The electronic version	of this file/report	should have the file na	me:
------------------------	---------------------	-------------------------	-----

Type of document.Spill Number.Year-Month.File Year-Year or Report name.pdf

report. hw961009 1991 -09-19 PHASE I pdf
ENVIRONMENTAL ASSESSMENT

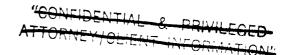
Project Site numbers will be proceeded by the following:

Municipal Brownfields - b Superfund - hw Spills - sp ERP - e VCP - v

BCP - c

non-releasable - put .nf.pdf

Example: letter.sp9875693.1998-01.Filespillfile.nf.pdf



PHASE I ENVIRONMENTAL ASSESSMENT

PRESTOLITE ELECTRIC INCORPORATED (FORMERLY MOTOROLA)

400 MAIN STREET

ARCADE, NEW YORK 14009

Prepared for:

PRESTOLITE ELECTRIC INCORPORATED FOUR SEAGATE, 10th FLOOR TOLEDO. OHIO 43691-0904

JUNE 1991

Prepared by:

IT CORPORATION
333 PIERCE ROAD
SUITE 200
ITASCA, ILLINOIS 60143
(708) 250-7788

PROJECT NO. 312205

1.0 SUMMARY

The Prestolite facility in Arcade, New York, manufactures automotive and industrial products such as: electro-mechanical charging systems (alternators with electronic regulators), and electronic odometers and speedometers. The facility is located on approximately 40 acres of land at 400 Main Street, Arcade, New York. The complex occupies a 350,000 square foot area under roof and has 1.2 acres of paved parking areas.

The site was originally used as a lumber breakout yard in the early 1920's. From the 1920's, to the 1940's, the site underwent gradual development with several houses and businesses being located on the site based on Sanborn map depiction of the property during this time period. During World War II, as one of the businesses on the site, Lee Drennan Inc., a machine shop, was reported to have had a government contract to manufacture metal parts.

The facility was managed by Sylvania from 1952-1955. Sylvania built a wastewater treatment system (WWTS) which consisted of a concrete settling basin. Limestone was used to treat the water, which was then discharged to Cemetery Creek. Motorola purchased the facility in 1955. In 1959, Motorola constructed a new WWTS which treated waste water from press operations and electroplating. This treatment system included a concrete neutralization pit with automatic pH control, using sodium hydroxide and sulfuric acid. System overflow went to an oil interceptor and then to a concrete settling basin. Water from the settling basin flowed through an underground pipe and mixed with wastewater from die casting, water from roof drains and cooling water. The combined wastewater was discharged to Cemetery Creek. Once or twice a year, sludge from the settling basin was placed in a low-lying area near the chemical storage building. Various reports indicate that the sludge was placed there beginning either in 1959 or 1970 and continuing until 1976. In 1980, the facility filed a Notification of Hazardous Waste Site for the sludge storage area. In 1981, approximately 30 cubic yards of sludge from the 3450 square feet sludge storage area was removed and disposed off-site.

IT investigated the site and collected ground water and soil samples in addition to soil vapor samples from areas of potential environmental concern including the sludge disposal area, a filter cake storage area, a petroleum/solvent burn area, near a chemical storage building,

a former drum storage area, the site of a former 6500 gallon xylene underground storage tank (UST), and the area where the old WWTS was located. Samples were also collected from a stained section of ground where metal parts bins containing metal parts coated with petroleum or solvents are stored, the site of a former 550 gallon xylene UST, beneath an above ground fuel storage tank (AST), near degreasers at four locations in the facility, and near former sump/floor drain locations in the plant.

Prestolite has an asbestos removal policy in place and plans to remove nine transformers containing PCB oil in the future. Therefore, these issues were not addressed during this investigation.

In the best case remediation scenario, remediation is anticipated to be required in the following areas: bag house, chemical storage area, degreasers, site-wide groundwater. In the typical remediation scenario, remediation is anticipated to be requested in these additional areas: filter cake, transformers, petroleum/solvent burn area and the second historical drum storage area. In the worst case remediation scenario, remediation is anticipated to be required in these additional areas: sludge storage area, closed 550 gallon UST, methylene chloride AST and former sump trench area. Costs are summarized in a tabular format.

Identified Volatiles in Ground weater

1. methylene chloride

2. Tri chloroethene

3. 1,1,1- Trichloroethene

4. 1,1- Dichloroethene

5. Trans-1,2- Dichloroethene

6. Vinyl chloride

2.0 INTRODUCTION

2.1 OBJECTIVE

IT Corporation completed a site investigation of the Prestolite facility in Arcade, New York during June of 1991 for Prestolite Electric Incorporated. The objective of the work was to estimate significant remediation costs which could be incurred at the site. This was accomplished by first identifying potential areas of concern by reviewing previous site assessment data and visually inspecting the site. Sampling and analysis activities were planned and completed to determine if any of the potential areas of environmental concern might require remediation. Finally, potential remediation costs were estimated. The site investigation is not intended to be a complete environmental regulatory compliance audit nor is it intended to be a Remedial Investigation/Feasibility Study for the site.

2.2 SITE DESCRIPTION AND BACKGROUND

The site consists of an automotive parts manufacturing facility located at 400 Main Street in Arcade, New York (Figure 1-1). The Prestolite facility is located on the west side of Arcade, a small village in western New York. A small stream, Cemetery Creek, traverses the property from east to west and joins Cattaraugus Creek approximately 1/2 mile to the north of the facility. The manufacturing plant sits on terrain which gently slopes to the north and west. The back of the plant site rises in elevation towards upland areas located to the south.

The facility is bounded on the west by a lumberyard (Arcade Lumber Company), which was visible in an early 1950's aerial photograph of the facility. Single family residential units and apartments are located north, east and west of the facility, interspersed with commercial business along Main Street. South of the site is predominantly rural with the exception of a cemetery. A Uni-Mart gas station is located on the corner of Main and Prospect Street, just east of the facility.

Surface water on the site flows north and west. The depth to groundwater was determined to be between 6 and 13 feet during field investigations. Regional groundwater flow is

thought to be to the northwest.

The history of the site is as described in Section 1.0 The Prestolite facility currently produces a variety of automotive parts. The manufacture of these products involves several metal fabricating processes such as aluminum die casting and finishing, metal stamping and machining operations, coil winding, metal washing, and phosphatizing operations. Aluminum end covers for alternators are cast, washed, and finished in the die cast shop before being sent to assembly lines. Oil, grease and metals from belt and batch washers and finishers are constituents of the wastewater streams from this area. Operations that take place in the press shop include screw machining, metal stamping and machining, phosphatizing and washing. Parts are phosphatized to facilitate lubrication prior to stamping in the 1,000-ton punch press. High levels of lead in the wastewater stream from this area are associated with drawing compounds used on the 1,000-ton press. After forming, the parts are washed, generating a wastewater stream containing oil, grease, and metal. Leadbearing wastewater is treated by the wastewater treatment plant. Parts are then transferred to assembly operations.

Various chemicals are used in the manufacturing processes. These materials are mostly stored in 55-gallon drums. Total weight or volume is recorded, as well as an indication of whether the material is stored in bulk tanks, bags, or smaller liquid containers. The facility has used nitrogen for inert gas firing ovens and argon for arc welding.

Fuels are stored in aboveground steel tanks at several locations at the facility. Diesel fuel and kerosene, used for emergency purposes, are stored in two 250-gallon tanks and one 200-gallon tank, respectively.

Raw materials are stored in 55-gallon drums in the raw material storage building, which has six storage bays opening onto a loading dock. Although the storage building has a concrete floor, it was constructed before 1962 and does not incorporate spill prevention measures such as dikes or spill collection sumps. The area to the front of the chemical storage building, where loading and unloading occurs, is paved, and the area to the rear and sides is unpaved.

There is a ditch around the east end of the plant and parking lot, which serves to collect surface runoff. The facility does not have a system of storm drains to collect runoff.

Electricity is supplied to the plant through the Village of Arcade distribution system. The plant has 154 transformers, nine of which are wet and contain 30-60 percent PCB fluids. The PCB-containing electrical equipment is inspected monthly and is located indoors in enclosures over a concrete floor. The company reported that there has been a small amount of seepage of PCB fluid from the transformers but that a spill has never occurred. Seepage and cleanup materials have been place in a 55-gallon drum and disposed of by ENSCO through incineration.

3.0 PREVIOUS SITE ASSESSMENTS

During July of 1984, the site was visited by a consultant who performed an environmental site assessment for the past property owner, Motorola, Inc.. During the course of the investigation, an inventory of major chemicals stored on site was obtained. The investigation included a literature search and site investigation of buildings, storage tanks, and yards. The major area of concern noted in this report was the possibility of groundwater contamination due to past WWTS activities and sludge deposition.

During the Phase I environmental assessment performed by IT in June of 1991, several other items of concern were noted which include unpermitted air emission points, and the fact that Prestolite has been listed as a PRP for wastes sent to the Envirotek II site in Tonawanda, New York.

4.0 SAMPLING AND ANALYSIS ACTIVITIES

During June of 1991, IT Corporation collected four water samples and nine soil samples based on recommendations set forth in the revised Phase II Work Plan for the Prestolite plant. Groundwater samples were collected from four monitoring wells installed at three specific areas of concern and one background location. Soil samples were collected from nine test pits also located in areas of concern. In addition, a total of nine soil vapor test points were installed during the investigation. Standard sampling and decontamination procedures were followed for all activities. The location and purpose of each sample is described below.

MW-1 is an 18 foot well located in the front parking lot in the approximate location of the former WWTS. No elevated photoionization detector (PID) readings were obtained at this location. MW-2 is a 20 foot well located in the sludge disposal area. PID readings of up to 700 ppm were obtained at a depth between six and eight feet in this well. MW-3 is a 15 foot well located in the rear of the building near an area where scrap metal bins are stored. Slightly elevated readings were obtained from the surface at this location. MW-4 is a 20 foot background well located on the southeast corner of the building. No elevated PID readings were obtained at this location.

Test pits 1 and 2 are located near the filter cake storage area, south of the plant. Test pits 3 and 4 are located near the sludge disposal area. Test pits 5, 6, and 7 are located near the solvent/petroleum burn area. Test pit 8 is located near an area that had previously been used as a drum storage area. Test pit 9 is located near the scrap metal bins.

Soil vapor points 1 and 2 are located near a degreaser tank. Soil vapor point 1 was taken at a depth of 3.0 feet and soil vapor point 2 was collected from a depth of 4.5 feet. Soil vapor points 3 and 4 were located near a degreaser tank. SV-3 was obtained from a depth of 4.0 feet and soil vapor point 4 at a depth of 3.0 feet. Soil vapor point 4 yielded organic vapor meter (OVM) readings of 674 - 2000 ppm. Soil vapor points 5 and 6 were taken in the area of a floor trench. OVM readings of 17 ppm at 4.0 feet were obtained at the soil vapor point 5 location. Soil vapor point 6, from a depth of 3.0 feet, had OVM readings of 17 ppm. Soil vapor point 7 was taken near a former UST location. No elevated OVM readings were obtained at this location. Soil vapor point 8 was also in the area of the

former UST. More than 12 inches of concrete was encountered at this location and as a result, no readings were obtained. Soil vapor locations 9 and 10 were in the vicinity of an above ground methylene chloride tank. OVM readings of 32 ppm were obtained from a depth of 3.5 feet at location 9. The sample from location 10 was obtained from a depth of 4.0 feet and yielded OVM readings of 35 ppm.

Sample locations are shown on Figure 1-2. The field activity daily logs which detail the field activities performed at the site are contained in Appendix A. The boring logs for the four monitoring wells installed by IT are contained in Appendix B.

All groundwater and soil samples in addition to a rinsate sample and a trip blank were shipped on ice via overnight courier following chain-of-custody procedures to IT's Cincinnati laboratory for metals, volatiles, and cyanide analytical testing.

The completed chain-of-custody forms are included in Appendix C. The request for analysis forms are contained in Appendix D.

5.0 RESULTS AND CONCLUSIONS

The laboratory analytical results (Tables 1-2, 1-3, and 1-4) indicate impacted soil and groundwater at several areas of the facility. The following discussion outlines the type of situations encountered and the specific locations at the Prestolite facility:

Impacted soil was found at the location of the aboveground storage tank on the north side of the plant. The constituents of concern included methylene chloride (26 ug/kg), carbon disulfide (4 ug/kg), trichloroethene (26 ug/kg), and toluene (5 ug/kg). Soil obtained from MW-2, on the south side of the facility, near the sludge disposal area, was found to contain methylene chloride (53 ug/kg), acetone (56 ug/kg), butanone (9 ug/kg), 4 methyl-2-pentanone (1 ug/kg), and toluene (4 ug/kg). The soil sample collected from MW-3, located near the scrap metal bins on the south side of the plant, indicated that the compounds methylene chloride (3600 ug/kg), benzene (240 ug/kg), toluene (740 ug/kg), and total xylenes (3100 ug/kg) are present in the soil at this location.

Soil samples collected from Test Pit 1 (TP-1) indicated that methylene chloride (50 ug/kg), acetone (16 ug/kg), and toluene (2 ug/kg) are present in the soil at this location. At the TP-3 location, the compounds methylene chloride (60 ug/kg), acetone (100 ug/kg), trans-1,2dichloroethane (4 ug/kg), 2 butanone (32 ug/kg), trichloroethene (3 ug/kg), 4-methyl-2pentanone (3 ug/kg), toluene (33 ug/kg), ethylbenzene (810 ug/kg) and xylenes (7200 ug/kg) were detected in the soil. TP-4 had detects of the compounds methylene chloride (57 ug/kg), acetone (14 ug/kg), butanone (2 ug/kg), chlorobenzene (3 ug/kg), ethylbenzene (10 ug/kg) and total xylenes (62 ug/kg). The results from TP-5 indicated that methylene chloride (3900 ug/Kg) was present in the soil. The analytical results from TP-6 indicated that methylene chloride (3700 ug/kg), toluene (8900 ug/kg), ethylbenzene (29,000 ug/kg) and total xylenes (400,000 ug/kg) are present in the soil. The results from TP-7 indicate that methylene chloride (64 ug/kg), acetone (16 ug/kg), carbon disulfide (4 ug/kg), trans-1-2-dichloroethene (9 ug/kg), butanone (2 ug/kg), trichloroethene (2 ug/kg), 4-methyl-2 pentanone (2 ug/kg), ethylbenzene (2 ug/kg) and total xylenes (12 ug/kg) are present in the soils at this test pit location. At Test Pit 8, constituents of concern are present in the form of methylene chloride (57 ug/kg), acetone (14 ug/kg), 1,1-dichloroethane (11 ug/kg), trans-1,2-dichloroethene (23 ug/kg), 1,1,1-trichloroethane (2 ug/kg), trichloroethene (9 ug/kg), and toluene (1 ug/kg).

Laboratory results indicate that metals are present in soil collected from the area of the baghouse, soil from the above ground storage tank area, and soil obtained from MW-2 and MW-3, in concentrations ranging from 0.566 ug/g to 388,000 ug/g.

Laboratory analysis of the ground water samples obtained from the four monitoring wells installed by IT indicated volatile organic compounds in the groundwater at the sites. Compounds detected in the ground water at MW-Mincluded: methylene chloride (22 ug/l), acetone (26 ug/l), 1,1,1-trichloroethane (15 ug/l), and trichloroethene (98 ug/l). Analysis of the ground water at MW-Z indicates that vinyl chloride (82 ug/l), methylene chloride (33 ug/l), acetone (34 ug/l), 1,1-dichloroethane (6 ug/l), trans-1,2-dichloroethene (61 ug/l), benzene (3 ug/l), toluene (84 ug/l), ethylbenzene (360 ug/l) and total xylenes (1500 ug/l) are present. The ground water at MW-Z was found to contain methylene chloride (23 ug/l), 1,1,1-trichloroethane (10 ug/l), trichloroethene (35 ug/l), ethylbenzene (2, ug/l) and total xylenes (8 ug/l). None of the parameters included in the laboratory analysis program were detected in the ground water at MW-Z. Resampling of MW-2, MW-3 and MW-4 indicated volatile organic compounds in similar concentrations as found originally.

TABLE 1-2a

SUMMARY OF SOIL ANALYTICAL RESULTS TARGET COMPOUND LIST (TCL) VOLATILE ORGANIC COMPOUNDS PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	TP-01	TP-03	TP-04	TP-05	TP-06	TP-07	TP-08	SS-02	MW-2	MW-3
Oepth	3' -5 '		2′-3′	5' -6'	3'-4'	3'-4'	0-1'			
TCL Volatile Org an ic Compounds (ug/kg)										
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8romomethane	NB	ND	ND	ON	מא	ND	ND	ND	ND	ND
Vinyl Chloride	GN	HD	ND	סא	ND	ND	ND.	ND	ND	ND
Chloroethane	OM	ON	ND	NO	ND	ND	ND	ON	ND	ND
Methylene Chlori de	50B	608	578	3900B	3700B	64B	5 78	25B	53B	36008
Acetone	16	100	14	ON	ИD	16	14	ND	56	ND
Carbon Disulfide	ND	ND	ND	ON	ND	4	ND	4	DM	ND
i,l-Dichloraethe ne	ND	В	ND	סא	סא	ND	МÐ	מא	ND	ND
1.1-Dichloroethane	ND	НÐ	ND	В	ND	DN	11	ND	ND	ND
trans-1,2-dichlor c ethene	GM	43	ND	ND	ND	9	23	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.2-dichloroethane	DM	ОМ	ND	ON	ND	ND	ND	ND	ND	ND
2-butanone	ND	32	2	В	ND	2J	ND	ND	9	ON
1,1,1-trichloroe th ane	. ND	ND	NO	סא	ND	ND	2.J	ND	OM	ND
Carbon Tetrachloride	NB	ND	ND	ON	GN	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	DM	ND	ND	ND	ND	МÐ	ND	ND
Bromodichlorometh ane	GN	NB	ND	סא	ND	ND	ND	ND	ND	DM
1,2-dichloroprop ane	BN	МÐ	ND	ND	ND	ND	ND	ND	ND	ΝD .
trans-1,3-dichlor o propane	ND	ON	OM	ND	ND	ND .	ND	ND	ND	ND
Trichloroethene	B	3J	ND	ND	ND	2J	9	26	ND	ND
Dibromochloromet ha ne	ND	NÐ	ND	DM	ND	ND	ND	ND	ND	ND
1,1,2-trichloroet h ane	ND.	ND	. NO	ND	ND	ND	ND	. ND	ND	סא
8enzene	ND	ND.	. ND	DN	ND	ND	ND	ND	ND	240
cis-1,3-dichlorop r opene	ИÐ	ND	ND	ON	ND	ND	ND	ND	ND	ND
Bromoform	ND.	ND	ND	ОМ	ND	ND	DN	ND	מא	ND
4-methyl-2-pentan o ne	B	3J	ND	ND	OM	2J	ND	ND	1J	ND
2-hexanone	NO	ND	ND	ND	ND	מא	ND	ND	ND	ND
Tetrachloroethene	ND	NĐ	ND	DN	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	ND	ND	ND	GN	ND	מא	ND	ПD	ИD	ND
Toluene	2.J	33	3J	ND	8900	ND	1J	5.)	4J	740
Chlorobenzene	ND	HĐ	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	NO	810	10	ND	2900 0 -	2J	ND	В	ND	ND
Styrene	NO	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	7200	62	DИ	400000	12	ND	ND	ND	3100

ND = Not Detected

^{8 =} Analyte detected in blank

J = Estimated value

SUMMARY OF SOIL ANALYTICAL RESULTS TARGET COMPOUND LIST (TCL) VOLATILE ORGANIC COMPOUNDS PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	TP-03R	TP-05R	TP-06R	BLANK	BLANK	RINSATE
				TRIP	TRIP	FIELD

701 Nolohila Ossasia						
TCL Volatile Organic						
Compounds (ug/kg)						
Chloromethane	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NÐ	GH	ND	ND	ND	ND
Chloroethane	ND	МО	ND	ND	ND	ND
Methylene Chloride	4103	288	ND	43	20	648
Acetone	GN	ND	ND	ND	13	16
Carbon Disulfide	ND	ND	ND	ND	ND	4
1,1-Dichloroethene	ND	ВМ	ND *	NO	ND	· ND
1,1-Dichloroethane	מא	OM	ND	ND	В	מא
trans-1,2-dichlor oe thene	HÐ	ND	ND	ND	ND	9
Chloroform	ND	מא	ND	ND	ND	ND
1,2-dichloroethan e	ND	NO	ND	ND	В	ND
2-butanone	NB	28	ND	ND	סא	2J
l,l,l-trichloroet ha ne	ND	ND	В	ND	DN	ND
Carbon Tetrachlor id e	ND	NĐ	ND	ND	סא	ND
Vinyl Acetate	GN	ND	ND	ND	מא	ND
Bromodichlorometh an e	ND.	NB	ND	ND	מא	ND
1,2-dichloropropa ne	DM	В	ND	ND	ND	ND
trans-1,3-dichlor op ropane	ND	ND	В	ND	ND	ND-
Trichloroethene	410J	NO	ND	ND	ND	2J
Oibromachlorometh an e	ND	ND	ND	ND	סא	ND
1,1,2-trichloroet ha ne	ND	ND	NB	ND	ND	ND
Benzene	NO	ИD	ND	ND	ND.	ND
cis-1,3-dichlorop ro pene	NĐ	NO	NĐ	ND	ND	ND
Bromaform	GN	ND	ND	ND	ND	ND
4-methyl-2-pentan on e	ND	GH	ND	ВD	ND	2J
2-hexanone	ND	ND	ND	ND	ND	DN
Tetrachloroethene	ND	NO	ND	DM	ND	DN
1.1,2.2-tetrachloroethane	ND	ND	ND	ND	ND	ND
Toluene	8303	300	280000J	ND	מא	ND
Chlorobenzene	ND	MD	חא	ND	מא	ND
Ethylbenzene	13 000J	55	240,000J	ND	פא	2)
Styrene	ND	סא	['] ND	ND	סא	ND
Total Xylenes	82 000J	32081	8000000	ND -	ND	12

ND = Not Detected

B = Analyte detected in blank

J = Estimated value

R = Resampled

SUMMARY OF SOIL ANALYTICAL RESULTS TARGET COMPOUND LIST (TCL) SEMI-VOLATILE ORGANIC COMPOUNDS AND PETROLEUM HYDROCARBONS PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	TP-02	TP-05	TP-07	TP-02 MATRIX SPIKE	TP-02 MATRIX SPIKE DUP
Cepth	1'-2'	5'-6'	3'-4'	1'-2'	1'-2'
TCL Semi-Volatile O rganic Compounds (ug/kg)					
Phenol	но.	иn	ND	76	53
bis(2-chlorethyl) et her	NO ND	ND 18 1	ND	ND	ND 53
2-Chlorophenol	ND	ND	ND	68	48
1.3-Dichlorobenze ne	ND	ND	ND ND	ND	ND
1,4-Dichlorobenze ne	ND	GN	סא	75	52
Benzyl Alcohol	ND	ND	ND	ND.	ND
1,2-Dichlorobenze ne	ND.	GN	ND	ND	ND
2-Methylphenol	ND	NĐ	ND	ND	ND
bis(2-chloroisopropyl)eth	NĐ	ND	ND	ND	ND
4-Methylphenol	NO	ND	ND	ND	ND
N-nitrosodi-n-pro py lamine	ND	МÐ	NÐ	71	48
Hexachloroethane	ND	. 40	ND	ND	ND
Nitrobenzene	NB	ND	ND	ND	ND
Isophorone	ON	ND	ND	סא	ND
2-Nitrophenol	ND	GN	DN	ND	ND
2,4-Dimethylphenol	NO	ND	ND	ND	ND
Benzoic Acid	МÐ	В	ON	DM	ND
bis(2-chlorethoxy)m ethane	NĐ	, ND	ND	ND	ND
2.4-Dichlorophenol	NĐ	DM	ND	ND	ND
1,2,4-Trichlorobe nzene	MD	ND	ND	В	ND
Napthalene	NĐ	1400	, ND	81	5 9
4-Chloroaniline	MD	ND -	· ND	ND	ND
Hexachlorobutadie ne	ON	NO	מא	ND	ND
4-Chloro-3-methylphenol	DH	HD	ON	85	56
2-Methylnapthalene	В	1300	180	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND.	ND	ND
2,4,6-Trichlorophenol	NO	ND	ND	ND	ND
2.4.5-Trichloraphenol	NO	ND	ND	ND	ND
2-Chloronapthalene	ND HD	סא	ND	ND	ND
2-Nitroaniline	B	ND	ND	ND	ND
Dimethyl Phthalate	ND	ND	NO	ND	ND
Acenapthylene	ND	ND	ND	78	57
3-Nitroaniline	D C	ND	ND	ND	ND
Acenapthene	NĐ	ND ND	ND	ND	ND
2,4-Dinitrophenol	ND NO	GK CH	ND ND	250	95
4-Nitrophenol Dibenzofuran	ND	ND 350	ND ND	DN	ND NO
2,4-Dinitrotoluene	ND ND	350	ND NO	ND	ND CE
	GN	NO	ND ND	90	65
2,6-Dinitrotoluene	ON	ND	ND	ND	DM

TABLE 1-2b (Cont'd)

SUMMARY OF SOIL ANALYTICAL RESULTS TARGET COMPOUND LIST (TCL) SEMI-VOLATILE GREANIC COMPOUNDS AND PETROLEUM HYDROCARBONS PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	TP-02	TP-05	TP-07	TP-02 MATRIX SPIKE	TP-02 MATRIX SPIKE DUP
Cepth	1'-2'	5'-6'	3'-4'	1'-2'	1'-2'
TCL Semi-Volatile Organic Compounds (ug/kg)					
Diethyl Phthalate	NB	ND	ND	ND	ND
Chlorophenylphen yl ether	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	סא	ND	ND
4,6-Dinitro2methylphenol	NB ND	ND ND	ND ND	ND ND	0N 0N
N-Nitrosodiphenyl a mine 4bromophenylphen yl ether	ND ND	ND ND	ND ND	ND.	ND
Hexachlorobenzene	ND ND	ND	ND ND	ND	ND
Pentachlorophenol	מא	ON.	מא	76	53
Phenanthrene	ND	710	ND	ND.	ND
Anthracene	ND	ND	ND	ND	ND
Di-n-butyl phtha lat e	NÐ	ND	MD	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Pyrene	ND	DN	ND	60	49
Butylbezylphthal ate	ND	ND	ND	ND	ND
3,3-Dichlorobenz id ine	DN	ОМ	ND	ND	ND
Benzo(a)anthracen e	ND	NO	ND	ND	ND
bis(2-ethylhexyl) ph thalat	В	2000	ND	ND	GN
Chrysene	ND	ND	ND	ND	ND .
Di-n-octyl phthalate	МÐ	ND .	DM	ND	DM
Benzo(b) fluoranthene	OM	ND:	ND	ND	סא
Benzo(k)fluoranthene	ND	NĐ	ND	ND	ND
Senzo(a)pyrene	NO	ND	ND	ND	סא
Indeno(1,2,3-cd)pyrene	NB NB	NÐ	NO	ND	ND
Dibenzo(a,h)anthracene	ND	ND	NO	ND	ND
Benzo(g,h,i) pery lene	ND	ND	NO	ND	ND
Total Petroleum					
Hydrocarbons (m g/kg)	4000	720	31	NO	ND

ND = Not Detected

TABLE 1-2c

SUMMARY OF SOIL ANALYTICAL RESULTS TARGET ANALYTE LIST (TAL) METALS, CYANIDE PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	TP-01	FP-02	TP-03	TP-04	TP-08	SS-01	SS-02	MW-2	MW-3
Depth	3'-5'		2'-3'	5' -6'	3'-4'	3'-4'	0-1'		
TAL Metals (ug/g)									
Aluminum	11000	9500	9300	10000	890 0	18000 0	120 00	960 0	12000
Antimony	NÐ	ND	ND	ND	ND	5.6	סא	ND	ND
Barium	120	140	150	51	52	90	76	45	77
Berrylium	ND	ND	ND	ND	ND	DM	DM	ND	ND
Cadmium	2.4	24	53	260	4.8	210	6.7	1.8	3.1
Calcium	4090	8500	6800	1100	1500 0	360 G	19000	710	14000
Chromium	12	18	15	12	10	9100	29	11	17
Cobalt	6.7	7.6	5.7	7.7	5.1	73	5.3	6.3	8.8
Copper	29	1600	54	16	29	12000	160	14	58
Iran ·	97 000	34000	16000	17000	17000	390006	21000	23000	31 000
Lead	21	120	210	17	17	990	56	8.8	17
Magnesium	2700	3800	2500	2400	250 0	690	3000	260 8	5900
Manganese	840	890	310	260	490	2100	230	330	67 8
Nickel	14	19	13	14	10	4700	18	12	2 0
Potassium	830	630	790	720	660	620	710	560	1300
Selenium	ND	ND	ND	ND	ND	ND	DN	ND	ND
Silver	ND	ND	ND	ND	ND	14.8	0.566	ND	ND
Sodium	130	250	110	100	310	2100	110	120	20 0
Thallium	25.3	25	24	19	20	360	27	23	28
Vanadium	14	15	12	13	13	41	12	12	13
Zinc	92	960	310	71	65	8500	480	39	95
Arsenic	4.3	6.2	5.5	5.5	5.1	24	7.4	6.1	9.5
Mercury	NB	0.06	0.2	DM	ND	0.23	ND	DN	DN
Cyanide	NA	NA	1.2	0.71	NA	NA	NA	NA	NA

NO = Not Detected

NA = Not Analyzed for that analyte

TABLE 1-3a

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS TARGET COMPOUND LIST (TCL) VOLATILE ORGANIC COMPOUNDS PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	MW-1	MW-2	MW-3	MW-4	MW-2R	MW-3R	MW-4R	FIELD RINSATE(1	TRIP Bla nk	FIELD RINSATE{2
ageat (on										
TCL Volatile Org an ic Compounds (ug/l)										
Chloromethane	ND	МĐ	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	BH	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	82	ND	ND	ND	DN	NO	ND	DM	ND
Chloroethane	ND	NB	ND	DN	ND	ND	NO	ND	ND	ИО
Methylene Chlori de	22	33	23	ND	4	3	. ND	24	4.3	ND.
Acetone	26	34	ND	DM	ND	ND	ND	DM	DM	ΝΟ
Carbon Disulfide	ND	ND	ND	DM	ND	ND	ND	ND	ND	ND
1,1-Dichloroethe ne	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroetha ne	ND	6	ND	ND	3	2	ND	מא	ND	ND
trans-1,2-dichlo ro ethene	ND	61	NB	ND	13	2	ND	ND	ND	ND
Chlaraform	ND	ND	ND	ND	ND	ND	ND	ND	ΝО	ПN
1,2-dichloroetha ne	ND	МВ	ND	ND	ND	ND	ND	ND	ND	ND
2-butanone	ND	ND	ND	HD	ND	ND	ND	ND	ND	סא
1,1,1-trichloroe th ane	15	ND	10	ND	1	5	ND	ND	ND	ND
Carbon Tetrachlo ri de	ND	В	ND	ND	ND	ND	ND	ND	DM	ND
Vinyl Acetate	NO	ND	DN	סא	סא	ND	ND	ND	ND	ND
Bromodichloromethane	BH	NB	ND	סא	ND	ND	ND	DM	ND	ND
1.2-dichloroprop ane	BN	ND	NO	ND	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropane	GM	ND	OM	ND	1	22	סא	ND	DM	מא
Trichloroethene	98	ND	35	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND.	ND	ND	- ND
1,1,2-trichloroe th ane	ND	ND	ND	DM	ND	ND	ND	ND	ON	. ND
Benzene	ND	. 3	ND	ND	1	ND	ND	ND.	ND	ND
cis-1,3-dichloro pro pene	ND	NO	· ND	ND	ND	ND	ND	ND.	ND	ND
3rpmoform	МĐ	ND	NO	ND	ND	ND	ND	ND	. ио	ND
4-methyl-2-pentanone	NO	HĐ	DM	ND	ND	ND	ND	ND	ND	ND
2-hexanone	NO	ND	ON	ND	ND	ND	ND	ND.	ND	ND
Tetrachloroethene	ND	NĐ	ND	ND	ND	ND	ND	מא	ND	ND
1,1,2.2-tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	84	ND	ND	7	2	ND.		ND	ND
Chlorobenzene	ND	CH	ND	ND	ND	ND	ND		ND	ND
Ethylbenzene	NO	360	2	ND	140	2	ND	· · · -	ND.	ND
Styrene	NO	ND	ND	ND	ND	NO	NO		ND	ND
Total Xylenes	ND	1500	8	ND	400	ND	ND		2.	

ND = Not Detected R = Resampled

TABLE 1-3b

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS TARGET ANALYTE LIST (TAL) METALS, CYANIDE PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	MW-1	MW-2	MW-3	MW-4
TAL Metals (ug/ml)				
Aluminum	118	530	190	53
Antimony	NO	ND	ND	ND
Barium	1.8	8.3	2.5	13.4
Berrylium	ND	ND	ND	NO
Cacimium	0.03	0.14	0.05	0.017
Calcium	600	1300	1100	610
Chromium	0.19	0.71	0.31	0.088
Cobalt	0.12	0.45	0.19	0.079
Copper	0.66	4.9	1.1	0.6
Iron	330	1500	570	. 150
Lead	0.27	2	0.35	0.19
Magnesium	170	580	310	190
Manganese	21	110	25	72
Nickel	0.28	1.3	0.49	0.21
Potassium	19	34	22	9.8
Selenium	ND	ИD	ND	ND
Silver	ND	0.021	0.006	0.013
Sodium	35	14	12	25
Thallium	0.24	1.2	0.45	ND
Vanadium	0.16	0.75	0.25	0.082
Zinc	1.7	11	3.4	1.5
Arsenic	0.09	0.6	0.16	0.0 9
Mercury .	0.0007	0.003	0.001	0.0004
Cyanide	ND	0.04	NA	NA

ND = Not Detected

TABLE 1-4

SUMMARY OF WIPE SAMPLE ANALYTICAL RESULTS PCBs PRESTOLITE - ARCADE FACILITY ARCADE, NEW YORK

Location	PCB-01	PC8-02	BLANK

PCBs (ug/wipe) 340 1600 ND

ND = Not Detected

ENVIRONNE REGION OF ENVIRON

5

)

) . . .