WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Regional Headquarters
2300 N. Dr. ML King Drive, PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8483
TDD 414-263-8713

November 29, 2000

Mr. Robert Miller
Spic & Span, Inc.
4301 N. Richards St.
Milwaukee, WI 53212

Subject: Case Closure for Dryclean USA, 5309 S. 108th St., Hales Corners, WI

FID: 241285550
BRRTS: 02-41-223675

Dear Mr. Miller:

I have reviewed your request for case closure for the above-named site dated August 17, 2000. Based on the investigation and documentation provided to the Department, it appears that the above-named site is in compliance with the requirements of Chs. NR 700 to 724, Wis. Admin. Code. Therefore, the Department considers the case closed and tracked as such, having determined that no further action is necessary at the site at this time. However, the case may be reopened pursuant to S. NR 726.09, Wis. Admin. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment.

The Department appreciates the actions you have taken to investigate the contamination at this site. If you have any questions or comments, please feel free to contact me at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. Future correspondence should be sent directly to the Remediation and Redevelopment programs assistant (263-8680) at the above address.

Sincerely,

John J. Hnat
Hydrogeologist
Remediation and Redevelopment

C: Brian Schneider, McLearn/Hart
Charles Benidt, Hales Corners Shopping Center
WDNR SER Files

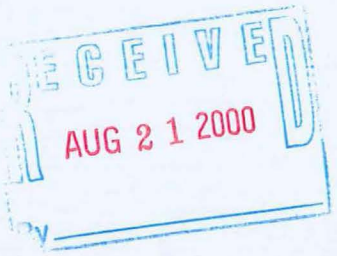
spic and span, inc.

4301 North Richards Street
Milwaukee, WI 53212-1097
414-964-5050
Fax 414-964-5042

August 17, 2000

code 79

Mr. Pat Chung
Program Specialist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
P. O. Box 12436
Milwaukee, WI 53212



Re: Dryclean-USA
5309 South 108th Street
FID#: 241285550

Dear Mr. Chung:

On February 2, 2000, our consulting firm McLaren/Hart, Inc., sent to your attention a Site Investigation Report for our Dryclean-USA store at 5309 South 108th Street, Hales Corners, Wisconsin. We neglected to include our $750.00 check which should have accompanied the report.

Enclosed is our check for $750.00 and again we request closure on the site as recommended by McLaren/Hart, Inc. Thank you.

Sincerely,

Robert A. Miller
President

RAM/ll

Cc: Brian Schneider

McLaren Hart, Inc.

2/7/00 PC

February 2, 2000

Mr. Pat Chung
Program Specialist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53212

Re: Dryclean USA
5309 South 108th Street, Hales Corners, Wisconsin
Site Investigation Report

FID 241285550
BRRTS 02-41-223675

Dear Mr. Chung:

Enclosed are two copies of the Site Investigation Report for the Dryclean USA property referenced above. The report was prepared in accordance with applicable sections of Wis. Adm. Code chs. NR 716.15. Based on the results of the investigation, McLaren/Hart recommends closure of the site. Feel free to contact either Brian Schneider or George Bayer if you have any questions or require additional information.

Sincerely,

McLAREN/HART ENVIRONMENTAL ENGINEERING CORPORATION

Brian Schneider, P.E.
Supervising Engineer

George J. Bayer (FOR)
Associate Geoscientist

O:\COMMON\Spic&Span\spic&span81rpt.wpd

cc: Bruce Keyes - Foley & Lardner
Robert Miller - Spic and Span
Reuben Peterson, Jr. - Borgelt, Powell, Peterson & Frauen, S.C.

W239 N2890 Pewaukee Road, Unit D, Pewaukee, Wisconsin 53072
414.523.2040 • 414.523.2059 fax • www.mclaren-hart.com

FID 24/285550
BRATS 02-41-223675

SITE INVESTIGATION REPORT

DRYCLEAN USA
FACILITY #81
5309 SOUTH 108th STREET
HALES CORNERS, WISCONSIN

Prepared for:

Mr. Robert Miller
Spic and Span, Inc.
4301 North Richards Street
Milwaukee, WI 53212

Prepared by:

McLaren/Hart
Environmental Engineering Corporation
W239 N2890 Pewaukee Road
Pewaukee, Wisconsin 53072

January 4, 2000

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SITE INVESTIGATION REPORT

DRYCLEAN USA
FACILITY #81
5309 SOUTH 108th STREET
HALES CORNERS, WISCONSIN

January 4, 2000

CERTIFICATION - PROFESSIONAL ENGINEER

I, Brian W. Schneider, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

REPORT: 9 pages

ATTACHMENTS:

A	Figures	3 pages
B	Tables	1 pages
C	Field Methodologies	3 pages
D	Laboratory Analytical Reports/Chain-of-Custody Documents	37 pages
E	Soil Boring Logs/Abandonment Forms/Well Construction Logs	16 pages

Signature and Title

Date

P.E. Stamp

1.0 INTRODUCTION

1.1 SITE LOCATION

The Property is located in the SE 1/4 of the SE 1/4 of Section 30, Township 6 North, Range 21 East. The address is 5309 South 108th Street in Hales Corners, Wisconsin. The site location is shown in Figure 1, Attachment A.

1.2 BACKGROUND

The following report summarizes investigation activities performed in and adjacent to the Dryclean USA facility. These activities were performed as a follow-up to the investigation activities previously performed by McLaren/Hart on October 20, 1998 and documented in the attached Site Investigation Results report dated November 2, 1998. A site location diagram is presented in Figure 1.

Dryclean USA is a subsidiary of Spic and Span, Inc. and the Dryclean USA facility space is leased from the Hales Corners Plaza Shopping Center, the property owner. The Shopping Center was constructed in 1978. Dryclean USA began operating on site in 1979. The dry cleaning machine was placed in a containment structure in 1995. The facility stopped using dry cleaning equipment in early November 1999.

On October 20, 1998, McLaren/Hart performed three soil boring tests (B-1 to B-3) in the immediate vicinity of the dry cleaning machine. Soil samples were collected from each boring from approximately 0.5 to 2.5 and 4.5 to 6 feet below ground surface (bgs). The samples were analyzed for tetrachloroethylene (PCE) and its potential breakdown products. One sample was obtained from fill soils beneath the concrete slab and one sample was obtained from native soils (or fill) found at a greater depth (4.5 to 6 feet bgs). Laboratory analyses were performed by Great Lakes Analytical using U.S. EPA SW-846 Method 8021. The results of the investigation were as follows:

- PCE concentrations were detected in three borings at concentrations of 1500, 2500, and 8400 µg/kg;
- PCE was detected only above 2.5 feet bgs;
- PCE was not detected in the samples collected from below 4.5 feet bgs;
- No PCE breakdown products were detected in any of the samples above the laboratory detection limit of 25 µg/kg; and,
- Groundwater was not encountered during this investigation.

1.3 PROPERTY OWNERSHIP

The Property is owned by:

Hales Corners Shopping Center
11117 West Greenfield Avenue
West Allis, WI 53214
Attention: Mr. Charles E. Benidt
(414) 778-0883

The responsible party for the site investigation:

Spic and Span, Inc.
4301 North Richards Street
Milwaukee, WI 53212
Attention: Mr. Robert Miller
(414) 964-5050

1.4 CONSULTANTS AND CONTRACTORS

The site investigation activities reported herein were performed by:

McLaren/Hart Environmental Engineering Corporation
W239 N2890 Pewaukee Road, Unit D
Pewaukee, WI 53072
(414) 523-2040 - phone
(414) 523-2059 - fax

As part of the investigation, the following service/commodity providers also conducted activities associated with the Property investigation:

Soil Probe Services

On-Site Environmental Services, Inc.
P.O. Box 280
Sun Prairie, WI 53590
(608) 837-8992

Laboratory Analytical Services

Great Lakes Analytical
1380 Busch Parkway
Buffalo Grove, IL 60089
(847) 808-7766

2.0 SITE PHYSIOGRAPHY, GEOLOGY AND HYDROGEOLOGY

2.1 TOPOGRAPHY AND SURFACE WATER DRAINAGE

- Site Topography. Based on the United States Geological Survey (USGS), Hales Corners, Wisconsin, 7.5 minute topographic map (1994), the topography in the immediate vicinity of the site slopes gently downward to the southwest from the site.

- Surface Water Drainage. Storm water along the site is anticipated to generally drain eastward along the curb side drainage associated with the parking lot of the retail mall in which Dryclean USA is located. The curb side drainage discharges to the storm sewer system. Storm water collected on the roof of the building is conveyed by roof drains to the storm sewer as well.

2.2 SOILS AND GEOLOGY/HYDROGEOLOGY

- Site Geology/Hydrogeology. The surface soils (less than five feet deep) have been classified by the U.S. Department of Agriculture, Soil Conservation Service (1971). The general soil association is the Ozaukee -Morley-Mequon Association with site-specific soils consisting of Ozaukee Silt Loam Series. The general soil association is described as well-drained to poorly drained soils with a subsoil of silty clay that formed in areas of thin loess and silty clay loam glacial till on moraines.

  The Ozaukee Silt Loam consists of moderately well-drained, silty soils that have a silty clay loam and silty clay subsoil underlain by calcareous silty clay loam glacial till. The Ozaukee soils have moderately slow permeability and high available water capacity.

  As noted, the site soils formed in areas of glacial till. The glacial till deposits in the area of the subject property vary between 100 to 200 feet thick and consist of unsorted, unstratified, unconsolidated mixtures of clay, silt, sand, pebbles, cobbles and boulders. The glacial till overlies the Niagara Dolomite bedrock which is up to 450 feet thick. The glacial deposits, as well as the bedrock, are considered to be groundwater aquifers.

3.0 SITE INVESTIGATION ACTIVITIES

The site investigation scope of work was developed in response to data gaps from the previous investigation. Additional tasks were added to the scope of work as the need for additional data was identified. The additional tasks are specified in the following sections.

3.1 PROJECT SCOPING DATA

To the extent practical, the scope of the project was defined in consideration of the criteria listed in NR 716.07, as detailed below. The data were updated during the investigation, as appropriate:

- Site Use. The Dryclean USA facility is located in the Hales Corners Shopping Center and has operated as a dry cleaning facility at this location since November, 1978.

- Type and Amount of Impact. Based on one round of prior investigation, soils in the immediate vicinity of the dry cleaning machine were found to be impacted with PCE. Three samples collected from 0.5 to 2.5 feet bgs adjacent to the machine, contained concentrations of 1,500, 2,500 and 8,400 ug/kg PCE.

- Environmental Media Potentially Affected. PCE impacts are estimated to be predominately within the coarse fill soils underlying the Dryclean USA facility.

- Need for Access Permission. The Hales Corners Plaza Shopping Center owns the property on which the impacts were found. Based on prior investigation findings, the impacts are believed to be limited to coarse fill soils in the vicinity of the dry cleaning machine and may extend to adjacent tenant spaces.

  Based on existing data, no off-site impacts are suspected and off-site access permission was not required. Access permission was obtained from the property owner (see Figure 2).

- Potential Receptors. No groundwater impacts have been identified at the site. Groundwater was not observed during the previous investigation.

- Significant Resources. Based on existing data, the site has not affected and does not present a threat to any threatened or endangered species, sensitive habitats, wetlands, resource waters, or historical or archeological sites.

- Immediate or Interim Actions: None have been conducted or are proposed.

3.2 SITE PHYSIOGRAPHY/SAMPLING STRATEGY

The sampling strategy was developed to identify the boundaries of soil impact, based on the known site conditions and characteristics. The sampling locations were selected based on data obtained from prior investigations and site characteristics.

3.3 FIELD INVESTIGATION METHODS

3.3.1 Soil Sample Collection and Handling

Soil sampling was performed using either portable power, hand augering, or soil probe equipment. Upon collection, the soil was classified with respect to USGS classification, color, moisture content, evidence of impact (discoloration and odor) and other observations. The information was recorded in a bound field notebook used to record daily activities.

As soon as possible following sample collection, the soil samples for the laboratory analysis were transferred to appropriate laboratory-provided containers. A fresh pair of latex (or similar) gloves were used during the handling of each sample to minimize the potential for cross contamination. The samples were containerized in laboratory-provided 60-ml glass jars with Teflon® septa. Twenty-five to 35 grams of soil were placed in the jars and each sample was preserved in the field with laboratory-provided purge-and-trap grade methanol.

The sample jars were labeled with the sample location identification, depth of sample, date of sample collection and intended analysis. The sample jars were placed in resealable plastic bags and packed in an iced, insulated container. A chain-of-custody form was completed each day, and accompanied each container of samples from the site to the laboratory. Samples were transported from the facility to the laboratory via overnight courier.

3.3.2 Decontamination Procedures

Soil sampling equipment was decontaminated before each boring location using an Alconox or TSP solution and rinsed in clean water. All sampling tools (i.e., spoons, knives, spatulas, etc.) were also cleaned in a solution of Alconox or TSP solution and rinsed in clean water prior to collection of each sample. A clean pair of latex, or equivalent, gloves was used during each sample to minimize the potential for cross-contamination.

3.3.3 Laboratory Analysis

Laboratory analyses were performed by Great Lakes Analytical using Wisconsin-modified U.S. EPA SW-846 Method 8021, for the target list compounds: PCE 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene, 1,1,2-trichloroethane, 1,1-dichlorethane, 1,2-dichloroethane, cis 1,2 dichloroethene, and vinyl chloride. The target list is defined to identify the PCE used at the facility, its potential breakdown products and related compounds.

3.4 QUALITY ASSURANCE/QUALITY CONTROL METHODS

The following quality assurance/quality control measures were implemented during the site investigation activities:

- Decontamination procedures and measures to minimize the potential for cross-contamination of samples were followed as specified in section 2.3.2.
- All site activities were recorded in a bound field notebook (see Field Documentation section below).
- Chain-of-custody procedures were followed as specified in Attachment C.

A methanol blank was included in each cooler shipped to the laboratory. The samples were shipped on ice; therefore, no temperature blanks were required.

3.5 FIELD DOCUMENTATION

All site activities were documented in a bound field notebook. Included in the daily documentation are:

- Procedures for sampling and other routine activities associated with the site investigation.
- Field observations.
- Chronological log of site activities.

3.6 SITE HEALTH AND SAFETY

All reasonable measures were taken to protect the health and safety of the personnel and general public. A site Health and Safety Plan that meets or exceeds the standards found in 29 CFR 1910.120 was prepared and followed during site activities. All project personnel and subcontracted personnel were trained in hazardous materials handling and have on-site training and experience.

Detailed methodologies for each of these tasks is provided in Attachment C. Additional information is presented in the following sections.

3.7 INVESTIGATION SCOPE OF WORK

The site investigation activities, as presented in the July 1, 1999 Work Plan, were implemented on November 18, 1999. The scope of work included:

- Sample four soil borings (B-4 through B-7) to six feet below ground surface.

- Collect up to two soil samples from each boring for laboratory analysis of target list VOCs. The samples were collected from various depths. Samples collected from boring location B-8 were not analyzed by the laboratory because VOCs were not detected above the laboratory detection limit at boring location B-7.

The specific objectives of each sampling location are presented in the July 1, 1999 Work Plan.

3.8 VARIATIONS FROM WORK PLAN

The following tasks were altered or added to the original work plan in response to field conditions and data needs:

- Boring B-5 was relocated approximately 9 feet west due to obstructions.
- Boring B-7 was relocated approximately 4 feet north due to access conflicts (boring was performed in the former Corner Sports facility).
- Optional boring B-8 was performed approximately 14 feet north of boring B-7.

3.9 RESULTS

The boring locations are shown in Figure 2 and the analytical results are summarized in Table 1. Laboratory reports, quality control data and chain of custody documents are provided in Attachment D. Soil boring logs are provided in Attachment E.

3.9.1 Soil Sampling

Two soil samples were collected from each of the five soil borings installed at the site. The samples were submitted for laboratory analysis of select VOCs. The soil sampling analytical results are detailed in Table 1. Tetrachloroethene (PCE) was the only VOC detected.

PCE was detected at 96 µg/kg at boring location B-5 at a depth of 0.5 to 2.5 feet bgs. PCE was not detected at any of the remaining borings installed during this second phase of the investigation, and the only detections during this phase or the prior phrase were located in the shallow depths of borings B-1, B-2, B-3 and B-5, all contained within the Dryclean USA facility. Samples collected from boring location B-8 were not analyzed by the laboratory because VOCs were not detected above the laboratory reporting limit at boring location B-7, which is located eleven feet closer to the Dryclean USA facility.

The results of the two rounds of sampling indicate that PCE impacted soil was generally confined to within a 15 foot radius of the dry cleaning machine. The highest PCE concentrations were detected in the fill and shallow silty clay soils immediately beneath the interior concrete slab (B-1, B-2, and B-3). PCE concentrations decreased with depth in the natural clay soils and have not been observed below 2.5 feet bgs.

3.9.2 Groundwater

Groundwater was not observed in any of the soil borings installed by McLaren/Hart.

4.0 RISK ASSESSMENT

Based on the results of the investigation, the PCE is confined to a small volume of shallow fill soils (1-4 feet bgs) near the location of the former dry cleaning machine. The PCE concentrations in the soils decrease with distance from the dry cleaning machine, and are apparently confined within the building footprint. Soil boring logs from this investigation indicate the underlying clay soils extend to a depth to at least 6 feet bgs. Based upon regional geological information, the clay soils extend to a depth much greater than 6 feet bgs.

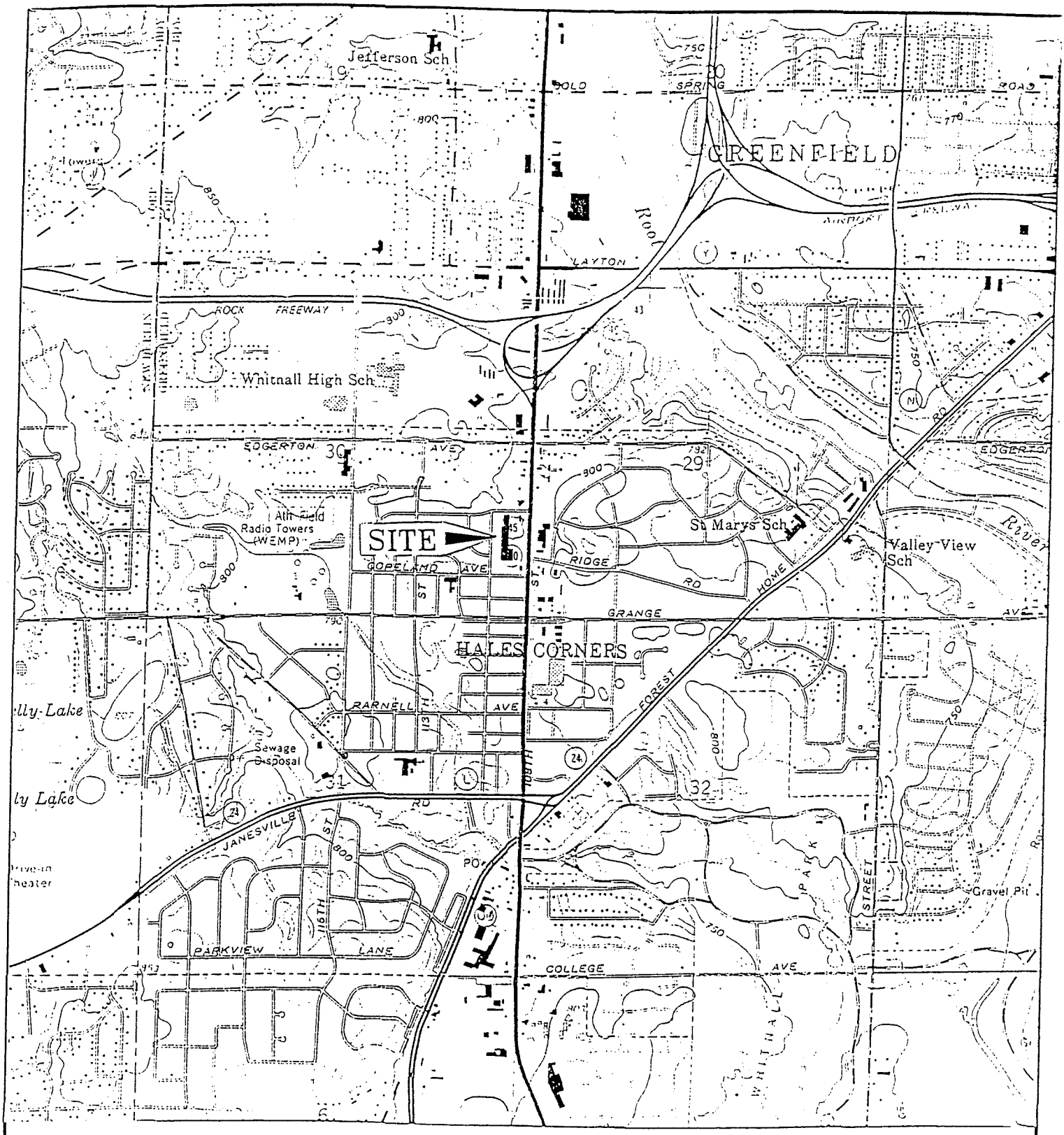
The WDNR Direct Contact Risk Model was used to evaluate the excess cancer risk attributable to contact with PCE through ingestion of soil particles, inhalation of soil particles and inhalation of PCE vapors. The results of the WDNR Direct Contact Risk Model indicate that soils with concentrations below 9,100 µg/kg would not pose a threat to human health. This concentration is greater than the highest concentration of 8,400 µg/kg detected on site to date. Based on this, the PCE would not pose a threat to human health even if the building were to be demolished and the soils disturbed at a future date. The WDNR Direct Contact Risk Model is shown in Table 2.

The potential risk to human health through ingestion of groundwater would be minimal to non-existent for the following reasons:

- The PCE is contained above low conductivity clay soils;
- There is a separation distance between soil and groundwater of at least four feet or more (groundwater was not encountered during this investigation); and,
- Water at the site is provided by the City of Milwaukee. There are no private wells within 100 feet, or public supply wells within 1,000 feet of the site.

5.0 SUMMARY AND RECOMMENDATIONS

Soil samples were obtained from areas surrounding the dry cleaning machine located within the Dryclean USA facility. Soil borings were also installed on the interior of the building and within a vacant store located 15 feet north of the drycleaning facility in an attempt to define the horizontal and vertical extent of PCE impacts. Based on the results of the investigation, the PCE is predominantly confined to a small volume of fill soils (1-4 feet bgs) soils beneath the interior concrete slab. Furthermore, PCE concentrations in the soils decrease with distance from the dry cleaning machine. The PCE concentrations are limited in magnitude and further migration is limited by underlying native clay soils. The results of the WDNR Direct Contact Risk Modeling indicate that even in the event of future demolition of the building and disturbance of the soils, the PCE would not pose a threat to human health through direct contact. In addition, the potential risk to human health through ingestion of groundwater is minimal to non-existent. Therefore, McLaren/Hart requests closure of this site.



USGS 7.5 minute series Hales Corners, Wisconsin topographic quadrangle dated 1959, photorevised 1994

McLaren Hart ENVIRONMENTAL ENGINEERING CORPORATION

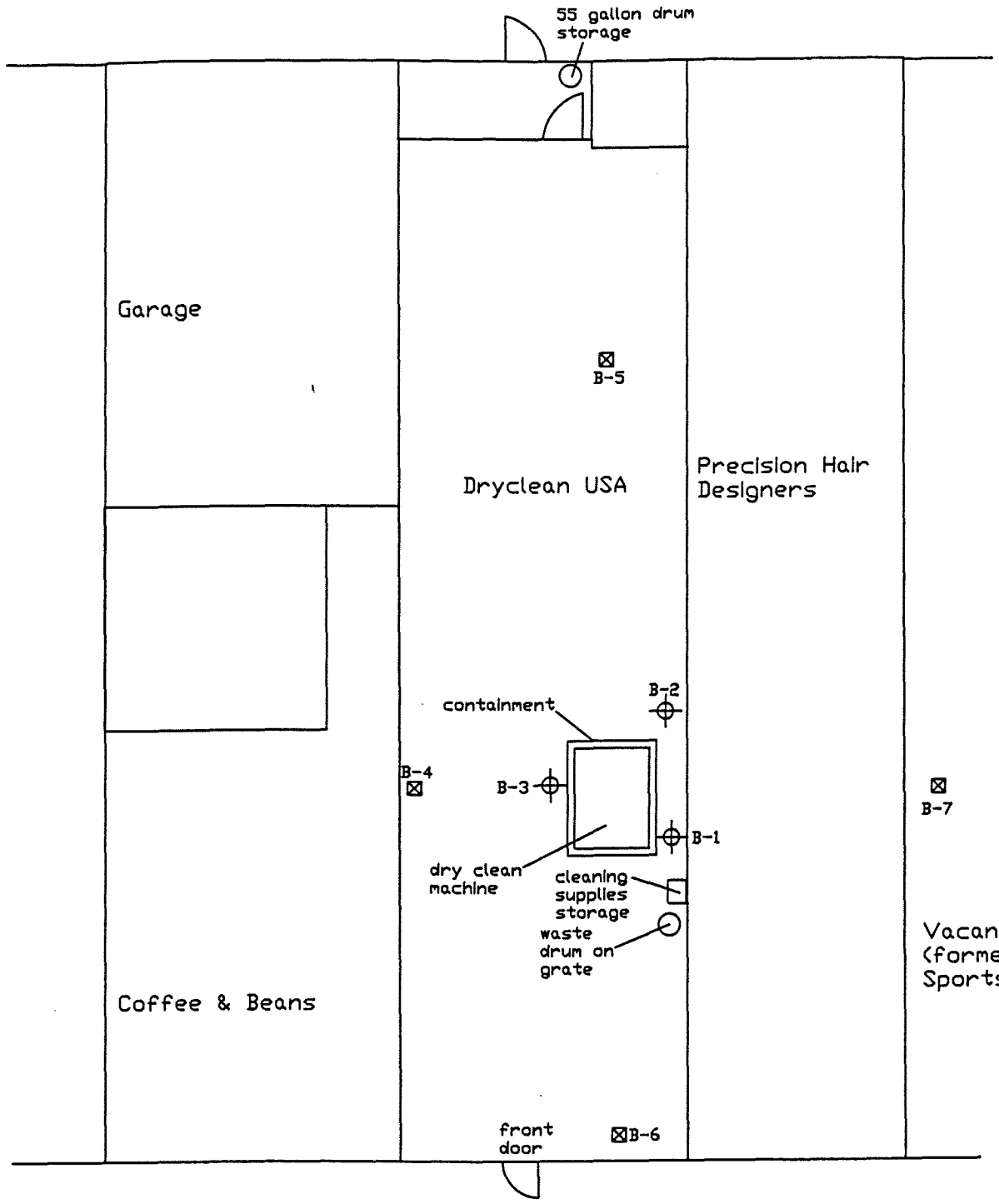
DRWN: MED	CHK'D: CJB
JOB#: 10080.4135.001.001	DATE: 10-14-98

FIGURE 1

SITE LOCATION MAP

Dryclean USA (store # 81)
5309 S. 108th Street, Hales Corners, WI

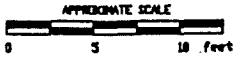
DWG: store 81



LEGEND

⊕ Boring Location Installed on 10-20-98

⊠ Boring Location Installed on 11-18-99



McLaren Hart® ENVIRONMENTAL ENGINEERING CORPORATION

DRWN: MED	CHK'D: GJB
JOB#: 10000.1321.001	DATE: 12/2/99

FIGURE 2
Boring Locations
Dryclean USA (store # 81)
5309 S. 108th Street
Hales Corners, WI

G:\common\spic&span\81b.dwg

Table 1
SOIL ANALYTICAL RESULTS
Dryclean USA Facility #81
5309 South 108th Street
Hales Corners, Wisconsin
All samples analyzed for Volatile Organic Compounds-special list (VOCs Method 8021).
Concentrations in Micrograms per Kilogram unless otherwise indicated

Dryclean USA Facility #81

	Sample Identification	B-1	B-1	B-2	B-2	B-3	B-3
	Depth (ft)	0.5-2.5	4.5-6.0	0.5-2.5	4.5-6.0	0.5-2.5	4.5-5.5
	Date Collected	10/20/98	10/20/98	10/20/98	10/20/98	10/20/98	10/20/98
ANALYTES:	1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
	trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
	Trichloroethene	ND	ND	ND	ND	ND	ND
	Tetrachloroethene (PCE)	8400	ND	1500	ND	2500	ND
	Vinyl chloride	ND	ND	ND	ND	ND	ND

	Sample Identification	B-4	B-4	B-5	B-5	B-6	B-6
	Depth (ft)	0.5-2.5	4.5-6	0.5-2.5	4.5-6	0.5-2.5	4.5-6
	Date Collected	11/18/99	11/18/99	11/18/99	11/18/99	11/18/99	11/18/99
ANALYTES:	1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
	cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
	trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
	Trichloroethene	ND	ND	ND	ND	ND	ND
	Tetrachloroethene (PCE)	ND	ND	ND	ND	96	ND
	Vinyl chloride	ND	ND	ND	ND	ND	ND

	Sample Identification	B-7	B-7	FB-1
	Depth (ft)	0.5-2.5	4.5-6	BLANK
	Date Collected	11/18/99	11/18/99	11/18/99
ANALYTES:	1,1-Dichloroethane	ND	ND	ND
	1,1-Dichloroethene	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND
	cis-1,2-Dichloroethene	ND	ND	ND
	trans-1,2-Dichloroethene	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND
	Trichloroethene	ND	ND	ND
	Tetrachloroethene (PCE)	ND	ND	ND
	Vinyl chloride	ND	ND	ND

8.4, 1.5, 2.5

Notes:
Only positive detection (i.e., > practical quantitation limit) shown.
ND: Not detected above practical quantitation limit.
NA: Not analyzed

WDNR DIRECT CONTACT RISK MODEL
SOIL CLEAN-UP GOALS

COMPOUND: PCE

PROJECT NAME: Dryclean USA - Hales Corners

SITE SPECIFIC PROPERTIES:

CONTAMINANT CONCENTRATION	C_{CHEM}=	9.1	mg/kg
WIDTH OF CONTAMINATED AREA	LS=	8	m
AREA OF CONTAMINATED SOIL	A=	70	m^2
ORGANIC CARBON CONTENT OF SOIL	OC=	0.0038	fraction
SOIL PARTICLE DENSITY	P_S=	2.6	g/cm^3
SOIL POROSITY	E=	0.45	unitless

CHEMICAL SPECIFIC PROPERTIES

ORAL CANCER SLOPE FACTOR (FROM RISK-BASED CONC. TABLE BACKGROUND INFORMATION)	SF_{O-CHEM}=	0.052	$[(mg/kg-day)]^{-1}$
INHALATION CANCER SLOPE FACTOR (FROM RISK-BASED CONC. TABLE BACKGROUND INFORMATION)	SF_{I-CHEM}=	0.00203	$[(mg/kg-day)]^{-1}$
MOLECULAR DIFFUSIVITY OR AIR DIFFUSION COEFFICIENT	D_{I-CHEM}=	0.0861	cm^2/sec
HENRY'S LAW CONSTANT	H_{CHEM}=	0.0149	$atm\text{-}m^3/mol$
ORGANIC CARBON PARTITION COEFFICIENT	$K_{OC-CHEM}$=	324	cm^3/gm

DNR DEFAULT EXPOSURE ASSUMPTIONS PER NR 720.19(5)(c)2.a.

INGESTION RATE OF SOIL AGE 1-6	$IR_{SOILAGE\ 1-6}$=	200	mg/day
INGESTION RATE OF SOIL AGE 7-31	$IR_{SOILAGE\ 7-31}$=	100	mg/day
DAILY INHALATION RATE	IR_{AIR}=	20	m^3/day
AVERAGE BODY WEIGHT AGE 1-6	$BW_{AGE\ 1-6}$ =	15	kg
AVERAGE BODY WEIGHT AGE 7-31	$BW_{AGE\ 7-31}$=	70	kg
EXPOSURE DURATION DURING AGES 1-6	$ED_{AGE\ 1-6}$ =	6	yr
EXPOSURE DURATION DURING AGES 7-31	$ED_{AGE\ 7-31}$=	24	yr
EXPOSURE DURATION FOR INHALATION OF PARTICULATES	$ED_{INHALATION}$=	30	yr
EXPOSURE FREQUENCY	EF=	350	days/year
AVERAGING TIME	AT=	70	yr

CONTINUED ON FOLLOWING PAGE

DIRECT CONTACT RISK MODEL (CONTINUED)

EXCESS CANCER RISK DUE TO INGESTION OF SOIL

AGE ADJUSTED SOIL INGESTION FACTOR	$IF_{SOIL/ADJ}$=	114.29	mg-yr/kg-day
CANCER RISK FROM INGESTION OF CONTAMINATED SOIL	$RISK_{ING-CHEM}$=	7.41E-07	unitless

EXCESS CANCER RISK DUE TO INHALATION OF PARTICLES

WIND SPEED IN MIXING ZONE	V=	2.25	m/sec
DIFFUSION HEIGHT	DH=	2	m
RESPIRABLE FRACTION	RF=	0.036	g/m^2-hr
FRACTION OF VEGETATIVE COVER	G=	0.05	unitless
MEAN ANNUAL WIND SPEED	Um=	4.5	m/sec
EQUIVALENT THRESHOLD VALUE OF WIND SPEED AT 10 M	Ut=	12.8	m/sec
FUNCTION DEPENDENT ON Um/Ut	F(x)=	0.0497	unitless
PARTICULATE EMISSION FACTOR	PEF=	2.51E+10	m^3/kg
RISK FROM INHALATION OF CONT. SOIL PARTICULATES	$RISK_{INHP-CHEM}$=	8.65E-14	unitless

EXCESS CANCER RISK DUE TO INHALATION OF VAPORS

UNIT CONVERSION - AREA OF CONTAMINATED SOIL	A_{CM}=	700000	cm^2
EXPOSURE INTERVAL	T=	7.90E+08	sec
SOIL-WATER PARTITION COEFFICIENT	K_{d-CHEM}=	1.2312	cm^3/g
SOIL-AIR PARTITION COEFFICIENT	$K_{as-CHEM}$=	0.496183	g/cm^3
EFFECTIVE DIFFUSIVITY	$D_{el-CHEM}$=	0.066155	cm^2/g
CHEMICAL ALPHA VALUE	P_{CHEM}=	0.008935	cm^2/sec
SOIL TO AIR VOLATILIZATION FACTOR	VF_{CHEM}=	8195.41	m^3/kg
CANCER RISK DUE TO INHALATION OF VAPORS	$RISK_{INHV-CHEM}$=	2.65E-07	unitless

EXCESS CANCER RISK DUE TO CHEMICAL CONTAMINATED SOIL

$RISK_{CHEM}$= 1.01E-06 unitless

References

1.) Smith, R.L. October, 1995. "EPA Region III Risk-Based Concentration Table Background Information."

2.) U.S. EPA 1991. Risk Assessment Guidance for Superfund Volume 1: Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals).

SOIL SAMPLE LOGGING, COLLECTION AND HANDLING

Following retrieval of the soil sample from the sampling device, a section of sample intended for laboratory analysis was contained. A portion of the sample was immediately transferred to laboratory-provided containers, field preserved (if appropriate), labeled, placed in a plastic bag, sealed and stored in an insulated container pending shipment to the laboratory.

The remaining sample was classified in accordance with ASTM method D-2487, with reference to method D-2488 (as appropriate). The descriptions may include information pertaining to soil type (Unified Soil Classification System code), grain size distribution, gradation, color (Munsell notation or other), odor, moisture content, consistency, grain shape, lithology and other content, structure, mottling and layering, as appropriate. Upon completion of classification, this portion of the sample was contained in a sealed plastic bag pending field screening, or was deposited in an appropriate container pending disposal.

The samples to be analyzed in the laboratory for volatile organic compounds (VOCs; SW-846 Method 8021) were transferred to laboratory-provided 60-ml glass jars with Teflon® septa. Twenty-five to 35 grams of soil was placed in the jars and preserved in the field with laboratory-provided purge-and-trap grade methanol. The jars were then securely sealed, labeled with the sample identification, date of collection and intended analysis. The selected sample containers were then placed in resealable plastic bags and stored on ice in an insulated container.

The samples were transported to a Wisconsin-certified laboratory via overnight courier or the laboratory courier or McLaren/Hart staff. All sampling locations and procedures were documented in a bound field notebook used to record daily activities at the site.

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SAMPLE CUSTODY PROCEDURES

Sample custody procedures are designed to comply with U.S. EPA and National Enforcement Investigation Council (NEIC) requirements for sample control. Samples collected during a site investigation are the responsibility of identified persons from the time they were collected until they or their derived data are incorporated into the final report. Stringent chain-of-custody procedures were followed to maintain and document sample possession.

Chain-of-custody forms were competed to the fullest extent possible prior to sample shipment. They included the following information:

- Sample identification;
- Date collected;
- Source of sample (including type of sample and site identification);
- Sampler name.

The forms were filled out in a legible manner using waterproof ink and were signed by the sampler. Similar information was provided on the sample label, which was securely attached to the sample bottle. Samples were always accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them signed, dated and noted the time on the record. A separate custody record accompanied each sample container. A copy of the custody record was retained by the field sampler and filed upon return to the office.

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SOIL PROBE SAMPLE COLLECTION METHODS

A soil probe (Geoprobe® or other) unit consists of a hydraulic ram with a hydraulic hammer, the sampling probe and driving rods. The sampling probe is a one- or two-inch diameter stainless steel tube into which a disposable polyethylene liner is inserted prior to each sampling event. The sampler is then driven into the ground using the hydraulic ram or, when the hydraulic ram cannot exert enough pressure to continue to push the sampler into the ground, the hammer.

Prior to driving the sampler into the ground and between each sampling event, the stainless steel tube was washed in a solution of water and Alconox®. The sampler was rinsed in clean water. A new, clean plastic sleeve was inserted for each sampling event. The plastic sleeves are disposable and not intended for reuse.

After the sampler penetrated the ground to the appropriate depth, the nose plug was removed (one-inch sampler only; the two-inch sampler does not use a nose plug) and the sampler was pushed/hammered an additional two feet into the ground (undisturbed soil collection procedures). Upon advancing the sampler two feet (one-inch sampler) or four feet (two-inch sampler), the entire sampler, with the plastic sleeve intact, was withdrawn. The plastic sleeve was then provided to the on-site geologist or scientist for soil classification and sample containerization.

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GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

December 3, 1999

George Bayer
McLaren/Hart
W239 N2890 Pewaukee Rd.
Pewauakee, WI 53072

RE: Dryclean USA #81

Dear George Bayer

Enclosed are the results of analyses for sample(s) received by the laboratory on November 19, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Andy Johnson
Project Manager

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

McLaren/Hart	Project:	Dryclean USA	Sampled: 11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received: 11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Reported: 12/3/99 13:55

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
B-5 0.5-2.5	B911427-01	Soil (WI)	11/18/99
B-5 4.5-6	B911427-02	Soil (WI)	11/18/99
B-4 0.5-2.5	B911427-03	Soil (WI)	11/18/99
B-4 4.5-6	B911427-04	Soil (WI)	11/18/99
B-6 0.5-2.5	B911427-05	Soil (WI)	11/18/99
B-6 4.5-6	B911427-06	Soil (WI)	11/18/99
B-7 0.5-2.5	B911427-07	Soil (WI)	11/18/99
B-7 4.5-6	B911427-08	Soil (WI)	11/18/99
B-8 .5-2.5	B911427-09	Soil (WI)	11/18/99
B-8 4.5-6	B911427-10	Soil (WI)	11/18/99
FB-1	B911427-11	Methanol	11/18/99

Not analyzed

Great Lakes Analytical

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Andy Johnson, Project Manager

Accreditations/Certifications: Illinois EPA-100261; New Jersey DEP-54001; USACE; Wisconsin DNR-999917160

GREAT LAKES ANALYTICAL

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McLaren/Hart	Project:	Dryclean USA	Sampled: 11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received: 11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Reported: 12/3/99 13:55

WDNR Volatile Organic Compounds by Method 8021
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Reporting Limit	Result	Units	Notes*
B-5 0.5-2.5			**B911427-01**			**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/24/99	25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"	25	ND	"	
1,1-Dichloroethene	"	"	"	25	ND	"	
cis-1,2-Dichloroethene	"	"	"	25	ND	"	
trans-1,2-Dichloroethene	"	"	"	25	ND	"	
Tetrachloroethene	"	"	"	25	**96**	"	
1,1,1-Trichloroethane	"	"	"	25	ND	"	
1,1,2-Trichloroethane	"	"	"	25	ND	"	
Trichloroethene	"	"	"	25	ND	"	
Vinyl chloride	"	"	"	25	ND	"	
B-5 4.5-6			**B911427-02**			**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/24/99	25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"	25	ND	"	
1,1-Dichloroethene	"	"	"	25	ND	"	
cis-1,2-Dichloroethene	"	"	"	25	ND	"	
trans-1,2-Dichloroethene	"	"	"	25	ND	"	
Tetrachloroethene	"	"	"	25	ND	"	
1,1,1-Trichloroethane	"	"	"	25	ND	"	
1,1,2-Trichloroethane	"	"	"	25	ND	"	
Trichloroethene	"	"	"	25	ND	"	
Vinyl chloride	"	"	"	25	ND	"	
B-4 0.5-2.5			**B911427-03**			**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/25/99	25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"	25	ND	"	
1,1-Dichloroethene	"	"	"	25	ND	"	
cis-1,2-Dichloroethene	"	"	"	25	ND	"	
trans-1,2-Dichloroethene	"	"	"	25	ND	"	
Tetrachloroethene	"	"	"	25	ND	"	
1,1,1-Trichloroethane	"	"	"	25	ND	"	
1,1,2-Trichloroethane	"	"	"	25	ND	"	
Trichloroethene	"	"	"	25	ND	"	
Vinyl chloride	"	"	"	25	ND	"	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions.*

Andy Johnson, Project Manager

Accreditations/Certifications: Illinois EPA-100261; New Jersey DEP-54001;
USACE; Wisconsin DNR-999917160

GREAT LAKES ANALYTICAL

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McLaren/Hart	Project:	Dryclean USA	Sampled: 11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received: 11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Revised Report: 12/9/99 13:55

WDNR Volatile Organic Compounds by Method 8021
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Reporting Limit	Result	Units	Notes*
B-4 4.5-6			**B911427-04**			**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/25/99	25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"	25	ND	"	
1,1-Dichloroethene	"	"	"	25	ND	"	
cis-1,2-Dichloroethene	"	"	"	25	ND	"	
trans-1,2-Dichloroethene	"	"	"	25	ND	"	
Tetrachloroethene	"	"	"	25	ND	"	
1,1,1-Trichloroethane	"	"	"	25	ND	"	
1,1,2-Trichloroethane	"	"	"	25	ND	"	
Trichloroethene	"	"	"	25	ND	"	
Vinyl chloride	"	"	"	25	ND	"	
B-6 0.5-2.5			**B911427-05**			**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/25/99	25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"	25	ND	"	
1,1-Dichloroethene	"	"	"	25	ND	"	
cis-1,2-Dichloroethene	"	"	"	25	ND	"	
trans-1,2-Dichloroethene	"	"	"	25	ND	"	
Tetrachloroethene	"	"	"	25	ND	"	
1,1,1-Trichloroethane	"	"	"	25	ND	"	
1,1,2-Trichloroethane	"	"	"	25	ND	"	
Trichloroethene	"	"	"	25	ND	"	
Vinyl chloride	"	"	"	25	ND	"	
B-6 4.5-6			**B911427-06**			**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/25/99	25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"	25	ND	"	
1,1-Dichloroethene	"	"	"	25	ND	"	
cis-1,2-Dichloroethene	"	"	"	25	ND	"	
trans-1,2-Dichloroethene	"	"	"	25	ND	"	
Tetrachloroethene	"	"	"	25	ND	"	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions.*

Andy Johnson, Project Manager

Accreditations/Certifications: Illinois EPA-100261; New Jersey DEP-54001;
Wisconsin DNR-999917160

GREAT LAKES ANALYTICAL

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McLaren/Hart	Project:	Dryclean USA	Sampled: 11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received: 11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Reported: 12/3/99 13:55

WDNR Volatile Organic Compounds by Method 8021
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
B-6 4.5-6 (continued)			**B911427-06**				**Soil (WI)**	
1,1,1-Trichloroethane	9110558	11/22/99	11/25/99		25	ND	ug/kg dry	
1,1,2-Trichloroethane	"	"	"		25	ND	"	
Trichloroethene	"	"	"		25	ND	"	
Vinyl chloride	"	"	"		25	ND	"	
B-7 0.5-2.5			**B911427-07**				**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/25/99		25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"		25	ND	"	
1,1-Dichloroethene	"	"	"		25	ND	"	
cis-1,2-Dichloroethene	"	"	"		25	ND	"	
trans-1,2-Dichloroethene	"	"	"		25	ND	"	
Tetrachloroethene	"	"	"		25	ND	"	
1,1,1-Trichloroethane	"	"	"		25	ND	"	
1,1,2-Trichloroethane	"	"	"		25	ND	"	
Trichloroethene	"	"	"		25	ND	"	
Vinyl chloride	"	"	"		25	ND	"	
B-7 4.5-6			**B911427-08**				**Soil (WI)**	
1,1-Dichloroethane	9110558	11/22/99	11/25/99		25	ND	ug/kg dry	
1,2-Dichloroethane	"	"	"		25	ND	"	
1,1-Dichloroethene	"	"	"		25	ND	"	
cis-1,2-Dichloroethene	"	"	"		25	ND	"	
trans-1,2-Dichloroethene	"	"	"		25	ND	"	
Tetrachloroethene	"	"	"		25	ND	"	
1,1,1-Trichloroethane	"	"	"		25	ND	"	
1,1,2-Trichloroethane	"	"	"		25	ND	"	
Trichloroethene	"	"	"		25	ND	"	
Vinyl chloride	"	"	"		25	ND	"	
FB-1			**B911427-11**				**Methanol**	
1,1-Dichloroethane	9120021	11/22/99	12/1/99		25	ND	ug/l	
1,2-Dichloroethane	"	"	"		25	ND	"	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions.*

Andy Johnson, Project Manager

Accreditations/Certifications: Illinois EPA-100261; New Jersey DEP-54001;
USACE; Wisconsin DNR-999917160

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McLaren/Hart	Project:	Dryclean USA	Sampled: 11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received: 11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Reported: 12/3/99 13:55

WDNR Volatile Organic Compounds by Method 8021
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
FB-1 (continued)			**B911427-11**				**Methanol**	
1,1-Dichloroethene	9120021	11/22/99	12/1/99		25	ND	ug/l	
cis-1,2-Dichloroethene	"	"	"		25	ND	"	
trans-1,2-Dichloroethene	"	"	"		25	ND	"	
Tetrachloroethene	"	"	"		25	ND	"	
1,1,1-Trichloroethane	"	"	"		25	ND	"	
1,1,2-Trichloroethane	"	"	"		25	ND	"	
Trichloroethene	"	"	"		25	ND	"	
Vinyl chloride	"	"	"		25	ND	"	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions.*

Andy Johnson, Project Manager

Accreditations/Certifications: Illinois EPA-100261; New Jersey DEP-54001;
USACE; Wisconsin DNR-999917160

GREAT LAKES ANALYTICAL

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McLaren/Hart	Project:	Dryclean USA	Sampled:	11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received:	11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Reported:	12/3/99 13:55

Dry Weight Determination
Great Lakes Analytical

Sample Name	Lab ID	Matrix	Result	Units
B-5 0.5-2.5	B911427-01	Soil (WI)	86.1	%
B-5 4.5-6	B911427-02	Soil (WI)	79.9	%
B-4 0.5-2.5	B911427-03	Soil (WI)	86.4	%
B-4 4.5-6	B911427-04	Soil (WI)	84.4	%
B-6 0.5-2.5	B911427-05	Soil (WI)	86.5	%
B-6 4.5-6	B911427-06	Soil (WI)	80.8	%
B-7 0.5-2.5	B911427-07	Soil (WI)	88.9	%
B-7 4.5-6	B911427-08	Soil (WI)	87.1	%

Great Lakes Analytical

Andy Johnson, Project Manager

GREAT LAKES ANALYTICAL

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Buffalo Grove, Illinois 60089

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McLaren/Hart	Project:	Dryclean USA	Sampled: 11/18/99
W239 N2890 Pewaukee Rd.	Project Number:	#81	Received: 11/19/99
Pewauakee, WI 53072	Project Manager:	George Bayer	Reported: 12/3/99 13:55

Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

Great Lakes Analytical

Andy Johnson, Project Manager

GREAT LAKES ANALYTICAL

CHAIN OF CUSTODY REPORT

1380 Busch Parkway
Buffalo Grove, IL 60089-4505
(847) 808-7766
FAX (847) 808-7772

20725 Watertown Road
Brookfield, WI 53501
(414) 798-1030
FAX (414) 798-1066

Client: McLaren Hart
Address: W239 N 2890 Pewaukee Rd
Pewaukee, WI 53072
Report to: George Bayer
Phone #: (414) 523-2040
Fax #: (414) 523-2059
Bill To:
Address:
State & Program: WI
Phone #:
Fax #:
TAT: (5 DAY) 4 DAY 3 DAY 2 DAY 1 DAY < 24 HRS.
DATE RESULTS NEEDED: 11/30
TEMPERATURE UPON RECEIPT: 4°
AIR BILL NO. GLA PU
Project: Dryclean USA #81
Sampler: George Bayer
PO/Quote #:

FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PRESERVATIVES	NO. CONTAINERS	TYPE CONTAINERS	VOC Special List: PCE, TCE, 111TCA, 11DCE, 112TCA, 11DCA, 12DCA, Trans 1,2 DCE, Vinyl chloride, Cis 1,2 DCE	Dry wt	CRACKED BROKEN	IMPROPERLY SEALED	GOOD CONDITION	LABORATORY ID NUMBER
1 B-5 0.5-2.5'	11/18/99		Soil	MeOH	2		X	X			✓	B911427-01
2 B-5 4.5-6'	↓		↓	↓	↓		X	↓			↓	02
3 B-4 0.5-2.5'	↓		↓	↓	↓		X	↓			↓	03
4 B-4 4.5-6'	↓		↓	↓	↓		X	↓			↓	04
5 B-6 0.5-2.5	↓		↓	↓	↓		X	↓			↓	05
6 B-6 4.5-6'	↓		↓	↓	↓		X	↓			↓	06
7 B-7 0.5'-2.5'	↓		↓	↓	↓		X	↓			↓	07
8 B-7 4.5'-6'	↓		↓	↓	↓		X	↓			↓	08
9 B-8 0.5-2.5' (do not need to run 12/3/99)	↓		↓	↓	↓		HOLD				↓	09
10 B-8 4.5-6' / FB-1 MEOH BLANK	↓		↓	↓	↓		HOLD / Run Field Blank				↓	10

RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME	RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME
		K Outman	11/19/99	K Outman	11/19/99	C. Newman	11/19

COMMENTS:

PAGE OF

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dryclean USA		B-4

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental Denny Totske	11/18/99	11/18/99	Soil Probe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___ ___ ___	___ ___ ___ ___ ___ ___		Feet	Feet	2.0 Inches

Boring Location
State Plane N, E S/C/N | Lat ° ' "
1/4 of 1/4 of Section T N,R | Long ° ' "

Local Grid Location (If applicable)
Feet ☐ N ☐ S Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	41	

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	24		0	0.3' Concrete				<1						
			1	FILL, Fine to coarse grained sand, little gravel, trace silt, light brown, moist.										
			2	FILL, clay silty, trace fine to coarse grained sand and gravel, grayish brown, moist.										
2	24				CL			<1						
			3	CLAY, silty, trace roots, blue gray to black, moist.										
			4											
3	18			CLAY, silty, gray with light brown mottling, moist.	CL			<1						
			5											
			6											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	McLaren/Hart Pewaukee, Wisconsin Tel: 414-523-2040, Fax: 414-523-2059

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dryclean USA		B-5

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental Denny Totske	11/18/99	11/18/99	Soil Probe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	— — — — — — — —		Feet	Feet	2.0 Inches

Boring Location
State Plane N, E S/C/N
1/4 of 1/4 of Section T N,R
Lat ° ' "
Long ° ' "

Local Grid Location (If applicable)
Feet ☐ N ☐ S Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	41	

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	24		1	0.3' Concrete FILL, Fine to coarse grained sand, little gravel, trace silt, light brown, moist.				<1						
2	24		2 3	CLAY, silty, trace fine to coarse grained sand and gravel, grayish brown, moist.	CL			<1						
3	24		4 5 6	CLAY, silty, gray with light brown mottling, moist.	CL			<1						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	McLaren/Hart Pewaukee, Wisconsin Tel: 414-523-2040, Fax: 414-523-2059

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dryclean USA		B-7

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental Denny Totske	11/18/99	11/18/99	Soil Probe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet	Feet	2.0 Inches

Boring Location
State Plane N, E S/C/N Lat ° ' "
1/4 of 1/4 of Section T N,R Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	41	

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	24		0	0.3' Concrete				<1						
			1	FILL, Fine to coarse grained sand, little gravel, trace silt, light brown, moist.										
			2	FILL, clay silty, trace fine to coarse grained sand and gravel, grayish brown, moist.										
2	24				CL			<1						
			3	CLAY, silty, trace roots, blue gray to black, moist.										
					CL									
			4											
3	18			CLAY, silty, gray with light brown mottling, moist.				<1						
			5											
			6											

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dryclean USA		B-8

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental Denny Totske	11/18/99	11/18/99	Soil Probe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	— — — — — —		Feet	Feet	2.0 Inches

Boring Location
State Plane N, E S/C/N Lat ° ' "
1/4 of 1/4 of Section T N,R Long ° ' "
Local Grid Location (If applicable)
Feet ☐ N ☐ S Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	41	

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	24		0	0.3' Concrete				<1						
			1	FILL, Fine to coarse grained sand, little gravel, trace silt, light brown, moist.										
			2	FILL, clay silty, trace fine to coarse grained sand and gravel, grayish brown, moist.										
2	24							<1						
			3	CLAY, silty, trace roots, blue gray to black, moist.	CL									
					CL									
			4											
3	18			CLAY, silty, gray with light brown mottling, moist.				<1						
			5											
			6											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

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SITE INVESTIGATION WORK PLAN

DRYCLEAN USA
FACILITY #81
5309 SOUTH 108th STREET
HALES CORNERS, WISCONSIN

Prepared for:

Mr. Robert Miller
Spic and Span, Inc.
4301 North Richards Street
Milwaukee, WI 53212

Prepared by:

McLaren/Hart
Environmental Engineering Corporation
W239 N2890 Pewaukee Road, Unit D
Pewaukee, Wisconsin 53072

July 1, 1999

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ATTACHMENTS

SITE INVESTIGATION WORK PLAN

DRYCLEAN USA
FACILITY #81
5309 SOUTH 108th STREET
HALES CORNERS, WISCONSIN

1.0 INTRODUCTION

1.1 BACKGROUND

The following report summarizes proposed investigation activities to be performed in or adjacent to the Dryclean USA facility. These activities will be performed as a follow-up to the investigation activities previously performed by McLaren/Hart on October 20, 1998 and documented in the attached Site Investigation Results report dated November 2, 1998. A site location diagram is presented in Figure 1.

Dryclean USA is a subsidiary of Spic and Span, Inc. and the Dryclean USA facility space is leased from the Hales Corners Plaza Shopping Center, the property owner. The Shopping Center was constructed in 1978. The dry cleaning machine was placed in a containment structure in 1995.

On October 20, 1998, McLaren/Hart performed three soil boring tests (B-1 to B-3) in the immediate vicinity of the dry cleaning machine. Soil samples were collected from each boring from approximately 0.5 to 2.5 and 4.5 to 6 feet below ground surface (bgs). The samples were analyzed for tetrachloroethylene (PCE) and its potential breakdown products. Generally, one sample was obtained from fill soils beneath the concrete slab and one sample was obtained from native soils (or fill) found at a greater depth. Laboratory analyses were performed by Great Lakes Analytical using U.S. EPA SW-846 Method 8021. PCE concentrations ranged from "no detect" to 8400 µg/kg. PCE was not detected in the samples collected from below 4.5 feet bgs. No PCE breakdown products were detected above the laboratory detection limit of 25 µg/kg. Additional details are included in the attached Site Investigation Results report.

1.2 SITE LOCATION AND OWNERSHIP

The Property is located in the SE 1/4 of the SE 1/4 of Section 30, Township 6 North, Range 21 East. The address is 5309 South 108th Street. The Property is owned by:

Hales Corners Shopping Center
11117 West Greenfield Avenue
West Allis, WI 53214
Attention: Mr. Charles E. Benidt
(414) 778-0883

The responsible party for the site investigation:

Spic & Span, Inc.
4301 North Richards Street
Milwaukee, WI 53212
Attention: Mr. Robert Miller
(414) 964-5050

1.3 CONSULTANTS AND CONTRACTORS

The site investigation consultant is:

McLaren/Hart Environmental Engineering Corporation
W239 N2890 Pewaukee Road, Unit D
Pewaukee, Wisconsin 53707
Attention: Mr. Brian W. Schneider P.E.
(414) 523-2040 - phone
(414) 523-2059 - fax

As part of the investigation, the following service/commodity providers will conduct activities associated with the investigation:

Soil Probe Services

On-Site Environmental Services, Inc.
P.O. Box 280
Sun Prairie, WI 53590
(608) 837-8992

Laboratory Analytical Services

Great Lakes Analytical
1380 Busch Parkway
Buffalo Grove, IL 60089
(847) 808-7766

2.0 OBJECTIVES AND PROJECT SCOPE

2.1 PROJECT SCOPING

To the extent practical, the scope of the project was defined in consideration of the criteria listed in NR 716.07, as follows:

- Site Use. The Dryclean USA facility is located in the Hales Corners Shopping Center and has operated as a dry cleaning facility at this location since November, 1978.

- Type and Amount of Impact. Based on investigations performed to date, soils in the immediate vicinity of the dry cleaning machine are impacted with PCE. Three samples collected from 0.5 to 2.5 feet bgs adjacent to the machine contained concentrations of 1,500, 2,500 and 8,400 ug/kg PCE.

- Environmental Media Potentially Affected. PCE impacts are estimated to be predominately within the coarse fill soils underlying the Dryclean USA facility.

- Need for Access Permission. The Hales Corners Plaza Shopping Center owns the property on which the impacts were found. Based on prior investigation findings, the impacts are believed to be limited to coarse fill soils in the vicinity of the dry cleaning machine and may extend to adjacent tenant spaces.

  Based on existing data, no off-site impacts are suspected and off-site access permission will not be required. Access permission may be required from both the adjacent tenants and the property owner (see Figure 2).

- Potential Receptors. No groundwater impacts have been identified at the site. Groundwater was not observed during the previous investigation.

- Significant Resources. Based on existing data, the site has not affected and does not present a threat to any threatened or endangered species, sensitive habitats, wetlands, resource waters, or historical or archeological sites.

- Potential Remedial Actions. Potential remedial actions, if required, may include natural attenuation, bioremediation, soil vapor extraction and/or capping and monitoring.

The additional information needed to determine an appropriate remedial response includes, the lateral boundaries of affected soil in the vicinity of the dry cleaning machine and other data needed to determine a site-specific cleanup approach.

2.2 SITE PHYSIOGRAPHY/SAMPLING STRATEGY

The sampling strategy was developed to identify the boundaries of soil impact, based on the known site conditions and characteristics. The sampling locations were selected based on data obtained from prior investigations and the following site characteristics:

- Site Topography. Based on the United States Geological Survey (USGS), Hales Corners, Wisconsin, 7.5 minute topographic map (1994), the topography in the immediate vicinity of the site slopes gently downward to the southwest from the site.

- Surface Water Drainage. Storm water along the site is anticipated to generally drain eastward along the curb side drainage associated with the parking lot of the retail mall in which Dryclean USA is located. The curb side drainage discharges to the storm sewer system. Storm water collected on the roof of the building is conveyed by roof drains to the storm sewer as well.

- Site Geology/Hydrogeology. The surface soils (less than five feet deep) have been classified by the U.S. Department of Agriculture, Soil Conservation Service (1971). The general soil association is the Ozaukee -Morley-Mequon Association with site-specific soils consisting of Ozaukee Silt Loam Series. The general soil association is described as well-drained to poorly drained soils with a subsoil of silty clay that formed in areas of thin loess and silty clay loam glacial till on moraines.

  The Ozaukee Silt Loam consists of moderately well-drained, silty soils that have a silty clay loam and silty clay subsoil underlain by calcareous silty clay loam glacial till. The Ozaukee soils have moderately slow permeability and high available water capacity.

  As noted, the site soils formed in areas of glacial till. The glacial till deposits in the area of the subject property vary between 100 to 200 feet thick and consist of unsorted, unstratified, unconsolidated mixtures of clay, silt, sand, pebbles, cobbles and boulders. The glacial till overlies the Niagara Dolomite bedrock which is up to 450 feet thick. The glacial deposits, as well as the bedrock, are considered to be groundwater aquifers.

3.0 INVESTIGATION SCOPE OF WORK

Based on the information obtained during the site investigation performed on October 20, 1998, McLaren/Hart recommends the following approach to assess the extent of the subsurface impacts.

Assuming that significant subsurface structures are not present in the vicinity of the dry cleaning machine, four to eight borings will be installed and soil samples from 0.5 to 2.5 feet bgs and 4.5 to 6 feet bgs will be collected for laboratory analysis. Boring locations are as follows:

- **B-4** Located approximately 10 feet south of B-3.
- **B-5** Located approximately 15 feet west of the dry cleaning machine.
- **B-6** Located approximately 20 feet east of the dry cleaning machine.
- **B-7** Located approximately 16 feet north of the dry-cleaning machine, within the Precision Hair Designers facility. If access to this location is denied, the boring will be performed in the adjacent facility (store) to the north.
- **B-8 thru B-11** Optional boring locations that will be performed only if the newly installed borings fail to define the horizontal extent of PCE impacts.

The actual depths from which the samples are collected will depend on observed soil characteristics. The approximate referenced soil boring locations are depicted on Figure 2.

3.1 FIELD METHODS AND LABORATORY ANALYSES

3.1.1 Soil Sample Collection and Handling

Soil sampling will be performed using soil probe techniques. Upon collection, the soil will be classified with respect to USGS classification, color, moisture content, evidence of impact (discoloration and odor) and other observations. When practical, ASTM methods D-2487 and D-2488 will be utilized. The information will be recorded in a bound field notebook used to record daily activities.

As soon as possible following sample collection, the soil samples designated for laboratory analysis will be transferred to appropriate laboratory-provided containers. A fresh pair of latex (or similar) gloves will be used during the handling of each sample to minimize the potential for cross contamination. The samples will be containerized in pre-tarred 60-ml glass jars with Teflon® septa. Approximately 25 to 30 grams of sample will be placed in the jar and preserved with laboratory-

provided purge-and-trap grade methanol. Soil samples intended for analysis of dry weight will be contained in HDPE jars (provided by the laboratory) or resealable bags.

The sample jars will be labeled with the sample location identification, depth of sample, date of sample collection and intended analysis. The sample jars will then be placed in resealable plastic bags and packed in an iced, insulated container. A chain-of-custody form will be completed each day, and will accompany each container of samples from the site to the laboratory. Samples will be transported from the facility to the laboratory via overnight courier.

3.1.2 Decontamination Procedures

The auger and all down-hole equipment will be decontaminated before each boring location using an Alconox or TSP solution and rinsed in known-clean water (distilled, deionized or municipal potable). Any sampling tools (i.e., spoons, knives, spatulas, etc.) will also be cleaned in a solution of Alconox or TSP solution and rinsed in known-clean water prior to collection of each sample. A clean pair of latex, or equivalent, gloves is used for each sample to minimize the potential for cross-contamination.

3.1.3 Laboratory Analysis

Laboratory analysis will be performed by En Chem, Inc. using Wisconsin-modified U.S. EPA SW-846 Method 8021, for the target list compounds: PCE 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene, 1,1,2-trichloroethane, 1,1-dichlorethane, 1,2-dichloroethane, and vinyl chloride. The target list is defined to identify the compound used at the facility (PCE), its potential breakdown products and related compounds.

3.2 QUALITY ASSURANCE/QUALITY CONTROL METHODS

The following quality assurance/quality control measures will be implemented during the site investigation activities.

- Decontamination procedures and measures to minimize the potential for cross-contamination of samples will be followed as specified in section 3.1.2.
- All site activities will be recorded in a bound field notebook (see Field Documentation section below).
- Chain-of-custody procedures will be followed as specified in section 3.1.2.

3.2.1 Replicate and Blank Samples

One methanol blank will be sampled on-site. The samples will be shipped on ice; therefore, no temperature blanks are anticipated to be required. If no solid ice is present in the cooler upon receipt by the laboratory, the melt waste will be measured for temperature.

3.3 INVESTIGATIVE WASTE MANAGEMENT

All investigative wastes generated during site activities, including soil probe spoils, sampling gloves and used sample jars not intended for laboratory analysis, will be contained in labeled, 55-gallon drums. The drums will be stored on-site, out of the way of daily site activities, pending disposal.

3.4 FIELD DOCUMENTATION

All site activities will be documented in a bound field notebook. Included in the daily documentation are:

- Procedures for sampling and other routine activities associated with the site investigation;
- Field observations; and
- Chronological log of site activities

3.5 SITE HEALTH AND SAFETY

The protection of site personnel and the general public is a primary concern. All reasonable measures will be taken to protect the health and safety of the personnel and general public. A site Health and Safety Plan that meets or exceeds the standards found in 29 CFR 1910.120 will be prepared and followed during site activities. All project personnel and subcontracted personnel are trained in hazardous materials handling and have appropriate on-site training and experience. During site activities, the Health and Safety Officer (HSO) may halt work if, in the HSO's opinion, unsafe conditions are present. Work will not continue until the unsafe conditions have been rectified to the satisfaction of the HSO.

3.6 REPORTING

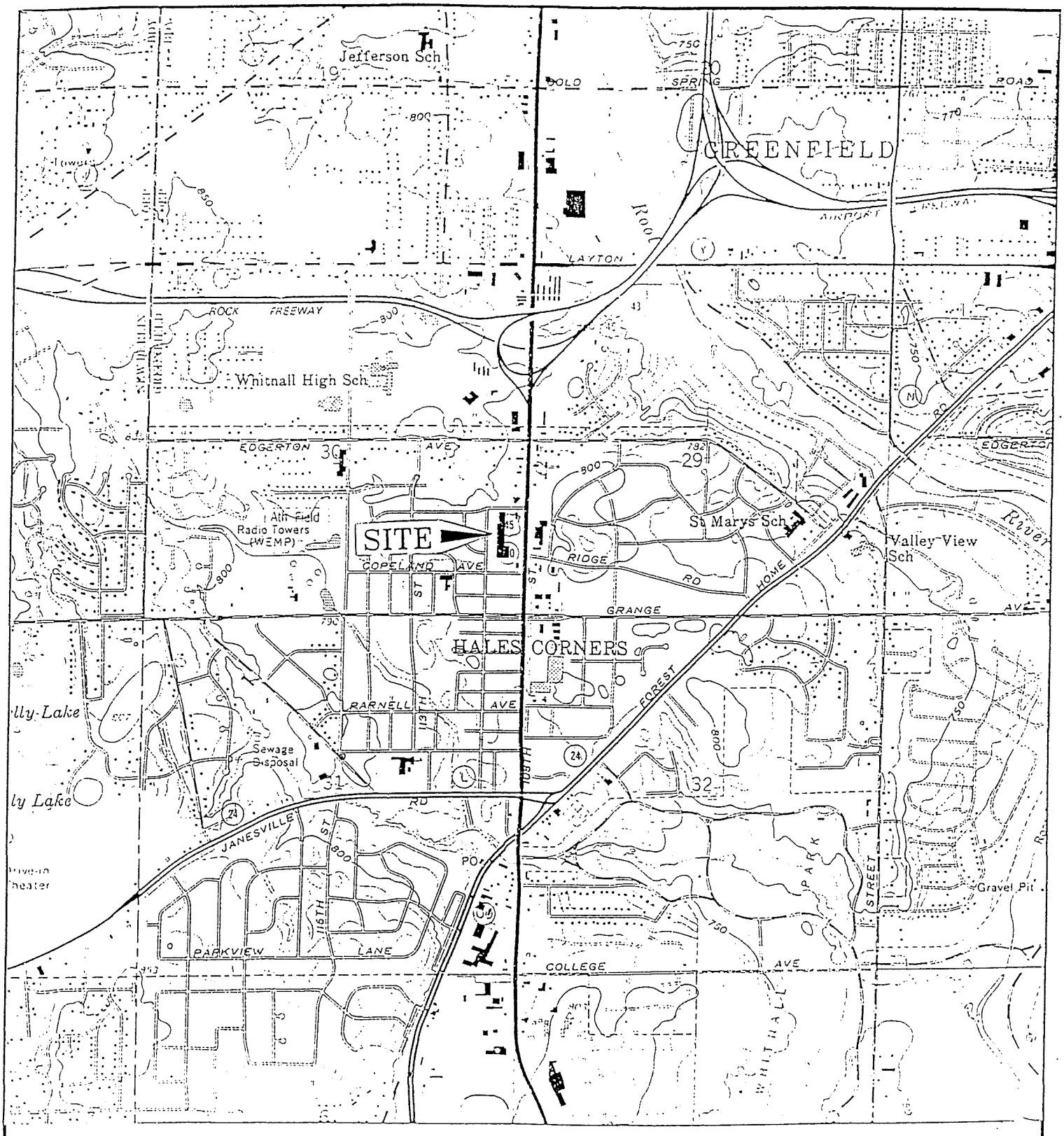
Upon receipt of the laboratory results, if the boundaries of impact have been sufficiently defined, a report detailing the investigative results will be prepared and submitted to the WDNR. Two copies of the report will be submitted. The report will include:

- The WDNR's identification number for the Dryclean USA facility investigation (if issued) and the date of submittal;
- An executive summary summarizing the investigative results, conclusions and, if necessary, recommendations for further site work;
- The project title and purpose;
- An identification of the current property owner or other parties, as appropriate;
- An identification of the consulting firm and all subcontractors performing work associated with the investigation;
- An assessment of the potential for events at the site to present a public health threat and a summary of any response actions at the facility relating to the investigation;
- Investigative methods; and
- Investigative results, including in-field observations, laboratory results, discrepancies between the field observations and laboratory results, and data interpretations.

4.0 SCHEDULE

Upon approval of this Work Plan by Spic and Span, Inc., and the Hales Corners Plaza Shopping Center, a copy will be submitted to the WDNR. It is assumed work will proceed without formal WDNR approval.

The site work will begin following Digger's Hotline clearance, and clearance by the Hales Corners Shopping Center to proceed. Site work is anticipated to require one day. Laboratory results are generally received within three weeks of sample submittal. The investigation is anticipated to be completed within four weeks following receipt of the laboratory reports. Therefore, the final report is anticipated to be completed within eight weeks of initiation of field activities, assuming additional investigation is not required.



USGS 7.5 minute series Hales Corners, Wisconsin topographic quadrangle dated 1959, photorevised 1994

N
W E
S

APPROXIMATE SCALE

0 1000 2000 3000 4000 5000 Feet

McLaren Hart ENVIRONMENTAL ENGINEERING CORPORATION

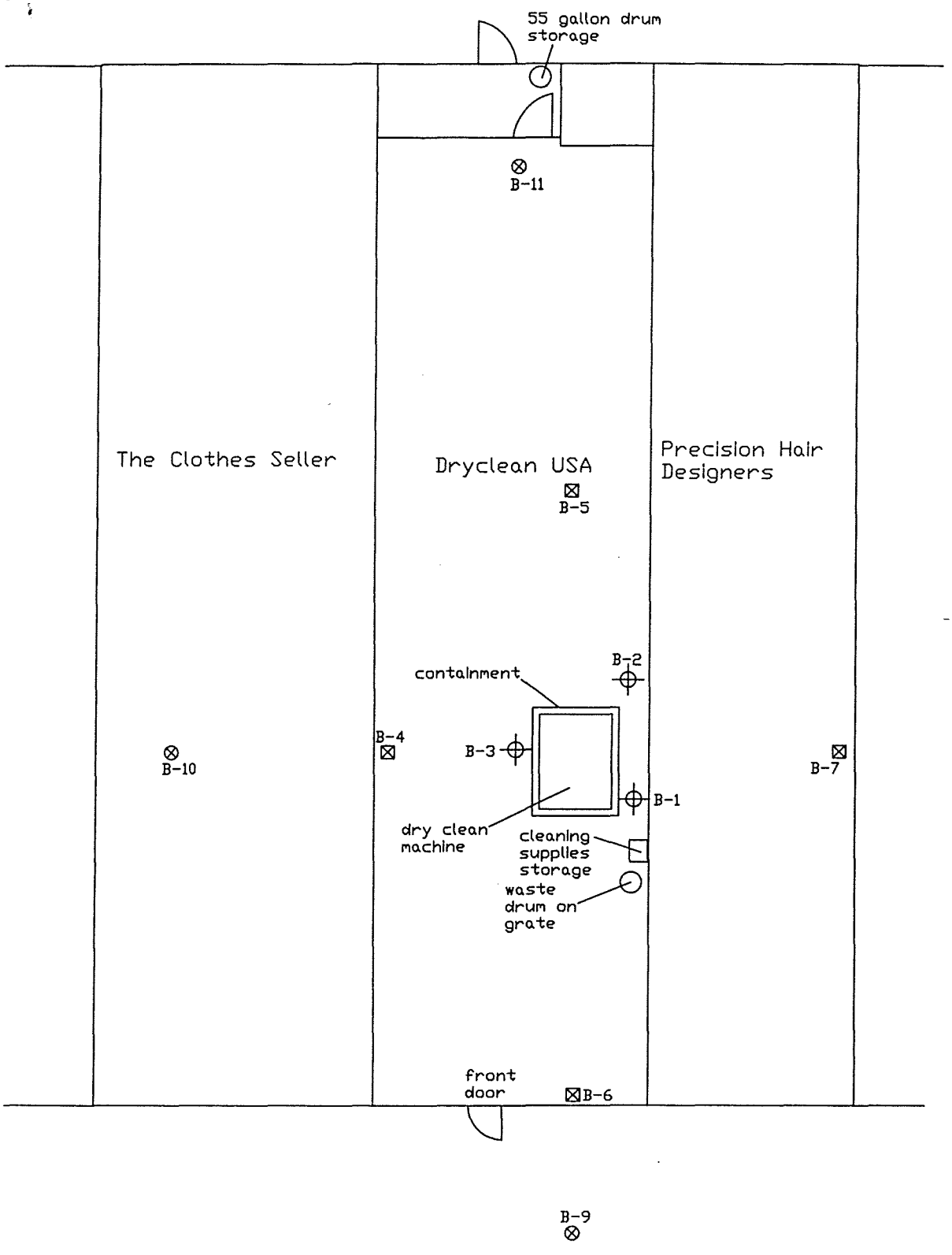
DRWN: MED	CHK'D: GJB
JOB#: 10080.4135.001.001	DATE: 10-14-98

FIGURE 1

SITE LOCATION MAP

Dryclean USA (store # 81)
5309 S. 108th Street, Hales Corners, WI

DWG store 81



LEGEND

- Boring Location
- ⊠ Proposed Boring Location
- ⊗ Optional Boring Location (if required)

W S N E

APPROXIMATE SCALE
0 5 10 feet

McLaren Hart® ENVIRONMENTAL ENGINEERING CORPORATION

DRWN: MED	CHK'D: GJB
JOB#: 10080.4135.001.001	DATE: 10-30-98

FIGURE 2
Boring Locations
Dryclean USA (store # 81)
5309 S. 108th Street
Hales Corners, WI

DWG: 81

July 1, 1999

Mr. Bob Miller
Spic & Span, Inc.
4301 North Richards Street
Milwaukee, WI 53212-1097

Re: Site Investigation Results
Dryclean U.S.A. Facility #81
5309 S. 108th Street, Hales Corners, Wisconsin
McLaren/Hart Project No.: 10080.4135.001-001

Dear Bob:

McLaren/Hart Environmental Engineering Corporation (McLaren/Hart) conducted a site investigation on behalf of Spic & Span, Incorporated at the Dryclean U.S.A. facility located at 5309 S. 108th Street, Hales Corners, Wisconsin. Soils beneath the subject facility were investigated to determine if site dry cleaning operations have potentially contributed to subsurface impacts. The site investigation scope was outlined in our Site Investigation Workplan dated October 13, 1998.

The facility is located in a strip mall. Precision Hair Designers occupies the tenant space immediately to the north while The Clothes Seller occupies the tenant space immediately to the south. The strip mall was constructed in 1978. A site location diagram is presented in Figure 1.

Scope and Methods

On October 6, 1998, McLaren/Hart personnel visited the site to select boring locations. The areas below the loading door and the filter changing equipment of the dry cleaning machine were identified as having the greatest potential for impact. A third boring location was selected opposite these, at the corner of the dry cleaning machine. Prior to any boring installation, Diggers Hotline was notified to ensure that buried facility utilities would not be encountered.

Sampling was conducted on October 20, 1998 using soil probe techniques. Borings were advanced to approximately 6 feet below ground surface (bgs). Boring locations are presented in Figure 2. The following locations were sampled:

1. Northeast corner of dry cleaning machine (boring B-1);
2. Northwest of dry cleaning machine (boring B-2); and
3. Adjacent to dry cleaning machine loading door (boring B-3).

Upon sample collection, the soil was classified with respect to United States Geological Survey methods and observed for color, moisture content, and any evidence of impact, including discoloration and odor. The information was recorded in a bound field notebook used to record daily activities.

As soon as possible following sample collection, the soil samples selected for laboratory analysis were transferred to appropriate laboratory-provided containers. A fresh pair of latex (or similar) gloves were used during the handling of each sample to minimize the potential for cross contamination. The samples were containerized in laboratory-provided 60-ml glass jars with Teflon® septa. Twenty-five (25) to 35 grams of soil were placed in the jars and each sample was preserved in the field with laboratory-provided purge-and-trap grade methanol. The sample jars were labeled with the sample identification, depth, date of collection and intended analysis. The sample jars were then placed in resealable plastic bags and packed on ice, in an insulated container. A chain-of-custody form was completed each day, and accompanied each container of samples from the site to the laboratory.

Two soil samples from each soil boring location were submitted for laboratory analysis of tetrachloroethylene (PCE) and its potential breakdown products. Generally, one sample was obtained from fill soils beneath the concrete slab and one sample was obtained from native soils (or fill) found at a greater depth. Laboratory analyses were performed by Great Lakes Analytical using U.S. EPA SW-846 Method 8020. Target list compounds included: PCE, 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene, 1,1,2-trichloroethane, 1,1-dichlorethane, 1,2-dichloroethane, and vinyl chloride. Great Lakes Analytical laboratory is certified by the Wisconsin Department of Natural Resources.

Results

Fill soils containing various amounts of sand, gravel and silt were encountered underlying the facility to a depth of approximately 1 feet bgs. Grayish brown Silty clay fill soils with a trace of fine to coarse grained sand and gravel were observed beneath the sandy fill to a depth of approximately 2.5feet bgs. Approximately 2.2 feet of fill soils were observed. Blue gray to black silty clay was observed beneath the fill soils. The soils were moist and no groundwater was observed. No staining or odors were observed during this investigation. Soil boring logs are presented in Attachment A.

PCE concentrations ranged from "no detect" to 8400 µg/kg. PCE was not detected in the samples collected from below 4.5 feet bgs. No PCE breakdown products were detected above the laboratory detection limit of 25 µg/kg. A summary of the detected compounds and concentrations is provided in Table 1. The laboratory reports are included in Attachment B.

Conclusions and Recommendations

Historical operations have resulted in shallow subsurface impacts as evidenced by detections of PCE. However, PCE was not detected below 4.5 feet bgs. Based on the analytical data, McLaren/Hart recommends additional investigation to determine the areal extent of PCE contamination and to verify that it is confined to the shallow fill soils.

Additionally, Wisconsin Administrative Code NR 700 specifies reporting requirements for owners/operators that discover a hazardous substance release. McLaren/Hart recommends that legal

counsel evaluate the reporting requirements, if any, per the referenced regulation.
We look forward to be of service to you in this matter. Please contact me if you have any questions.

Sincerely,

McLAREN/HART ENVIRONMENTAL ENGINEERING CORPORATION

Brian W. Schneider, P.E.
Senior Engineer

George J. Bayer (FOR)
Associate Geoscientist

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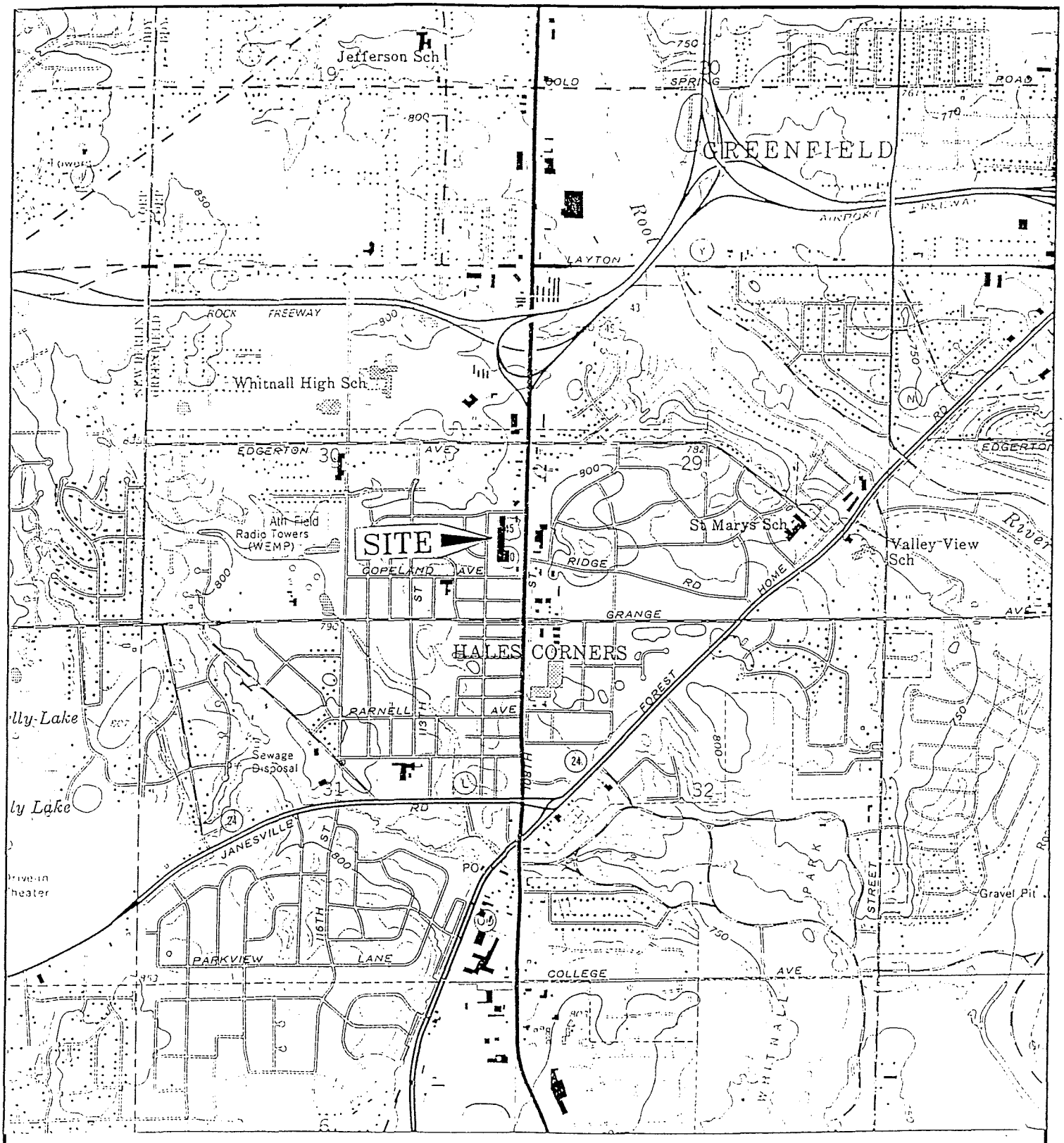


USGS 7.5 minute series Hales Corners, Wisconsin topographic quadrangle dated 1959, photorevised 1994

N
W E
S

APPROXIMATE SCALE

0 1000 2000 3000 4000 5000 Feet

McLaren Hart ENVIRONMENTAL ENGINEERING CORPORATION

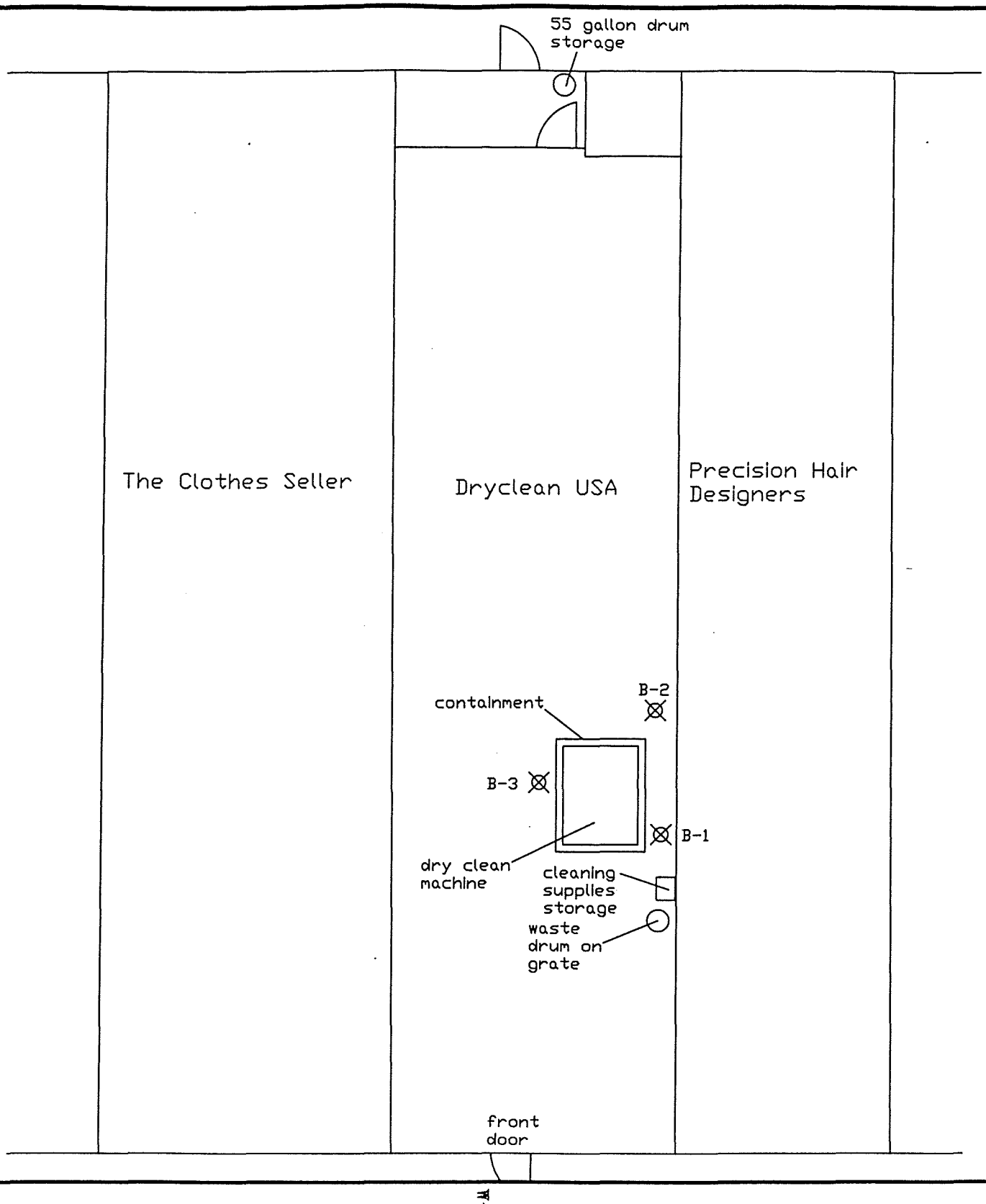
DRWN: MED	CHK'D: GJB
JOB#: 10080.4135.001.001	DATE: 10-14-98

FIGURE 1

SITE LOCATION MAP

Dryclean USA (store # 81)
5309 S. 108th Street, Hales Corners, WI

DWG: store 81



LEGEND
⊗ Boring Location

N
W
E
S

APPROXIMATE SCALE
0 5 10 feet

McLaren Hart® ENVIRONMENTAL ENGINEERING CORPORATION

DRWN: MED	CHK'D: GJB
JOB#: 10080.4135.001.001	DATE: 10-30-98

FIGURE 2
Boring Locations
Dryclean USA (store # 81)
5309 S. 108th Street
Hales Corners, WI

81 LWM

Table 1
SOIL ANALYTICAL RESULTS
Dryclean USA Facility #81
5309 South 108th Street
Hales Corners, Wisconsin

All samples analyzed for Volatile Organic Compounds-special list (VOCs Method 8021).
Concentrations in Micrograms per Kilogram unless otherwise indicated

		Dryclean USA Facility #81					
	Sample Identification	B-1	B-1	B-2	B-2	B-3	B-3
	Depth (ft)	0.5-2.5	4.5-6.0	0.5-2.5	4.5-6.0	0.5-2.5	4.5-5.5
	Date Collected	10/20/98	10/20/98	10/20/98	10/20/98	10/20/98	10/20/98
ANALYTES:	1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
	trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
	Trichloroethene	ND	ND	ND	ND	ND	ND
	Tetrachloroethene (PCE)	8400	ND	1500	ND	2500	ND
	Vinyl chloride	ND	ND	ND	ND	ND	ND

Notes:
Only positive detection (i.e., > practical quantitation limit) shown.
ND: Not detected above practical quantitation limit.
NA: Not analyzed

SOIL BORING LOG INFORMATION

McLaren Hart®

ENVIRONMENTAL ENGINEERING CORPORATION

Facility/Project Name: Dryclean U.S.A. Facility #81	Geologist: George Baver		Boring Number: B-1
Boring Drilled By (Firm Name and Name of Crew Chief): On-Site Environmental - Denny Totzke	Start Date: 10/20/98	Completion Date: 10/20/98	Drilling Method: Soil probe
County: Milwaukee	Civil Town/City/Village: Hales Corners		Borehole Diameter: 1.5"

Sample Number and Type	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description and Geologic Origin for Each Major Unit	USCS	PID (IU)	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P200	RQD/Comments
			0	.3' Concrete slab								
1	24		1	FILL, fine to coarse grained sand, little gravel, trace silt, light brown, very moist.								
			2	CLAY, silty, trace fine to coarse grained sand and gravel, grayish brown, moist. (FILL)	FILL							
2	24		3	CLAY, silty, blue gray to black moist (buried topsoil).	CL							
			4									
3	18		5	CLAY, silty, gray with light brown mottling, very moist.	CL							
			6									
			7	(occasional thin silt seams)								
			8									
			9									
			10									
			11									
			12									
			13									
			14									
			15									
			16									
			17									
			18									
			19									

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature	Firm
	McLaren/Hart, Inc.

McLaren Hart®

ENVIRONMENTAL ENGINEERING CORPORATION

Facility/Project Name: Dryclean U.S.A. Facility #81	Geologist: George Baver	Boring Number: B-2	
Boring Drilled By (Firm Name and Name of Crew Chief): On-Site Environmental - Denny Totzke	Start Date: 10/20/98	Completion Date: 10/20/98	Drilling Method: Soil probe
County: Milwaukee	Civil Town/City/Village: Hales Corners		Borehole Diameter: 1.5"

Sample Number and Type	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description and Geologic Origin for Each Major Unit	USCS	PID (IU)	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P200	RQD/Comments
			0	.3' Concrete slab								
1	24		1	FILL, fine to coarse grained sand, little gravel, trace silt, light brown, very moist.	FILL							
			2	CLAY, silty, trace fine to coarse grained sand and gravel, grayish brown, moist. (FILL)								
2	12		3	CLAY, silty, blue gray to black moist (buried topsoil).	CL							
			4									
3	18		5	CLAY, silty, gray with light brown mottling, very moist.	CL							
			6									
			7	(Occasional thin silt seams)								
			8									
			9									
			10									
			11									
			12									
			13									
			14									
			15									
			16									
			17									
			18									
			19									

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature	Firm
	McLaren/Hart, Inc.

McLaren Hart®

ENVIRONMENTAL ENGINEERING CORPORATION

Facility/Project Name: Dryclean U.S.A. Facility #81	Geologist: George Baver	Boring Number: B-3	
Boring Drilled By (Firm Name and Name of Crew Chief): On-Site Environmental - Denny Totzke	Start Date: 10/20/98	Completion Date: 10/20/98	Drilling Method: Soil probe
County: Milwaukee	Civil Town/City/Village: Hales Corners		Borehole Diameter: 1.5"

Sample Number and Type	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description and Geologic Origin for Each Major Unit	USCS	PID (IU)	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P200	RQD/Comments
			0	.3' Concrete slab								
1	24		1	FILL, fine to coarse grained sand, little gravel, trace silt, light brown, very moist,								
			2	CLAY, silty, trace fine to coarse grained sand and gravel, grayish brown, moist. (FILL)	FILL							
2	18		3	CLAY, silty, blue gray to black moist (buried topsoil).	CL							
			4									
3	12		5	CLAY, silty, gray with light brown mottling, very moist.	CL							
			6									
			7	(Occasional thin silt seams)								
			8									
			9									
			10									
			11									
			12									
			13									
			14									
			15									
			16									
			17									
			18									
			19									

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature	Firm
	McLaren/Hart, Inc.

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

McLaren/Hart	Client Project ID:	Dryclean USA	Sampled:	Oct 20, 1998
1300 E. Touhy Avenue	Sample Descript:	Soil: #81 B-1 0.5-2.5'	Received:	Oct 21, 1998
Des Plaines, IL 60018	Analysis Method:	EPA 5030/8021		
Attention: Brian Schneider	Lab Number:	810-2728	Analyzed:	Oct 23, 1998
			Reported:	Oct 28, 1998

WDNR VOLATILE ORGANIC COMPOUNDS (5030/8021)

Analyte	Method Detection Limit µg/kg	Practical Quanitation Limit µg/kg	WDNR Reporting Limit µg/kg Wet Weight	Sample Results µg/kg Dry Weight
1,1-Dichloroethane	7.2	23	25	N.D.
1,2-Dichloroethane	2.3	7.5	25	N.D.
1,1-Dichloroethene	5.7	18	25	N.D.
trans-1,2-Dichloroethene	5.4	17	25	N.D.
Tetrachloroethene	5.2	16	25	8,400
1,1,1-Trichloroethane	5.6	18	25	N.D.
1,1,2-Trichloroethane	4.6	15	25	N.D.
Trichloroethene	6.2	20	25	N.D.
Vinyl chloride	8.2	26	25	N.D.

Analytes reported as N.D. were not present above the WDNR Reporting Limit IN WET WEIGHT as specified in Release News, Volume 4, Number 3, July 1994.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

8102717.mlh <14>

GREAT LAKES ANALYTICAL
1380 Busch Parkway
Buffalo Grove, Illinois 60089
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McLaren/Hart	Client Project ID: Dryclean USA	Sampled:	Oct 20, 1998
1300 E. Touhy Avenue	Sample Descript: Soil: #81 B-1 4.5-6'	Received:	Oct 21, 1998
Des Plaines, IL 60018	Analysis Method: EPA 5030/8021		
Attention: Brian Schneider	Lab Number: 810-2729	Analyzed:	Oct 23, 1998
		Reported:	Oct 28, 1998

WDNR VOLATILE ORGANIC COMPOUNDS (5030/8021)

Analyte	Method Detection Limit µg/kg	Practical Quanitation Limit µg/kg	WDNR Reporting Limit µg/kg Wet Weight	Sample Results µg/kg Dry Weight
1,1-Dichloroethane	7.2	23	25	N.D.
1,2-Dichloroethane	2.3	7.5	25	N.D.
1,1-Dichloroethene	5.7	18	25	N.D.
trans-1,2-Dichloroethene	5.4	17	25	N.D.
Tetrachloroethene	5.2	16	25	N.D.
1,1,1-Trichloroethane	5.6	18	25	N.D.
1,1,2-Trichloroethane	4.6	15	25	N.D.
Trichloroethene	6.2	20	25	N.D.
Vinyl chloride	8.2	26	25	N.D.

Analytes reported as N.D. were not present above the WDNR Reporting Limit IN WET WEIGHT as specified in Release News, Volume 4, Number 3, July 1994.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

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Accreditations/Certifications: Delaware IL 069, Illinois LPA [illegible], New Jersey DEP 54001, New York DOH-11487
Tennessee DOH 02804, Tennessee DEC, USACE, Virginia 00164, Wisconsin DNR 999917100

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McLaren/Hart
1300 E. Touhy Avenue
Des Plaines, IL 60018
Attention: Brian Schneider

Client Project ID: Dryclean USA
Sample Descript: Soil: #81 B-2 0.5-2.5'
Analysis Method: EPA 5030/8021
Lab Number: 810-2730

Sampled: Oct 20, 1998
Received: Oct 21, 1998

Analyzed: Oct 24, 1998
Reported: Oct 28, 1998

WDNR VOLATILE ORGANIC COMPOUNDS (5030/8021)

Analyte	Method Detection Limit µg/kg	Practical Quantitation Limit µg/kg	WDNR Reporting Limit µg/kg Wet Weight	Sample Results µg/kg Dry Weight
1,1-Dichloroethane	7.2	23	25	N.D.
1,2-Dichloroethane	2.3	7.5	25	N.D.
1,1-Dichloroethene	5.7	18	25	N.D.
trans-1,2-Dichloroethene	5.4	17	25	N.D.
Tetrachloroethene	5.2	16	25	1,500
1,1,1-Trichloroethane	5.6	18	25	N.D.
1,1,2-Trichloroethane	4.6	15	25	N.D.
Trichloroethene	6.2	20	25	N.D.
Vinyl chloride	8.2	26	25	N.D.

Analytes reported as N.D. were not present above the WDNR Reporting Limit IN WET WEIGHT as specified in Release News, Volume 4, Number 3, July 1994.

GREAT LAKES ANALYTICAL

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McLaren/Hart	Client Project ID:	Dryclean USA	Sampled:	Oct 20, 1998
1300 E. Touhy Avenue	Sample Descript:	Soil: #81 B-2 4.5-6'	Received:	Oct 21, 1998
Des Plaines, IL 60018	Analysis Method:	EPA 5030/8021		
Attention: Brian Schneider	Lab Number:	810-2731	Analyzed:	Oct 24, 1998
			Reported:	Oct 28, 1998

WDNR VOLATILE ORGANIC COMPOUNDS (5030/8021)

Analyte	Method Detection Limit µg/kg	Practical Quanitation Limit µg/kg	WDNR Reporting Limit µg/kg Wet Weight	Sample Results µg/kg Dry Weight
1,1-Dichloroethane	7.2	23	25	N.D.
1,2-Dichloroethane	2.3	7.5	25	N.D.
1,1-Dichloroethene	5.7	18	25	N.D.
trans-1,2-Dichloroethene	5.4	17	25	N.D.
Tetrachloroethene	5.2	16	25	N.D.
1,1,1-Trichloroethane	5.6	18	25	N.D.
1,1,2-Trichloroethane	4.6	15	25	N.D.
Trichloroethene	6.2	20	25	N.D.
Vinyl chloride	8.2	26	25	N.D.

Analytes reported as N.D. were not present above the WDNR Reporting Limit IN WET WEIGHT as specified in Release News, Volume 4, Number 3, July 1994.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
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McLaren/Hart
1300 E. Touhy Avenue
Des Plaines, IL 60018
Attention: Brian Schneider

Client Project ID: Dryclean USA
Sample Descript: Soil: #81 B-3 0.5-2.5'
Analysis Method: EPA 5030/8021
Lab Number: 810-2732

Sampled: Oct 20, 1998
Received: Oct 21, 1998
Analyzed: Oct 23, 1998
Reported: Oct 28, 1998

WDNR VOLATILE ORGANIC COMPOUNDS (5030/8021)

Analyte	Method Detection Limit µg/kg	Practical Quanitation Limit µg/kg	WDNR Reporting Limit µg/kg Wet Weight	Sample Results µg/kg Dry Weight
1,1-Dichloroethane	7.2	23	25	N.D.
1,2-Dichloroethane	2.3	7.5	25	N.D.
1,1-Dichloroethene	5.7	18	25	N.D.
trans-1,2-Dichloroethene	5.4	17	25	N.D.
Tetrachloroethene	5.2	16	25	2,500
1,1,1-Trichloroethane	5.6	18	25	N.D.
1,1,2-Trichloroethane	4.6	15	25	N.D.
Trichloroethene	6.2	20	25	N.D.
Vinyl chloride	8.2	26	25	N.D.

Analytes reported as N.D. were not present above the WDNR Reporting Limit IN WET WEIGHT as specified in Release News, Volume 4, Number 3, July 1994.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

8102717.mlh <18>

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McLaren/Hart
1300 E. Touhy Avenue
Des Plaines, IL 60018
Attention: Brian Schneider

Client Project ID: Dryclean USA
Sample Descript: Soil: #81 B-3 4.5-5.5'
Analysis Method: EPA 5030/8021
Lab Number: 810-2733

Sampled: Oct 20, 1998
Received: Oct 21, 1998

Analyzed: Oct 23, 1998
Reported: Oct 28, 1998

WDNR VOLATILE ORGANIC COMPOUNDS (5030/8021)

Analyte	Method Detection Limit µg/kg	Practical Quantitation Limit µg/kg	WDNR Reporting Limit µg/kg Wet Weight	Sample Results µg/kg Dry Weight
1,1-Dichloroethane	7.2	23	25	N.D.
1,2-Dichloroethane	2.3	7.5	25	N.D.
1,1-Dichloroethene	5.7	18	25	N.D.
trans-1,2-Dichloroethene	5.4	17	25	N.D.
Tetrachloroethene	5.2	16	25	N.D.
1,1,1-Trichloroethane	5.6	18	25	N.D.
1,1,2-Trichloroethane	4.6	15	25	N.D.
Trichloroethene	6.2	20	25	N.D.
Vinyl chloride	8.2	26	25	N.D.

Analytes reported as N.D. were not present above the WDNR Reporting Limit IN WET WEIGHT as specified in Release News, Volume 4, Number 3, July 1994.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

ANALYTICAL

CHAIN OF CUSTODY REPORT

Buffalo Grove, IL 60089-4505
(847) 808-7766
FAX (847) 808-7772

20725 Watertown Road
Brookfield, WI 53401
(414) 798-1030
FAX (414) 798-1066

Client: McLaren Hart | Bill To: | TAT: (5 DAY) 4 DAY 3 DAY 2 DAY 1 DAY < 24 HRS

Address: | Address: | DATE RESULTS NEEDED: 10/28

TEMPERATURE UPON RECEIPT: Ice

Report to: | Phone #: ( ) Fax #: ( ) | State & Program: | Phone #: ( ) Fax #: ( ) | BILL NO. C w pw

Project: Cryclean USA

Sampler: George Bayer

PO/Quote #:

#	FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PRESERVATIVES	NO. CONTAINERS	TYPE CONTAINERS	Special List: PCE, TCE, 1,1,1 TCA, 1,1 DCE, 1,1,2 TCA, 1,1 DCA, 1,2 DCE, Trans 1,2 DCE, Vinyl Chloride	SAMPLE CONTROL: CRACKED/BROKEN	SAMPLE CONTROL: IMPROPERLY SEALED	SAMPLE CONTROL: GOOD CONDITION	LABORATORY ID NUMBER
1	#86 B-3 3.5-2.5'	10/20/98		Soil	MeOH	2		X			✓	8102726
2	#86 B-3 4.5'-6'										✓	8102727
3	#81 B-1 .5'-2.5'										✓	8102728
4	#81 B-1 4.5-6'										✓	8102729
5	#81 B-2 .5'-2.5										✓	8102730
6	#81 B-2 4.5-6'										✓	8102731
7	#81 B-3 .5'-2.5'										✓	8102732
8	#81 B-3 4.5'-5.5'										✓	8102733
9	MeOH BLANK										✓	8102734
10												

RELINQUISHED	RECEIVED	RELINQUISHED	RECEIVED
George Bayer 10/21/98 7:30am	Kim Artman 10/21/98	K Artman 10/21/98	10/21

COMMENTS: