/98
7439-97-6	Mercury	ND	.249	1	CV	03/12/98
7440-02-0	Nickel	4.47	2.95	1	P	03/12/98
7440-09-7	Potassium	ND	147	1	P	03/12/98
7782-49-2	Selenium	ND	.741	2	F	03/16/98
7440-22-4	Silver	ND	.737	1	P	03/12/98
7440-23-5	Sodium	ND	73.7	1	P	03/12/98
7440-28-0	Thallium	ND	.741	1	F	03/16/98
7440-62-2	Vanadium	3.76	3.68	1	P	03/12/98
7440-66-6	Zinc	17.8 $\pm$	7.37	1	P	03/12/98

Percent Solid of 80.3 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP	CV - Analyzed by Cold Vapor
F - Analyzed by GFA	A - Analyzed by flame AA

RE  
7/10/98

I-9

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802361  
Client Name: CARCI  
Field Number: SG-W

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 15.2

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	84.8	0.10	mg/L	1.			03/11/98
Cyanide, Total	15.9	1.22	mg/Kg	1.	ND	0.01	03/20/98

RE  
7/10/98

WC-1

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802362  
Client Name: CARCI  
Field Number: SD-2

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 8.9

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD	BLANK RESULTS	MDL	ANALYSIS DATE
Solids, Percent	91.1	0.10	%	1.				03/11/98
Cyanide, Total	3.94	1.04	mg/Kg	1.		ND	0.01	03/20/98

2  
7/10/98

WC-2

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802363  
Client Name: CARCI  
Field Number: SD-6

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 17.8

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD	BLANK RESULTS	MDL	ANALYSIS DATE
Solids, Percent	82.2	0.10	%	1.				03/11/98
Cyanide, Total	ND	VS	mg/Kg	1.		ND	0.01	03/20/98

2  
7/11/98

WC-3

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802364  
Client Name: CARCI  
Field Number: SD-6DUP

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 21.2

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	MDL	ANALYSIS DATE
Solids, Percent	78.8	0.10	%	1.			03/11/98
Cyanide, Total	ND	1.26	mg/Kg	1.	ND	0.01	03/20/98

RE  
7/16/98

WC-4

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802367  
Client Name: CARCI  
Field Number: SG-E

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 3.6

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	96.4	0.10	%	1.			03/11/98
Cyanide, Total	2.10	1.01	mg/Kg	1.	ND	0.01	03/20/98

WC-5  
2/10/98

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802368  
Client Name: CARCI  
Field Number: SD-5

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 3.8

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	96.2	0.10	%	1.			03/16/98
Cyanide, Total	ND	0.99	mg/Kg	1.	ND	0.01	03/20/98

R  
7/16/98

WC-6

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802369  
Client Name: CARCI  
Field Number: SD-1

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 15.2

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	84.8	0.10	%	1.			03/11/98
Cyanide, Total	7.51	1.06	mg/Kg	1.	ND	0.01	03/25/98

24  
7/10/98  
WC-C

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8600  
Sample #: 9802370  
Client Name: CARCI  
Field Number: CP-2

Matrix: Soil  
Date Received: 03/09/98  
% Moisture: 19.7

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	MDL	ANALYSIS DATE
Solids, Percent	80.3	0.10	%	1.			03/11/98
Cyanide, Total	1.90	1.19	mg/Kg	1.	ND	0.01	03/25/98

R  
williams

WC-8