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LETTER REPORT
FOR
MIDLAND MACHINE
DECATUR, MACON COUNTY, ILLINOIS
TDD: S05-9909-004
PAN: 9P0401SIXX

March 20, 2000

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Brendan P. McLennan — Date: 3/20/00
Brendan P. McLennan, START Project Manager

Reviewed by: Barbara Critchlow — Date: 3/20/00
Barbara Critchlow, E & E Technical Editor

Approved by: Mary J. Ripp — Date: 3/20/00
Mary Jane Ripp, START Program Manager

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March 20, 2000

Gail Nabasny, START Project Officer
Emergency Support Section (SE-5J)
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Midland Machine
Decatur, Macon County, Illinois
TDD: S05-9909-004
PAN: 9P0401SIXX

Dear Ms. Nabasny:

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) was tasked under Technical Direction Document (TDD) S05-9909-004 to assist the United States Environmental Protection Agency (U.S. EPA) On-Scene Coordinator (OSC) Fred Bartman, in conducting sampling and site assessment activities at the Midland Machine site. The site is composed of the home and machine shop of a local resident located at the intersection of State Route 48 and Brushed College Road, in Decatur, Macon County, Illinois (Attachment A, Figure 1). The site is bordered on the north and east by Brushed College Road, to the west by State Route 48, and to the south by a trucking company and a welding company. The investigation stemmed from the presence of abandoned drums on the site.

On September 9, 1999, START members Brendan McLennan and Tim Calloway assisted OSC Bartman in conducting a site assessment at the Midland Machine site. A site reconnaissance revealed a property heavily cluttered with empty scrapped tanks, broken machinery, and construction debris; overgrowths of weeds were present across the site (Attachment A, Figure 2; Attachment B). There are three buildings on the site; one is the site owner's machine shop, at the northwest corner of the site; located next to the shop to the east is the owner's residence; and on the southern portion of the site is an unused building. The drums dumped on site had been placed on a plastic tarp on the southeast portion of the site along the fence line with the trucking company. There are approximately 150 drums overpacked by the State of Illinois and 10 non-overpacked drums located on the tarp. Other drums were present on the site but all of those belonged to the site resident and were empty and intended for use as scrap.

START collected five samples from drums that were pre-screened with a photoionization detector (PID) and combustible gas indicator (CGI) to determine the presence of organic or flammable constituents in the drum contents. START collected one soil sample from soils around the tarp area. START also collected one water sample from the well located on site. All of the samples were packed in ice and sent to CT&E Environmental Services, in Ludington, Michigan under analytical TDD S05-

9909-804. Samples D-1 and D-5 were analyzed for polychlorinated biphenyls (PCBs), flash point, volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). Sample D-2 was analyzed for flash point, VOCs, and SVOCs. Sample D-4 was analyzed for toxicity characteristic leaching procedure (TCLP) metals, and PCBs. Sample D-6 was analyzed for total Resource Conservation and Recovery Act (RCRA) metals and flash point. Soil sample S-1 was analyzed for TCLP metals, PCBs, and SVOCs. Residential well sample W-1 was analyzed for total RCRA metals, PCBs/Pesticides, VOCs, and SVOCs.

All samples analyzed for VOCs indicated high levels of benzene, toluene, ethylbenzene, and xylene (BTEX) compounds. Sample D-1 had ethylbenzene present at 27,300 parts per million (ppm). Sample D-2 had toluene present at 12,600 ppm. Sample D-5 had ethylbenzene present at 1,800 ppm, o-xylene at 2,060 ppm, m&p-xylene at 6,270 ppm, and toluene at 10,600 ppm. Samples D-1, D-2, and D-5 had flash points less than or equal to 85°F. Results from the soil sample revealed the presence of barium, cadmium, and lead. Results of the well sample indicated the presence of numerous metals but none at concentrations exceeding the removal action limits for groundwater. A summary of all samples is provided in Attachment C.

The preparation of this Letter Report serves as the final deliverable, as per OSC Bartman's request. All tasks pertaining to this TDD have been completed. Please contact our office should any additional information on this site be necessary.

Sincerely,

Brendan P. McLennan
START Project Manager

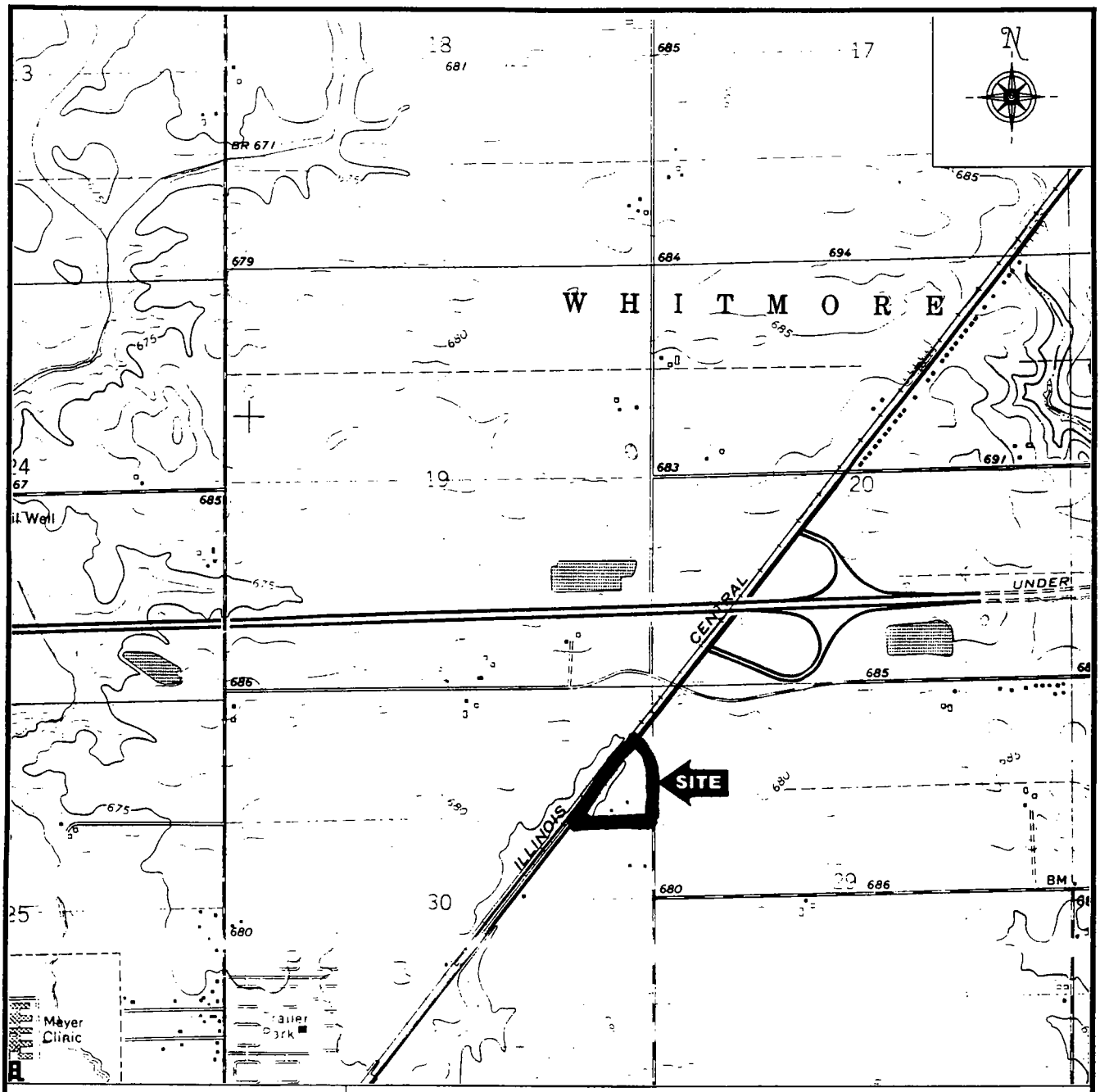
Mary Jane Ripp
START Program Manager

Attachments: A - Figures
B - Photodocumentation
C - Tables
D - Validated Analytical Results

cc: Fred Bartman, U.S. EPA OSC
START TDD File

Attachment A

Figures



Quadrangle Location

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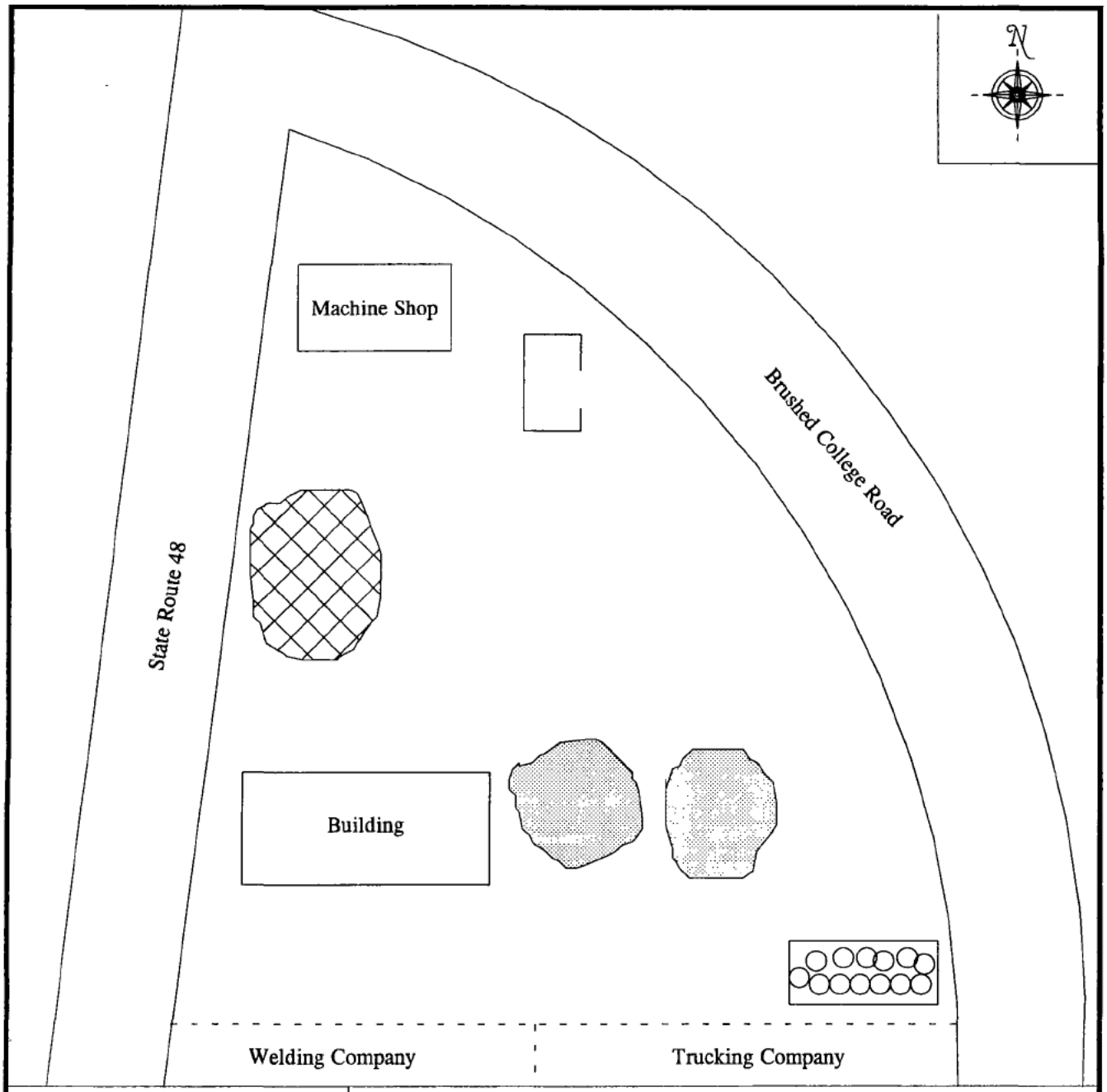
TITLE Site Location Map	FIGURE 1
SITE Midland Machine	SCALE 1:24,000
CITY Decatur STATE Illinois	TDD S05-9909-004
SOURCE USGS Topographic Map 7.5 Minute Series Forsyth, IL Quadrangle	DATE 1967 REVISED 1975



Legend

- Fence
- Scrap wood
- Construction debris
- Drum

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33 North Dearborn Street, Suite 900, Chicago, Illinois 60602

TITLE: Site Features Map	FIGURE: 2
SITE: Midland Machine	SCALE: Not to Scale
CITY: Decatur STATE: Illinois	TDD: S05-9909-004
SOURCE: Ecology and Environment, Inc.	DATE: February 2000

Attachment B

Photodocumentation

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1115
LOCATION: Decatur, Illinois **DIRECTION:** West **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: View of Midland Machine from Brushed College Road.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1125
LOCATION: Decatur, Illinois **DIRECTION:** Northwest **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Tanks and machinery strewn around the site.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1130
LOCATION: Decatur, Illinois **DIRECTION:** Southwest **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Abandoned drums along fence line with trucking company.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1133
LOCATION: Decatur, Illinois **DIRECTION:** South **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Empty drums present on site.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1141
LOCATION: Decatur, Illinois **DIRECTION:** South **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Large pile of construction debris and scrap wood.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1145
LOCATION: Decatur, Illinois **DIRECTION:** North **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Scrap metal and tanks present in overgrowth of weeds.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1150
LOCATION: Decatur, Illinois **DIRECTION:** Northwest **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Site owner's machine shop.

SITE: Midland Machine **DATE:** September 9, 1999 **TIME:** 1220
LOCATION: Decatur, Illinois **DIRECTION:** Southwest **PHOTOGRAPHER:** Brendan McLennan
SUBJECT: Location of sample D-4.

SITE: Midland Machine
LOCATION: Decatur, Illinois
SUBJECT: Location of sample D-6.

DATE: September 9, 1999
DIRECTION: West

TIME: 1245
PHOTOGRAPHER: Brendan McLennan

Attachment C

Tables

Table 1

SUMMARY OF DRUM AND SOIL SAMPLE ANALYTICAL RESULTS
MIDLAND MACHINE
DECATUR, MACON COUNTY, ILLINOIS
SEPTEMBER 9, 1999

	Sample Designation					
Parameter	**D-1**	**D-2**	**D-4**	**D-5**	**D-6**	**S-1**
Flash point (°F)	< 50	55	NA	85	> 200	NA
Volatile Organic Compounds (mg/kg)						
Ethylbenzene	27,300	ND	NA	1,800	NA	NA
o-Xylene	ND	ND	NA	2,060	NA	NA
m&p-Xylene	ND	ND	NA	6,270	NA	NA
Toluene	ND	12,600	NA	10,600	NA	NA
Semivolatile Organic Compounds (mg/kg)						
Naphthalene	5,100	2,600	NA	2,400	NA	ND
Total PCBs (mg/kg)	ND	NA	ND	1.7	NA	ND
TCLP Metals (mg/L)						
Barium	NA	NA	0.39	NA	NA	0.08
Cadmium	NA	NA	0.31	NA	NA	0.011
Lead	NA	NA	0.055J	NA	NA	0.056J
Total Metals (mg/L)						
Barium	NA	NA	NA	NA	0.43	NA
Cadmium	NA	NA	NA	NA	0.19	NA
Chromium	NA	NA	NA	NA	0.013	NA
Lead	NA	NA	NA	NA	0.24	NA
Silver	NA	NA	NA	NA	0.0059J	NA

Key:

ND	=	Not detected.
NA	=	Not analyzed.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
TCLP	=	Toxicity characteristic leaching procedure.
J	=	Estimated.
PCBs	=	Polychlorinated biphenyls.

Source: CT&E Environmental Services, Inc., Ludington, Michigan, under analytical TDD S05-9909-804.

Table 2

SUMMARY OF WELL WATER ANALYTICAL RESULTS
MIDLAND MACHINE
DECATUR, MACON COUNTY, ILLINOIS
SEPTEMBER 9, 1999

Parameter	Sample Designation W-1
Total Metals (mg/L)	
Antimony	0.01J
Arsenic	0.045J
Barium	0.28
Beryllium	0.002
Calcium	92
Chromium	0.003J
Iron	6.2
Magnesium	44
Potassium	3.4
Sodium	54
Zinc	0.29

Key:
mg/L = Milligrams per liter.
J = Estimated.

Source: CT&E Environmental Services, Inc., Ludington, Michigan, under analytical TDD S05-9909-804.

Attachment D

Validated Analytical Results

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MEMORANDUM

DATE: November 5, 1999

TO: Brendan McLennan, START Project Manager, E & E, Chicago, Illinois

FROM: Marcia Meredith Galloway, Chief Chemist, E & E, Buffalo, New York

THROUGH: Dave Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Toxicity Characteristic Leaching Procedure (TCLP) Metals and Total Metals – Resource Conversation and Recovery Act (RCRA), Flashpoint Site: Midland Machine Decatur, Macon County, Illinois.

REFERENCE: Project TDD S05-9909-004 Analytical TDD S05-9909-804
Project PAN 9P0401SIXX Analytical PAN 9PAD01TAXX

The data quality assurance (QA) review of drum samples, one soil and one water sample collected from the Midland Machine site. The samples were collected on September 9, 1999 by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment. Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan Indiana for analyses. The laboratory analyses were performed according to the U.S. EPA Solid Waste 846 Methods 1010 for flashpoint, 1311 for TCLP, 7470/71 for mercury, 7610 for potassium, and 6010B for all other metals. The one water sample was analyzed for all target analyte list (TAL) metals which includes the RCRA metals requested on the chain-of-custody. Data for potassium was not included in the data package, but since the compound was not requested, no further action was taken.

Sample Identification

START Identification No	Laboratory Identification No	Requested Analyses for each Location
D-4	39918400003	TCLP Metals
D-6	39918400005	Total RCRA Metals
S-1	39918400006	TCLP Metals
W-1	39918400007	Total RCRA Metals

Data Qualification:

I Sample Holding Time: Acceptable

The samples were collected on September 9, 1999, and analyzed between September 16 and 23, 1999.

This is within the six month holding time limit (28 days for mercury).

II. Calibration:

Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required.

Continuing Calibration: Acceptable

Recoveries for analytes in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Qualified

Preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks above the reporting limit except for lead and silver in the TCLP method blank and cadmium, magnesium, manganese, sodium, thallium, lead, and zinc in the water method blank. For the TCLP samples, silver was not detected in the samples and lead was detected at greater than 5 times the blank level. Lead results are qualified "J" as estimated. For the water sample, W-1, the method blank was run on two different analytical batches. The results reported in the associated analytical batch were considered for data qualification. The results for lead, cadmium, and manganese in sample W-1 are flagged "U" and should be considered non-detect. At least one blank was analyzed for each 20 samples.

IV. Interference Check Samples (ICSs): Acceptable

ICSs were analyzed and recoveries were within 20% of the mean value, as required except for silver. The ICS was only analyzed at the beginning of the analysis as required by SW-846. Silver was not detected in the samples for so data qualification is required.

V Additional QC Information: Acceptable

The laboratory control sample (LCS) and other QC samples were within method control limits except for silver and antimony. The positive results for silver in sample D-6 and antimony in sample W-1 are flagged "J" as estimated.

VI. Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use with the above noted qualifications.

Data Qualifiers and Definition

J - The associated numerical value is an estimated quantity because the reported concentrations were less than the required detection limits or quality control criteria were not met.

U – The associated numerical value is non-detect and consisdered an elevated reporting limit.

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MEMORANDUM

DATE: November 5, 1999

TO: Brendan McLennan, START Project Manager, E & E, Chicago, Illinois

FROM: Marcia Meredith Galloway, Chief Chemist, E & E, Buffalo, New York

THROUGH: Dave Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Target Compound List (TCL) Volatiles (VOCs), Semivolatiles (SVOCs), Pesticides and Polychlorinated Biphenyls (PCBs).
Site: Midland Machine Decatur, Macon County, Illinois.

REFERENCE: Project TDD S05-9909-004 Analytical TDD S05-9909-804
Project PAN 9P0401SIXX Analytical PAN 9PAD01TAXX

The data quality assurance (QA) review of four drum samples, one soil and one water sample collected from the Midland Machine site. The samples were collected on September 9, 1999 by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan Indiana for analyses. The laboratory analyses were performed according to the U.S. EPA Solid Waste 846 Methods 8260B for VOCs, 8270C for SVOCs, 8081 for pesticides and 8082 for PCBs.

Sample Identification

START Identification No	Laboratory Identification No	Requested Analyses for each Location
D-1	39918400001	VOCs, SVOCs, PCBs
D-2	39918400002	VOCs, SVOCs
D-4	39918400003	PCBs
D-5	39918400004	VOCs, SVOCs, PCBs
S-1	39918400006	SVOCs, PCBs
W-1	39918400007	VOCs, SVOCS, Pest, PCBs

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Data Qualification for Volatiles:

V-I. Sample Holding Time: Acceptable

The samples were collected on September 9, 1999, and analyzed September 20, 1999. This is within the 14-day holding time limit.

V-II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using bromofluorobenzene (BFB) were acceptable and samples were analyzed within 12 hours of BFB tuning.

V-III. Calibrations:

Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All average response factors were greater than or equal to 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

V-IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank above the limit of quantitation except for bromomethane in the blank associated with the drum and water samples. Bromomethane was not found in the samples.

V-V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.

V-VI. Compound Identification: Acceptable

The mass spectra and retention times for all detected compounds match the standards.

V-VII Additional QC Checks: Acceptable

The laboratory control sample (LCS) and surrogate recoveries were acceptable for all samples.

V-VIII Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, VOAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use.

Data Qualifications for Semivolatiles (SV):

SV-I. Sample Holding Time: Acceptable

The samples were collected on September 9, 1999, extracted on September 16, 1999 for waters and September 23, 1999 for solid samples, and analyzed on September 23, 24, or 27, 1999. This is within the 7 day holding time for waters and 14-day holding time limit for soils, from collection to extraction, and 40-day limit from extraction to analysis.

SV-II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using decaflurotriphenylphosphine (DFTPP) were acceptable and samples were analyzed within 12 hours of DFTPP tuning.

SV-III. Calibrations:

Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All target compounds had a relative response factor of at least 0.05. The %RSDs between response factors were less than 30% for all detected target compounds.

Continuing Calibration: Acceptable

The percent differences of the response factors were less than or equal to 25%, as required for detected target compounds.

SV-IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds were detected in the blank above the limit of quantitation.

SV-V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second

control limit.

SV-VI. Compound Identification: Acceptable with note

The sample chromatograms and retention times match the standards. The raw data for sample D-1 indicated that the napthalene was non-detect, yet the laboratory reported a value. The laboratory confirmed that napthalene was present and provided a mass spectra for review. The quantitation limits for sample S-1 are elevated and no target compounds were present. The chromatogram indicates the presence of hydrocarbon contamination.

SV-VII Additional QC Checks: Acceptable

The LCS and surrogate recoveries were acceptable for all samples. Surrogates were diluted out of all drum samples.

SV-VIII Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 4.0, BNAs by GC/MS Analysis. Based upon the information provided, the data are acceptable for use.

Data Qualifications for Pesticides and PCBs (P):

P-I. Sample Holding Time: Acceptable

The samples were collected on September 9, 1999, extracted September 15, 1999 for waters and September 22 for solid samples, and analyzed on September 22 and 23, 1999. This is within the 7-day and 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

P-II. Instrument Performance: Acceptable

The chromatographic resolution was adequate in the standard and sample chromatograms. Surrogate retention times were consistent in the samples and standards.

P-III. Calibrations:

Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The %RSD was not used for calibration, the curves were based on linear regression as allowed by the methods. The coefficient of variation was greater than 0.99 as required by the method for all detected compounds.

Continuing Calibration: Acceptable

The percent differences between the calibration standard response factors were less than 15%.

P-IV. Blanks: Acceptable

A method blanks were analyzed with the samples. No target compounds were detected in the blanks.

P-V. Compound Identification: Acceptable

The retention times of the detected PCBs in the samples matched those of the standards. The chromatograms provided by the laboratory could not be evaluated to determine whether there was a matching pattern for PCBs. The laboratory provided enhanced chromatograms to compare to the standards. All reference peaks are present and no data qualification is required.

P-VI. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples were within acceptable laboratory control limits except for one method blank. No qualification is required because the samples were acceptable. The LCS recoveries were within laboratory control limits.

P-VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are acceptable for use.

Data Qualifiers and Definition

J - The associated numerical value is an estimated quantity because the reported concentrations were less than the required detection limits or quality control criteria were not met.

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840001	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	<50	degree F		SW-846 1010		9/23/99 8:32	WD
GC/MS VOLATILE ORGANIC							
,1-Trichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
1,1,2,2-Tetrachloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
1,1,2-Trichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
1,1-Dichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
1,1-Dichloroethylene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
1,2-Dichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
1,2-Dichloropropane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Butanone (M E K)	ND	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
2-Hexanone	ND	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Acetone	ND D	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Benzene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Bromodichloromethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Bromoform	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Bromomethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
rbon disulfide	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Carbon tetrachloride	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Chlorobenzene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Chloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Chloroform	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Chloromethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
cis-1,2-Dichloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
cis-1,3-Dichloropropene	ND	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Dibromochloromethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Ethylbenzene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Methylene chloride	ND D	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
o-Xylene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
P & M -Xylene	ND D	ug/kg	5200000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Styrene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Tetrachloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840001	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS VOLATILE ORGANIC							
Toluene	27300000 D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
trans-1,2-Dichloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
trans-1,3-Dichloropropene	ND	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Trichloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
Vinyl chloride	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 14:45	JDS
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Chloronaphthalene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Chlorophenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Nitroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-Nitrophenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	2500	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
3-Nitroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
4-Chloroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
4-Nitroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

Ecology and Environment, Inc.

Sample ID:	3991840001	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
4-Nitrophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Acenaphthene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Acenaphthylene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Anthracene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Benzo[g,h,i]perylene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
2-chloroisopropyl)ether	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Carbazole	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Chrysene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Dibenzo[a,h]anthracene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Dibenzofuran	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Diethylphthalate	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Dimethylphthalate	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Fluoranthene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Fluorene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Hexachlorobenzene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Hexachloroethane	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Isophorone	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Naphthalene	5100 D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840001	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Nitrobenzene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Pentachlorophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Phenanthrene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
Phenol	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
[illegible]ene	ND D,M	mg/Kg	1300	SW846-8270	9/22/99 8:14	9/23/99 14:08	JLS
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
[illegible]oclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
[illegible]oclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
Aroclor-1262	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ
Aroclor-1268	ND	mg/Kg	0.99	SW846 8082 PCB	9/21/99 15:26	9/22/99 1:55	TMJ

Respectfully submitted,
C&E Environmental Services, Inc.

Lidya Silva

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840002	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-2	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	55	degree F		SW-846 1010		9/23/99 8:32	WD
GC/MS VOLATILE ORGANIC							
,1-Trichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
1,1,2,2-Tetrachloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
1,1,2-Trichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
1,1-Dichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
1,1-Dichloroethylene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
1,2-Dichloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
1,2-Dichloropropane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Butanone (M E K)	ND	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
-Hexanone	ND	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Acetone	ND D	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Benzene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Bromodichloromethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Bromoform	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Bromomethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
bon disulfide	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Carbon tetrachloride	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Chlorobenzene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Chloroethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Chloroform	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Chloromethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
cis-1,2-Dichloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
cis-1,3-Dichloropropene	ND	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Dibromochloromethane	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Ethylbenzene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Methylene chloride	ND D	ug/kg	13000000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
o-Xylene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
P & M -Xylene	ND D	ug/kg	5200000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Styrene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Tetrachloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840002	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-2	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS VOLATILE ORGANIC							
Toluene	12600000 D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
trans-1,2-Dichloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
trans-1,3-Dichloropropene	ND	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
Trichloroethene	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
ıyl chloride	ND D	ug/kg	2600000	SW846-8260	9/20/99 13:00	9/20/99 15:22	JDS
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
4-Dichlorobenzene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
hloronaphthalene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2-Chlorophenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2-Nitroaniline	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
2-Nitrophenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	1000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
3-Nitroaniline	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
4-Chloroaniline	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
4-Nitroaniline	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Sample ID:	3991840002	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-2	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
4-Nitrophenol	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Acenaphthene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Acenaphthylene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Anthracene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
nzo(a)anthracene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Benzo[g,h,i]perylene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
s(2-chloroisopropyl)ether	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Carbazole	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Chrysene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
ibenzo[a,h]anthracene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
benzofuran	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Diethylphthalate	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Dimethylphthalate	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Fluoranthene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Fluorene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Hexachlorobenzene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Hexachloroethane	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Isophorone	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Naphthalene	2600 D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840002	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-2	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Nitrobenzene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Pentachlorophenol	ND D,M	mg/Kg	2000	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Phenanthrene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
Phenol	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS
[illegible]rene	ND D,M	mg/Kg	500	SW846-8270	9/22/99 8:15	9/27/99 18:16	JLS

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya [illegible]

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840003	**Matrix:**	Solid
Client Sample ID:	D-4	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
PHYSICAL PROPERTY ANALYSIS							
Total Solids	53.4	%		SM18 2540G		9/24/99 22:31	JL
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1221	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1232	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1242	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1248	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1254	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1260	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1262	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
Aroclor-1268	ND	ug/kg	370	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:16	TMJ
TCLP METAL ANALYSIS SW-846 Method 1311							
Arsenic	ND	mg/L	0.02	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC
Barium	0.39	mg/L	0.005	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC
Cadmium	0.31	mg/L	0.005	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC
Chromium	ND	mg/L	0.05	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC
Lead	0.055 ~~B~~ J	mg/L	0.02	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC
Mercury	ND	mg/L	0.0002	SW846 7470 TCLP	9/23/99 9:12	9/23/99 10:49	SM
Selenium	ND	mg/L	0.02	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC
Silver	ND	mg/L	0.01	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:29	JAC

Respectfully submitted,
CT&E Environmental Services, Inc.

JMMcG 11/5/99

Udya Sahiza

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Ecology and Environment, Inc.

Sample ID:	3991840004	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-5	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	85	degree F		SW-846 1010		9/23/99 8:32	WD
GC/MS VOLATILE ORGANIC							
1,1 [illegible]richloroethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
1,1,2,2-Tetrachloroethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
1,1,2-Trichloroethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
1,1-Dichloroethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
1,1-Dichloroethylene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
1,2-Dichloroethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
1,2-Dichloropropane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
2 [illegible]anone (M E K)	ND	ug/kg	5000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
2-[illegible]xanone	ND	ug/kg	5000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	5000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Acetone	ND D	ug/kg	5000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Benzene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Bromodichloromethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Bromoform	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Bromomethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Ca[illegible] disulfide	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Carbon tetrachloride	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Chlorobenzene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Chloroethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Chloroform	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Chloromethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
cis-1,2-Dichloroethene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
cis-1,3-Dichloropropene	ND	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Dibromochloromethane	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Ethylbenzene	1800000 D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Methylene chloride	ND D	ug/kg	5000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
o-Xylene	2060000 D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
P & M -Xylene	6270000 D	ug/kg	2100000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Styrene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Tetrachloroethene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Ecology and Environment, Inc.

Sample ID:	3991840004	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-5	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS VOLATILE ORGANIC							
Toluene	10600000 D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
trans-1,2-Dichloroethene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
trans-1,3-Dichloropropene	ND	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
Trichloroethene	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
nyl chloride	ND D	ug/kg	1000000	SW846-8260	9/20/99 13:00	9/20/99 21:29	JDS
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
',4-Dichlorobenzene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
,4,5-Trichlorophenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Chloronaphthalene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-Chlorophenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-Nitroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-Nitrophenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	2500	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
3-Nitroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
4-Chloroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
4-Nitroaniline	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Ecology and Environment, Inc.

Sample ID:	3991840004	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-5	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
4-Nitrophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Acenaphthene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Acenaphthylene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Anthracene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Benzo[g,h,i]perylene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
2-chloroisopropyl)ether	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Carbazole	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Chrysene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Dibenzo[a,h]anthracene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Dibenzofuran	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Diethylphthalate	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Dimethylphthalate	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Fluoranthene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Fluorene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Hexachlorobenzene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Hexachloroethane	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Isophorone	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Naphthalene	2400 D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

Ecology and Environment, Inc.

Sample ID:	3991840004	**Matrix:**	Non Aqueous Liquid
Client Sample ID:	D-5	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Nitrobenzene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Pentachlorophenol	ND D,M	mg/Kg	5000	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Phenanthrene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
Phenol	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
[illegible]rene	ND D,M	mg/Kg	1200	SW846-8270	9/22/99 8:15	9/27/99 23:52	JLS
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1221	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1232	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1242	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1248	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1254	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1260	1.7	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1262	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ
Aroclor-1268	ND	mg/Kg	1.0	SW846 8082 PCB	9/22/99 13:51	9/23/99 7:30	TMJ

Respectfully submitted,
CT&E Environmental Services, Inc.

Udya Sahia

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840005	**Matrix:**	Aqueous
Client Sample ID:	D-6	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/L	0.01	SW846-6010	9/17/99 14:43	9/28/99 16:48	JAC
Barium	0.43	mg/L	0.005	SW846-6010	9/17/99 14:43	9/20/99 16:04	JAC
Cadmium	0.19	mg/L	0.001	SW846-6010	9/17/99 14:43	9/20/99 16:04	JAC
Chromium	0.013	mg/L	0.002	SW846-6010	9/17/99 14:43	9/20/99 16:04	JAC
Lead	0.24	mg/L	0.005	SW846-6010	9/17/99 14:43	9/20/99 16:04	JAC
Mercury	ND D,M	mg/L	0.005	SW846-7470	9/23/99 9:12	9/23/99 10:57	SM
Selenium	ND	mg/L	0.02	SW846-6010	9/17/99 14:43	9/20/99 16:04	JAC
Silver	0.0059 J	mg/L	0.0005	SW846-6010	9/17/99 14:43	9/20/99 16:04	JAC
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		9/23/99 8:32	WD

mma 11/5/99

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Sizia

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Ecology and Environment, Inc.

Sample ID:	3991840006	**Matrix:**	Solid
Client Sample ID:	S-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
PHYSICAL PROPERTY ANALYSIS							
Total Solids	71.0	%		SM18 2540G		9/24/99 22:31	JL
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
1,2-Dichlorobenzene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
1,3-Dichlorobenzene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
1,4-Dichlorobenzene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,4,5-Trichlorophenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,4,6-Trichlorophenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,4-Dichlorophenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,4-Dimethylphenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,4-Dinitrophenol	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,4-Dinitrotoluene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2,6-Dinitrotoluene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Chloronaphthalene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Chlorophenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Methyl naphthalene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Methylphenol (o-Cresol)	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Nitroaniline	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
2-Nitrophenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	ug/kg	1100000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
3,3-Dichlorobenzidine	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
3-Nitroaniline	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
4-Bromophenyl-phenylether	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
4-Chloro-3-methylphenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
4-Chloroaniline	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
4-Chlorophenyl-phenylether	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
4-Nitroaniline	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
4-Nitrophenol	ND D,M	ug/kg	2300000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Acenaphthene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Acenaphthylene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Anthracene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

Ecology and Environment, Inc.

Sample ID:	3991840006	**Matrix:**	Solid
Client Sample ID:	S-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo(a)anthracene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Benzo[a]pyrene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Benzo[b]fluoranthene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Benzo[g,h,i]perylene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Benzo[k]fluoranthene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Bis(2-Chloroethoxy)methane	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Bis(2-Chloroethyl)ether	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
bis(2-chloroisopropyl)ether	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Butylbenzylphthalate	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Carbazole	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Chrysene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Di-n-butylphthalate	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
di-n-Octylphthalate	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Dibenzo[a,h]anthracene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Dibenzofuran	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Diethylphthalate	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Dimethylphthalate	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Fluoranthene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Fluorene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Hexachlorobenzene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Hexachlorobutadiene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Hexachlorocyclopentadiene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Hexachloroethane	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Isophorone	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
N-Nitroso-di-n-propylamine	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
N-Nitrosodiphenylamine	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Naphthalene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Nitrobenzene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Pentachlorophenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Phenanthrene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
Phenol	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840006	**Matrix:**	Solid
Client Sample ID:	S-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Pyrene	ND D,M	ug/kg	570000	SW846-8270	9/16/99 20:10	9/23/99 13:23	JLS
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1221	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1232	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1242	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1248	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1254	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1260	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1262	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
Aroclor-1268	ND	ug/kg	280	SW846 8082 PCB	9/22/99 14:40	9/23/99 17:45	TMJ
TCLP METAL ANALYSIS SW-846 Method 1311							
Arsenic	ND	mg/L	0.02	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC
Barium	0.80	mg/L	0.005	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC
Cadmium	0.011	mg/L	0.005	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC
Chromium	ND	mg/L	0.05	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC
Lead	0.056 B	mg/L	0.02	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC
Mercury	ND	mg/L	0.0002	SW846 7470 TCLP	9/23/99 9:12	9/23/99 10:55	SM
Selenium	ND	mg/L	0.02	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC
Silver	ND	mg/L	0.01	SW846 6010 TCLP	9/20/99 9:26	9/24/99 21:58	JAC

Respectfully submitted,
CT&E Environmental Services, Inc.

MMG 11/5/99

Lidya Sorizio

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Ecology and Environment, Inc.

Sample ID:	3991840007	**Matrix:**	Aqueous
Client Sample ID:	W-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Aluminum	ND	mg/L	0.1	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Antimony	0.010 J,M	mg/L	0.01	SW846-6010	9/23/99 16:25	9/29/99 14:42	JAC
Arsenic	0.045 J,M	mg/L	0.01	SW846-6010	9/23/99 16:25	9/29/99 14:42	JAC
Barium	0.28	mg/L	0.005	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Beryllium	0.0020	mg/L	0.001	SW846-6010	9/23/99 16:25	9/29/99 14:42	JAC
Cadmium	0.0052 B	mg/L	0.001	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Calcium	92	mg/L	0.2	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Chromium	0.0030 J,M	mg/L	0.002	SW846-6010	9/23/99 16:25	9/29/99 14:42	JAC
Cobalt	ND	mg/L	0.001	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Copper	ND	mg/L	0.02	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Iron	6.2	mg/L	0.1	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Lead	0.020 J,M,B	mg/L	0.005	SW846-6010	9/23/99 16:25	9/29/99 14:42	JAC
Magnesium	44	mg/L	0.03	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Manganese	0.046 B	mg/L	0.003	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Mercury	ND	mg/L	0.0002	SW846-7470	9/16/99 9:12	9/16/99 9:27	SM
Nickel	ND	mg/L	0.005	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Potassium	3.4	mg/L	0.5	SW846-7610	9/15/99 7:34	9/21/99 16:58	SM
Selenium	ND	mg/L	0.02	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Silver	ND	mg/L	0.0005	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Sodium	54	mg/L	0.5	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Thallium	ND	mg/L	0.02	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Vanadium	ND	mg/L	0.01	SW846-6010	9/23/99 16:25	9/24/99 22:38	JAC
Zinc	0.29	mg/L	0.02	SW846-6010	9/23/99 16:25	9/29/99 14:42	JAC
GC/MS VOLATILE ORGANIC							
1,1,1-Trichloroethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
1,1,2-Trichloroethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
1,1-Dichloroethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
1,1-Dichloroethylene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
1,2-Dichloroethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
1,2-Dichloropropane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
2-Butanone (M E K)	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

Ecology and Environment, Inc.

Sample ID:	3991840007	**Matrix:**	Aqueous
Client Sample ID:	W-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS VOLATILE ORGANIC							
2-Hexanone	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Acetone	ND	ug/L	25	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Benzene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
omodichloromethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Bromoform	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Bromomethane	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Carbon disulfide	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Carbon tetrachloride	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Chlorobenzene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Chloroethane	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
hloroform	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Chloromethane	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
cis-1,2-Dichloroethene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
cis-1,3-Dichloropropene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Dibromochloromethane	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Ethylbenzene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Methylene chloride	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
-Xylene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
& M -Xylene	ND	ug/L	2.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Styrene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Tetrachloroethene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Toluene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
trans-1,2-Dichloroethene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
trans-1,3-Dichloropropene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Trichloroethene	ND	ug/L	1.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
Vinyl chloride	ND	ug/L	5.0	SW846-8260	9/20/99 10:00	9/20/99 20:50	JDS
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
1,2-Dichlorobenzene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
1,3-Dichlorobenzene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
1,4-Dichlorobenzene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

Ecology and Environment, Inc.

Sample ID:	3991840007	**Matrix:**	Aqueous
Client Sample ID:	W-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
2,4,5-Trichlorophenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2,4,6-Trichlorophenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2,4-Dichlorophenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2,4-Dimethylphenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
-Dinitrophenol	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2,4-Dinitrotoluene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2,6-Dinitrotoluene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2-Chloronaphthalene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2-Chlorophenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2-Methyl naphthalene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2-Methyl-4,6-dinitrophenol	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Methylphenol (o-Cresol)	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2-Nitroaniline	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
2-Nitrophenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
3&4-Methylphenol (p&m-Cresol)	ND	ug/L	24	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
3,3-Dichlorobenzidine	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
3-Nitroaniline	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
4-Bromophenyl-phenylether	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Chloro-3-methylphenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Chloroaniline	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
4-Chlorophenyl-phenylether	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
4-Nitroaniline	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
4-Nitrophenol	ND	ug/L	48	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Acenaphthene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Acenaphthylene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Anthracene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Benzo(a)anthracene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Benzo[a]pyrene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Benzo[b]fluoranthene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Benzo[g,h,i]perylene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Benzo[k]fluoranthene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Bis(2-Chloroethoxy)methane	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Bis(2-Chloroethyl)ether	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS

Reported: 10/14/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

Ecology and Environment, Inc.

Sample ID:	3991840007	**Matrix:**	Aqueous
Client Sample ID:	W-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
bis(2-chloroisopropyl)ether	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
bis(2-Ethylhexyl)phthalate	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Butylbenzylphthalate	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Carbazole	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Chrysene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Di-n-butylphthalate	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
di-n-Octylphthalate	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Dibenzo[a,h]anthracene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Dibenzofuran	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Diethylphthalate	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Dimethylphthalate	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Fluoranthene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Fluorene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Hexachlorobenzene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Hexachlorobutadiene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Hexachlorocyclopentadiene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Hexachloroethane	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Indeno[1,2,3-c,d] pyrene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Isophorone	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
N-Nitroso-di-n-propylamine	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
N-Nitrosodiphenylamine	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Naphthalene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Nitrobenzene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Pentachlorophenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Phenanthrene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Phenol	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
Pyrene	ND	ug/L	12	SW846-8270	9/22/99 8:06	9/24/99 2:32	JLS
GC SEMIVOLATILE ORGANIC ANALYSIS							
4,4'-DDD	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
4,4'-DDE	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
4,4'-DDT	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Aldrin	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

CT&E Environmental Services Inc.

Ecology and Environment, Inc.

Sample ID:	3991840007	**Matrix:**	Aqueous
Client Sample ID:	W-1	**Location:**	Grab
Collected:	9/8/99 12:00:00AM	**Project:**	S05-9909-804 - KJ0504 000607
Received:	9/14/99 4:54:48PM	**Sampled By:**	BM/TC

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC SEMIVOLATILE ORGANIC ANALYSIS							
alpha-BHC	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
alpha-Chlordane	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Aroclor-1016	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1221	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1232	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1242	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1248	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1254	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1260	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1262	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
Aroclor-1268	ND	ug/L	0.10	SW846 8082 PCB	9/15/99 19:09	9/18/99 5:29	TMJ
beta-BHC	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
delta-BHC	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Dieldrin	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Endosulfan I	ND	ug/L	0.05	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Endosulfan II	ND	ug/L	0.05	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Endosulfan sulfate	ND	ug/L	0.05	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Endrin	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Endrin aldehyde	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Endrin ketone	ND	ug/L	0.02	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
gamma-BHC (Lindane)	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
gamma-Chlordane	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Heptachlor	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Heptachlor epoxide	ND	ug/L	0.01	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Methoxychlor	ND	ug/L	0.05	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ
Toxaphene	ND	ug/L	1	SW846 8081A	9/15/99 19:10	9/22/99 17:17	TMJ

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Gilizia

Project Manager, Michigan Division

Reported: 10/14/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference