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ANALYTICAL RESULTS REPORT

SIGNETICS CORPORATION

Orem, Utah
UTD009667536

Utah Department of Environmental Quality
Division of Environmental Response & Remediation
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~~Draft~~ 9/19/91

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J.C.

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1.0 Introduction

This report is submitted to satisfy, in part, the reporting requirements of the Screening Site Inspection (SSI) for Signetics Corporation, Orem, Utah (UTD009667536). This report provides the analytical results data and other information from the sampling activities conducted August 17, 1989, by the Utah Division of Environmental Response & Remediation (UDERR). Previous reports include the Preliminary Assessment, Sampling Plan, Field Activities Report and Site Inspection Form (see Appendix 2). These reports serve as references and provide detailed information on the site's physical description, project objectives and sampling rationale.

2.0 Background

2.1 Site Description

Signetics Corporation, manufacturers of integrated circuits on silicon wafers, is located at 1275 South 800 East, Orem, Utah. The site is located approximately one-half mile north of the Orem City Well. See Figure 1 for a general location of the site. The site, approximately 28 acres in size, is bounded on the south by University Parkway, to the west by 800 East Street, and on the east by a small frontage road. Signetics Corporation lies near the southern edge of the Orem-Provo Bench.

2.2 Site History & Previous Work

Signetics, a subsidiary of U.S. Phillips Corporation, has been in operation since 1980. The company manufacturers integrated circuits on silicon wafers (semi-conductors) using various processes including ion implantation, crystal growth and diffusion furnace steps, and photolithography. Signetics currently employs about 1200 people.

Included in this facility are a Waste Solvent Storage Tank, a Wastewater Neutralization System and a Chemical Storage area. Please refer to Figure 2 for site sketch and building locations. The facility only receives waste products from its own integrated circuits manufacturing operation. The facility is annually inspected by RCRA and is currently being investigated by the Utah Division of Water Pollution Control regarding a National Pollution Discharge Elimination System (NPDES) permit.

Signetics has installed a 10,000 gallon tank that stores flammable waste solvents. Flammable solvents in the facility are drained to a holding tank located in the plant. Twice daily the solvents are pumped to the 10,000 gallon holding tank that is located outside the main building area, south of the parking lot. A transporter will pump the tank once per month and ship the liquid to United States Pollution Control Incorporated (USPCI) for disposal.

The Chem Stores Group at Signetics is responsible for all incoming and outgoing chemicals. Wastes generated at the Chemical Storage Warehouse comes mainly from container washout. Acid bottle and drum washout drains to the Elementary Neutralization Unit (ENU). Solvent bottle and some drain washout drains to the 10,000 gallon flammable solvents tank. Tetrachloroethane (TCA) is distilled at Chem Stores. Still bottoms from the distiller are drummed and accumulated as hazardous waste.

Signetics has recently finished completion of a new ENU that is above ground. Wastewater sent to the ENU includes all plant wastewater and a variety of inorganic acids and bases.

Signetics currently has two production areas where the majority of the plant's waste is generated. Mr. James Cochrane, Environmental Affairs Plant Manager, estimates 21 waste streams run throughout the plant. Please refer to UDERR's Sampling Plan, Section 3.2, dated September 20, 1990, for a complete list of waste streams currently being used by Signetics.

It appears that the groundwater pathway could pose the greatest hazard. Prior to 1980 it was reported that Signetics personnel sprayed unknown quantities of organic solvents over the soil in the parking lot area. The parking lot area was covered with asphalt in 1985, specifically the northeast section. Signetics contracted Emcon Associates, a consulting firm located in San Jose, California, to do a groundwater study of the facility in May, 1982. Results of the investigation showed groundwater contamination in the uppermost portion of the aquifer below the site. The volatile organic compounds that were found in the groundwater include trichloroethylene, tetrachloroethane, 1,1,1-trichloroethane, benzene, toluene, and ethylbenzene (EPA Methods 624/625 were used, see Table 3 for analytical results from Emcon Associates). EarthFax conducted a follow-up groundwater study in October, 1989. Analytical results data from the samples collected indicate that the uppermost portion of the aquifer had not been contaminated by volatile or semivolatile organic compounds. A small concentration (.0048 mg/l) of bis (2-ethylhexyl) phthalate was detected in SGW-1 (see Figure 3, Monitoring Well Locations). EarthFax concluded that the low concentration of this compound was present because of possible laboratory contamination.

3.0 Site Conditions

3.1 Geological Conditions

The Signetics facility lies near the southern edge of a narrow deltaic alluvial plateau located between the base of the Wasatch Range and the shoreline of Utah Lake. The Orem-Provo Bench is underlain by sediments transported westward into ancient Lake Bonneville (of which Utah Lake is a remnant) by the Provo River.

The sediments of Lake Bonneville, the Lake Bonneville group, consist of three Formations: The Alpine (oldest), Bonneville, and the Provo (youngest). The general area where the site is located is initially underlain by an average 120 feet of coarse deltaic gravel and sand of the Provo Formation. These permeable deposits rest on a clay member of the Alpine Formation, about 90 feet thick. The Alpine formation is divided into gravel, sand, silt, and clay members. Silt and clay predominate. A disconformity, representing subaerial erosion, a submature soil, and loess and alluvium locally separate the Alpine and Bonneville formations. The Bonneville Formation, generally less than 35 feet thick, is the thinnest of the Lake Bonneville group.

3.2 Hydrogeological Conditions

Ground water is first encountered beneath the Bench perched above scattered clay lenses at a depth approximately 30 to 65 feet and/or above the clay of the Alpine formation at a depth of approximately 100 to 120 feet. The groundwater in the Provo formation is derived chiefly from excess irrigation water applied on the Bench and infiltration of natural runoff. Groundwater generally moves southwestward, discharging as springs and seeps along the edge of the Bench, which follows the Provo River.

According to hydrogeological studies performed by EMCON Associates (1982) the water supply wells in the site area draw water from a deep artesian aquifer below the clay of the Alpine formation which forms a cap over deeper deposits. The city of Orem well, located approximately 1500 feet south of the Signetics facility, draws water from the deeper portion of the artesian aquifer in the 447 to 684 foot depth interval. There is a possibility of having a reversal in pressure gradient within the deeper portion of the aquifer (artesian) which would cause contamination to discharge to the surface.

According to hydrogeological investigations conducted by UDERR, June 1990, the groundwater beneath the site is found at a depth of approximately 75 to 100 feet within coarse sand and gravel deposits (see Table 2, Water Level Elevations). This ground water is vertically separated from the water supply producing zone by thick low permeability clay deposits(refer to draft Field Activities Report, Attachment 1, Drillers Logs, submitted to EPA June 28, 1991).

4.0 Sample Collection

The UDERR sampling team collected four groundwater samples and two Quality Assurance/Quality Control (QA/QC) samples at the Signetics site on June 4, 1991. The samples were shipped to their assigned Contract Laboratory Program (CLP) labs on June 5, 1991. Split samples were collected by EarthFax, a private consulting company representing the Signetics Corporation. EarthFax also assisted in

the purging of the wells, using a bladder pump for shallow wells and a grund fos pump for deeper wells, prior to sampling. Groundwater sample locations are shown in Figure 3.

All sampling activities were conducted in Level D protective clothing based on prior analytical data and the low levels of contaminants.

4.1 Groundwater

Based upon previous water level measurements obtained by UDERR personnel as shown in Table 2, it was determined that groundwater flows in a south-southwest direction. Groundwater samples were collected from one upgradient well, SGW-2, and three monitoring wells located downgradient, SGW-1, SGW3, and SGW-4. Upgradient well, SGW-2, was sampled first. Monitoring wells SGW-1, SGW-3, and SGW-4 located hydrologically downgradient were sampled next. Figure 3 shows the monitoring well locations that were sampled.

The field parameters, temperature, specific conductance, and pH were periodically monitored while the wells were being purged and just prior to sample collection. Refer to Table 1 for results of these measurements. HNu readings from each well taken prior to purging indicated undetectable concentrations of volatile organics in the headspace. Purging of all wells, except for SGW-4, consisted of removing at least three well casing volumes of water, until field parameters stabilized. SGW-4 was purged with a bladder pump and the flow rate for this pump was extremely slow (less than .25 gallons per minute). Pumping and purging of this well occurred over a period of approximately eight hours. Finally, it was decided to sample this well after approximately one casing of water had been removed. The groundwater sample collected appeared very clear.

Separate decontaminated teflon bailers were used for each monitoring well that was purged and sampled. All sampling equipment was decontaminated prior to field work with an initial rinse with tap water to remove gross contamination; followed by steam cleaning and an alcanox detergent wash and tap rinse; followed by a final rinse with distilled water. Due to mechanical problems with the peristaltic pump and filtering apparatus, groundwater samples were not filtered and were analyzed for total metals only. All inorganic groundwater samples were preserved with nitric acid to a pH of less than two.

5.0 Analytical Results

One set of groundwater samples were shipped in sealed coolers to Gulf South Environmental Lab for complete organic analysis. The other set of groundwater samples were shipped to Natural Resources Lab for inorganic analysis. All samples were shipped on June 5, 1991, as low concentration environmental samples under proper

chain-of-custody procedures and within the required contract holding times. The proper chain-of-custody procedures were followed as outlined in the Quality Assurance Project Plan (QAPP) of the UDERR, 1989.

5.1 Data Summary

The results of organic and inorganic analyses are shown in Tables 5 and 6. All samples were analyzed for volatiles, base/neutral/extractables, pesticides/PCBs, and for total metals. For organic results only, the data tables show only the contaminants that were detected above the contract required detection limit (CRDL).

5.2 Quality Assurance

Both organic and inorganic data packages were examined by Versar, Level of Effort contractor for UDERR, in accordance with the EPA Functional Guidelines for Reviewing Organic and Inorganic Compounds. The Quality Assurance Reports and data sheets are attached, along with Versar's report on data validation, as Appendix 1. The data packages were judged acceptable but several qualifiers (flags) were noted by the reviewer. Table 4, Qualifier Definitions, provides an explanation for the qualifiers that were used in validating the analytical data.

5.2.1 Inorganic Data

Specific findings pertaining to quality assurance of the inorganic data package include the following:

All the samples met regulatory and contractual holding times for mercury and all other metals. ICP Interference Check Sample Results (ICS) were within acceptable limits and required no qualification. Regarding Furnace Atomic Absorption, some problems were noted with the Post-Digestion Spike being out of prescribed limits. Sample absorbance was less than 50%. Therefore the compounds thallium and selenium were qualified with a "UJ". ICP Serial Dilution Results for manganese did not meet the Percent Difference (%D) criteria. Negative interference appeared possible for aluminum but both the initial result and the serial dilution result are near the Instrument Detection Limit (IDL). Refer to Table 4, Data Qualifier Definitions, for a complete explanation for specific qualifiers.

5.2.2 Organic Data

The organic data was found acceptable with the following qualifications noted:

Qualification of the BNA analytical data revealed some calibration problems. 2,4 dimethylphenol was found to be over the maximum %D

in several samples (HH 429, HH 430, and HH 439). The data for this compound was qualified as estimated (J) for these samples. With respect to holding times, all initial extraction and testing were within holding time criteria. Samples HH 440RE, HH 441RE, and HH442RE were extracted fifteen days after collection for reanalysis due to problems in the sample blank. Fifteen days exceeded the seven day extraction requirement and thus the reanalysis sample data was qualified and estimated (J). Phthalate contamination exceeded five times the Contract Required Quantitation Limit (CRQL) found in the sample blank corresponding to samples HH 440, HH 441, and HH 442. For each of these three samples phthalate data was qualified as unusable and requires reanalysis. The reviewer noted that with respect to Tentatively Identified Compounds (TICs) some unknown compounds appeared to match the chromatograph very well. For example, pyridine 2,3,4,5 tetrahydro in sample HH 441RE was very similar to the unknown peak at retention time 7.49 minutes.

VOA analysis indicated methylene chloride in the blank greater than the specified quantitation limit but less than the CRQL specified in the laboratory's Statement of Work (SOW). All sample results were qualified as undetected (U) including those reported as JB by the laboratory.

The overall assessment regarding pesticide analysis indicated some small problems, but data was not qualified.

6.0 Exposure Pathways

The objectives of this section are to summarize the analytical data in relationship to the exposure pathways and to determine whether hazardous substances have been released from the site to the environment. Only groundwater samples were collected during this investigation. The only potential source for contamination to the groundwater results from a spill of chlorinated solvents that occurred prior to 1980. Almost all of the site's surface, including the location where the spill occurred, is covered by asphalt or cement. Other pathways were not considered significant due to the asphalt paving. During the site investigation surface water or runoff water was not observed on or off-site. Therefore surface water, sediment, and soil samples were not collected during the sampling investigation. Due to this fact only the groundwater pathway will be analyzed. Non-qualified data and data flagged "J" is considered estimated and valid and are included in the discussion of analytical results (refer to Table 4, Qualifier Definitions). For further discussion of data validation criteria, refer to Section 5.2, Quality Assurance.

6.1 Groundwater

According to regional groundwater flow patterns and water-level measurements taken by EarthFax (September 1989) and UDERR personnel (June 1991) the groundwater flow direction is generally to the

south-southwest. Therefore monitoring well SGW-2 is located hydrologically upgradient and monitoring wells SGW-1, SGW-3, and SGW-4 are located downgradient.

Monitoring well SGW-2, an upgradient well, showed a concentration of 391 parts per billion (ppb) barium. Lead was also found at this sampling location at a concentration of 24.9 ppb. The highest level of barium found at the other downgradient monitoring well locations was 82.9 ppb at SGW-1. The highest level of lead was found at 2.50 ppb at SGW-1. Inorganic data indicated the presence of several metals in the upgradient well with higher level of concentrations than the downgradient wells. Upgradient well SGW-2 shows concentrations of calcium and magnesium at 103,000 ppb and 24,000 ppb, respectively. Downgradient well SGW-1 indicated calcium and magnesium concentrations at 74,300 ppb and 23,000 ppb, respectively. Analytical data from inorganic analysis showed no concentrations above the Maximum Contaminant Level (MCL).

Organic analysis of the groundwater at Signetics indicates a small release of contaminants. Benzene was found at a concentration of 2 ppb in monitoring wells SGW-1 and SGW-4 (downgradient monitoring wells). Toluene was found at a concentration of 1 ppb in SGW-4. 2-Butanone was indicated in SGW-3 at a concentration of 23 ppb. Small amounts of acetone were found in SGW-7 and SGW-6. These two samples were QA/QC samples, a decon and trip blank. All VOA compounds identified in the groundwater are qualified with a "J". Refer to Section 5.2.1 and 5.2.2 for an explanation of the qualifiers that were used. None of the contaminants identified were present above MCLs.

No pesticides/PCBs were found in any of the groundwater samples above the CRDL.

Low concentration levels of BNA compounds were found in the groundwater. Isophorone and 2-methylnapthalene were found in SGW-4 at 1 ppb. A possible laboratory contaminant, bis(2-ethylhexyl)phthalate, was found in several of the monitoring wells. The highest concentration was found in SGW-3 at 6 ppb. Numerous Tentatively Identified Compounds (TICs) were identified in the groundwater and a complete list can be found in Appendix 1. Please refer to Tables 5 and 6 for a complete list of inorganic and organic compounds that were identified in the groundwater at the Signetics site. None of the contaminants identified were present above MCLs.

7.0 Conclusions

Based upon the analytical results shown in Tables 5 and 6 there appears to be an observed release of contaminants with respect to the groundwater.

Analytical data indicates the presence of small levels of VOAs in

the groundwater. Benzene was found in SGW-1 and SGW-4 at 2 ppb. Toluene was found in SGW-4 at 1 ppb. Benzene and toluene were not found in the upgradient monitoring well, SGW-2, above the CRDL. Low concentration levels of BNA compounds were found in the groundwater. Isophorone and 2-methylnapthalene were found in SGW-4 at 1 ppb. These compounds were not found in the upgradient well, SGW-2, above the CRDL.

The Signetics site is in an area that has a residential/industrial population. Though there are substantial target receptors in the area, due to the very low levels of contaminants that were found in the groundwater, and the covering provided by concrete, asphalt and buildings, exposure (and therefore risk) is expected to be very low. Therefore, a population data table and population map were not completed for this report.

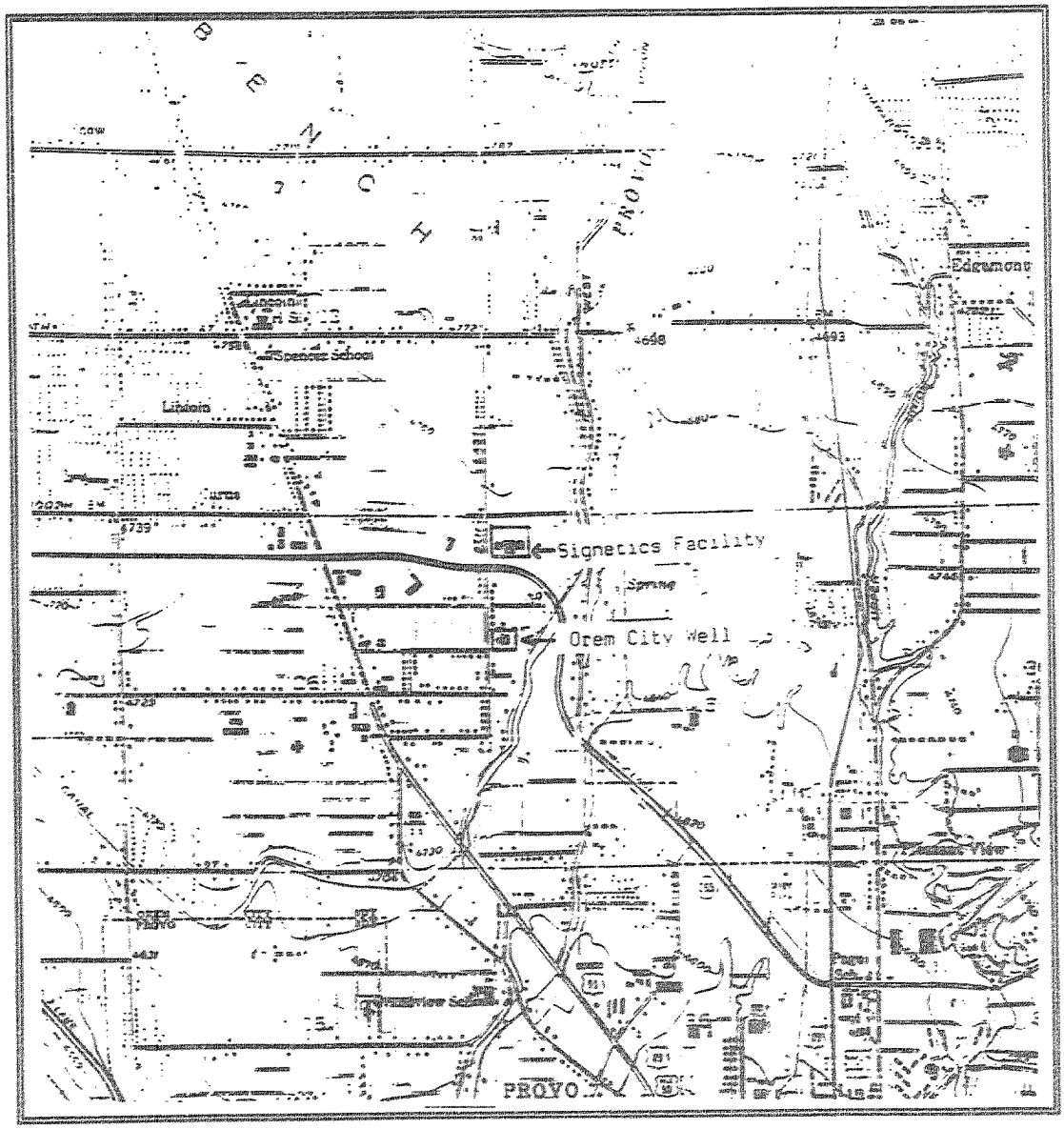
8.0 References

EarthFax, 1989. Collection of Groundwater Quality Samples at Signetics Co., Signetics Site, Orem, Utah.

Emcon Associates, 1982. Hydrogeological and Ground-Water Quality Investigation, Signetics Site, Orem, Utah.

Utah Department of Environmental Quality, Division of Environmental Response & Remediation, 1989. Quality Assurance Project Plan, October.

_____.1991. UDERR Field Activities Report, Signetics Site, Orem, Utah, June.



NORTH

U D E Q

BUREAU OF ENVIRONMENTAL RESPONSE AND REMEDIATION

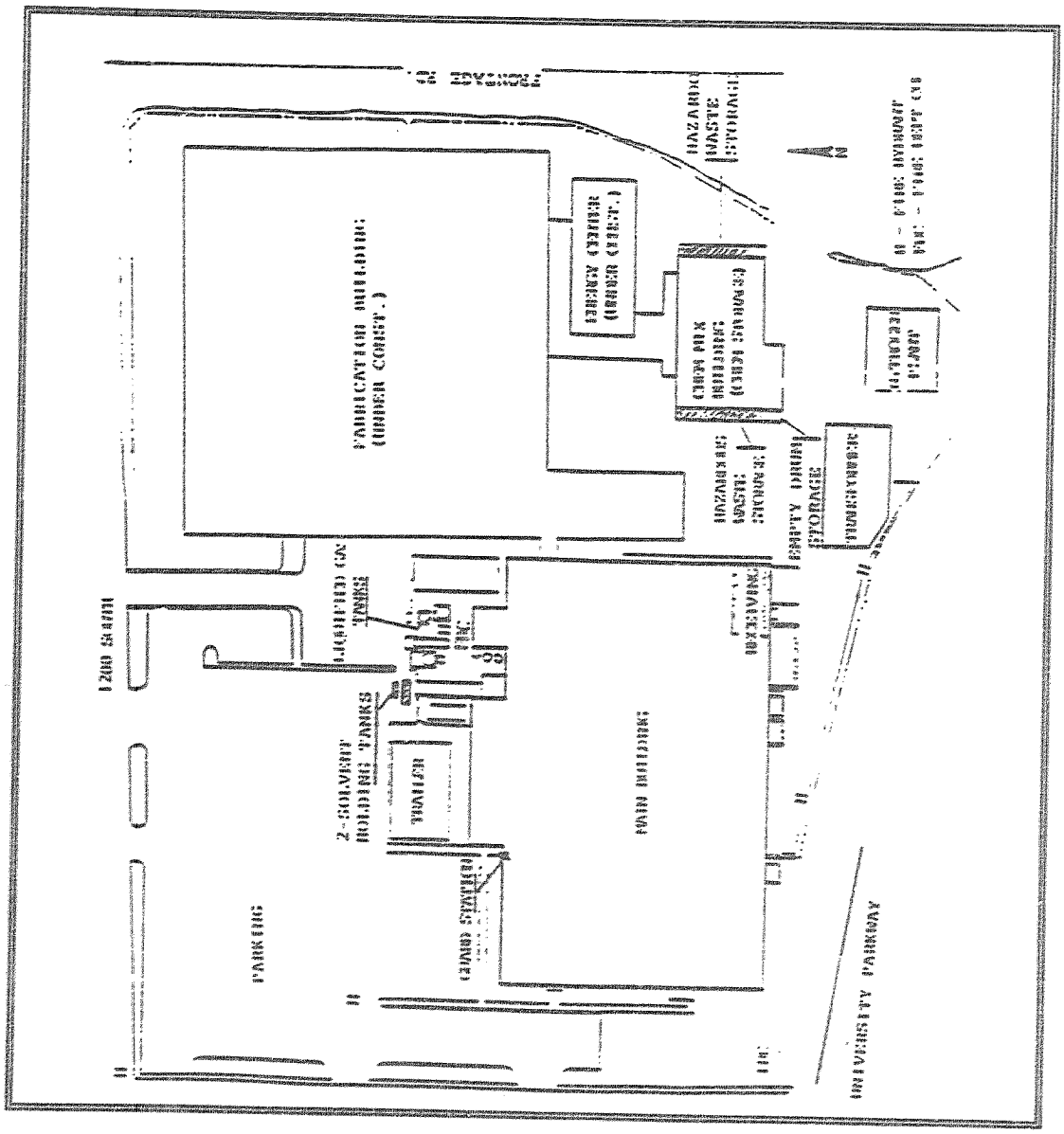
Site Location

Signetics Corporation
Orem, Utah

Figure 1

By	Date	Scale
MJS	9/17/91	1:25,0000

USGS topo.base
Salt Lake City, North.7.5"series



UDEQ

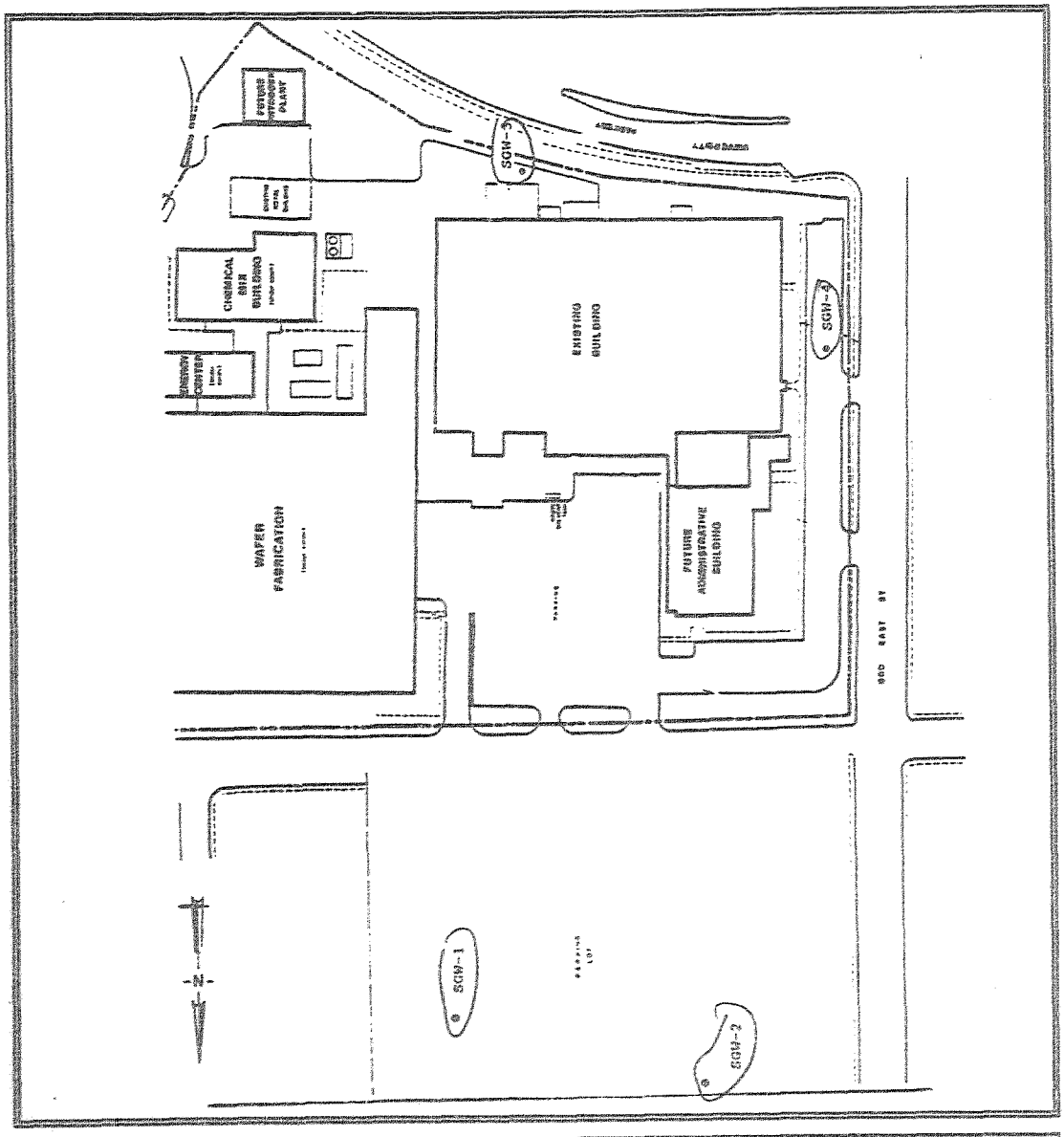
BUREAU OF ENVIRONMENTAL RESPONSE AND REMEDIATION

Site Sketch

Signetics Corporation
Orem, Utah

Figure 2

By	Date	Scale
MJS	9/17/91	NTS



KEY

● Monitoring well

UDEQ BUREAU OF ENVIRONMENTAL RESPONSE AND REMEDIATION		
Sampling Locations Signetics Corporation Orem, Utah Figure 3		
By MJS	Date 9/17/91	Scale NTS

TABLE 1*

TEMPERATURE, SPECIFIC CONDUCTANCE AND pH MEASUREMENTS

6/4/91

WELL NUMBER	TEMPERATURE celsius	SPECIFIC CONDUCTANCE umhos	pH
SGW-1**	18.8	222	7.5
SGW-2	15.2	494	7.4
SGW-3	15.8	206	7.2
SGW-4	16	218	7.7

*Readings above represent measurements taken after the wells had been purged (stabilized) and prior to sampling

**Measurements taken after only one casing of water had been removed due to slow recharge of well

TABLE 2
WATER LEVEL ELEVATIONS
(June 4, 1991)

Site	Measuring Point Elevation*	Static Water Level*	Static Water Elevation*
SGW-1	4760.6	82.11	4678.49
SGW-2	4761.1	80.82	4680.28
SGW-3	4752.9	80.74	4672.16
SGW-4	4755.2	85.10	4670.10

*Measurements in feet

TABLE 3

ANALYTICAL REPORT

SIGNETICS-OREM, UTAH

ANALYSIS BY ACUREX CORPORATION

July 23, 1982

WATER

PARAMETER	Well 1 7/14/82	Well 3 7/14/82	Well 4 7/14/82	City Well 4 7/15/82	City Well 1 7/15/82	Field Blank
Dichloromethane, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Chloroform, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Trichloroethylene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
trans-1,2-Dichloroethylene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
1,1-Dichloroethylene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Tetrachloroethylene (Perchloroethylene), ug/l	<1.	<1.	<1.	<1.	<1.	<1.
1,1,1-Trichloroethane, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
1,1-Dichloroethane, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
1,2-Dichloroethane, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
1,1,2-Trichloroethane, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Benzene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Toluene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Ethylbenzene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Xylene, ug/l	<1.	<1.	<1.	<1.	<1.	<1.
Dichlorobenzene, ug/l	P	ND	ND	ND	ND	ND

ND = None Detected
P = Present but not quantifiable

TABLE 4

Data Qualifier Definitions

General Qualifiers for Inorganic/Organic Data

R- Quality Control indicates that any positive values or reported detection limits are not reliable. Reported value is "rejected".

J- The associated numerical value is an estimated quantity because Quality Control criteria were not met, or the amount detected in the sample is below the contract required detection limit (Organics analysis only).

UJ- The reported detection limit is estimated because Quality Control criteria were not met. Compound was not detected.

JB- The reported value is estimated because compound was also detected in the associated blank.

UJB- The reported value has been changed to a sample quantitation limit because the sample value is not significantly greater than the blank contamination level, or is less than the blank contamination level.

JH- The associated numerical value is an estimated quantity because the samples were analyzed outside of the analytical or contractual holding time. Reported values may be lower than the actual value.

UJH- The possibility of a false non-detect exists because the sample was analyzed outside of the analytical or contractual holding time.

Specific Qualifiers

Organic Data

JN- Estimated value of a tentatively identified compound (TIC). Normal standard calibration and Quality Control Criteria do not apply for the reported result.

Z- No analytical result reported for this compound.

TABLE 4 (continued)

Inorganic Data

E- Qualified value because of interference problems (ICP serial dilution or poor GFAA analytical spike recovery).

I- Qualified value because result exceeded ICP linear range.

D- Qualified value because associated duplicate sample analysis control limits were exceeded.

S- Qualified value because matrix spike recovery were outside of the control limits.

C- Qualified value because of instrument calibration problems.

L- Qualified value because the LCS recoveries were outside of the control limits.

TABLE 5

INORGANIC RESULTS FOR GROUNDWATER SAMPLES (ug/l)
SIGMETICS
6/4/91

SAMPLE NUMBER	SGW-1	SGW-2	SGW-3	SGW-4	SGW-5	SGW-7
TRAFFIC NUMBER	MWR-581	MWR-582	MWR-583	MWR-584	MWR-585	MWR-586
SAMPLE LOCATIO	DOWNGRADIENT	UPGRADIENT	DOWNGRADIENT	DOWNGRADIENT	DUP FOR SGW-5	DECON BLANK
Aluminum	346.00	22400.00	42.30	52.20	377.00	17.20
Antimony	18.00	18.00	18.00	18.00	19.20	18.00
Arsenic	2.30	5.20	2.00	2.10	2.20	1.60
Barium	82.90	391.00	63.50	44.80	81.90	1.00
Beryllium	1.00	4.50	1.00	1.00	1.00	1.00
Cadmium	3.00	3.00	3.00	3.00	3.00	3.00
Calcium	74300.00	103000.00	52100.00	9350.00	75100.00	29.00
Chromium	5.20	17.80	7.70	5.60	6.10	4.00
Cobalt	3.00	11.10	3.00	3.00	3.00	3.00
Copper	4.40	20.50	2.00	8.10	4.00	2.00
Iron	16600.00	32600.00	15600.00	436.00	17900.00	7.50
Lead	2.50	24.90	1.00	1.00	2.50	1.00
Magnesium	23000.00	24000.00	13200.00	6270.00	22900.00	19.00
Manganese	280.00 J	590.00 J	281.00 J	32.20	308.00 J	1.00 J
Mercury	0.10	0.13	0.10	0.10	0.13	0.10
Nickel	7.00	19.60	7.00	7.00	7.00	7.00
Potassium	4570.00	10900.00	3590.00	74800.00	4410.00	303.00
Selenium	2.00	2.00	2.00	2.00 UJ	2.00	2.00
Silver	3.00	3.00	3.00	3.00	3.00	3.00
Sodium	11900.00	12900.00	12300.00	75200.00	11800.00	233.00
Thallium	2.00 UJ	2.00	2.00 UJ	2.00	2.00	2.00
Vanadium	3.00	30.20	3.00	3.00	3.00	3.00
Zinc	28.30	140.00	39.80	39.80	27.00	8.20

TABLE 6

ORGANIC DATA RESULTS FOR GROUND WATER SAMPLES (ug/l)
SIGNETICS
6/4/91

SAMPLE NUMBER TRAFFIC NUMBER SAMPLE LOCATION	SGW-1 RN-429 DOWNGRADIENT	SGW-2 RN-430 UPGRADIENT	SGW-3 RN-439 DOWNGRADIENT	SGW-4 RN-440 DOWNGRADIENT	SGW-5 RN-441 DUP/SGW-1	SGW-6 RN-443 TRIP BLANK	SGW-7 RN-442 DECON BLANK
VOAs							
Methylene Chloride	1 U		1 U		1 U		
Acetone						29	27
2-Butanone			23				
Benzene	2 J			2 J			
Toluene				1 J			
BNAs							
2,4-Dimethylphenol	10 UJ	10 UJ	10 UJ				
Naphthalene				1 J			
2-Methylnaphthalene				1 J			
bis (2-Ethylhexyl)phthal	1 JB	2 JB	6 JB	3 JB	1 JB		2 JB
Isophorone				1 J			
TICs- BNAs							
Heptadecane			3 JN	10 JN			
Bicyclo(4.1.0)Heptan-3-OL				2 JN			
Ethanone,1-(Methylphenyl)				6 JN			
Hexadecane				6 JN			
Dodecane, 2,7,10-Trimethyl				4 JN			
Tritetracontane				4 JN			
Cyclohexanol	3 JN	5 JN					
Butanoic Acid, 4-Chloro	4 JN	3 JN	4 JN		3 JN		
Eicosane				6 JN			

APPENDIX 1

APPENDIX 2

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

I. IDENTIFICATION NO.
UTD009667536

PART 1 - SITE LOCATION AND INSPECTION INFORMATION

II. SITE NAME LOCATION

01 Site Name (Legal, common or descriptive name of site)
SIGNETICS CORPORATION

02 Street, route no. or specific location identifier
1275 SOUTH 800 EAST

03 City
OREM

04 State UT 05 Zip Code 84057 06 County UTAH

07 County Code 49 08 Congress District 1

09 Coordinates (d,m,s)
Latitude 40, 16, 26.0
Longitude 111, 16,44.0

10 Type of ownership (Check one)
X Private
County
Federal
Municipal
State
Other:
Unknown

III. INSPECTION INFORMATION

01 Date Of Inspection
06/04/91

02 Site Status
X Active
Inactive

03 Years Of Operation
Beginning Year 1980
Ending Year
Unknown

04 Agency Performing Inspection (Check all that apply)
EPA
EPA Contractor:
Municipal
Municipal Contractor:
X State
State Contractor:
Other:

05 Chief Inspector	06 Title	07 Organization	08 Telephone No.
MICHAEL STORCK	E.H. SCIENTIST	UDERR	801-536-4100

09 Other Inspectors	10 Title	11 Organization	12 Telephone No.
JASON KNOWLTON	E.H. SCIENTIST	UDERR	801-536-4100

13 Site Representatives Interviewed	14 Title	15 Telephone No.
A. JAMES COCHRANE	A. ENV. PLT. MNGR	A. 255-6600
B.	B.	B.
C.	C.	C.

16 Address A. 1275 SOUTH, 800 EAST, OREM, UTAH, 84057
B.
C.

17 Access Gained By (Check one)
X PERMISSION
WARRANT

18 Time Of Inspection

19 Weather Conditions

IV. INFORMATION AVAILABLE FROM

01 Contact	02 Agency/Organization	03 Telephone
MICHAEL STORCK	UDERR	801-536-4100

04 Person Responsible For Site Inspection Form
MICHAEL STORCK

05 Agency/Organization
UDERR

06 Telephone No.
801-536-4100

07 Date
09/17/91

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

I. IDENTIFICATION NO.
UTD009667536

PART 2 - WASTE INFORMATION

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 Physical States (Check all that apply)

	Solid	Slurry
	Powder, Fines	X Liquid
X	Other SLURRY (Specify)	Gas

02 Waste Quantity at Site (Measures of waste quantities must be independent)

UNKNOWN

Tons
Cubic Yards
Number of Drums

03 Waste Characteristics (Check all that apply)

X Toxic	Persistent	X Flammable	Explosive	Not Applicable
Corrosive	Soluble	Ignitable	Reactive	
Radioactive	Infectious	Highly Volatile	Incompatible	

III. WASTE TYPE

Category	Substance Name	01 Gross Amount	02 Unit of Measure	03 Comments
X SLU	Sludge	UNKNOWN		
OLW	Oily Waste			
SOL	Solvents			
PSD	Pesticides			
OCC	Other Organic Chem			
IOC	Inorganic Chem			
ACD	Acids			
BAS	Bases			
MES	Heavy Metals			

IV. HAZARDOUS SUBSTANCES (See appendix for most frequently cited CAS numbers)

01 Category	02 Substance Name	03 CAS Number	04 Storage/ Disposal Method	05 Concen- tration	06 Measure of Concen- tration
	BENZENE			2	ug/l
	TOLUENE			1	ug/l

V. FEEDSTOCKS (See appendix for CAS numbers)

Category	01 Feedstock Name	02 CAS #	Category	01 Feedstock Name	02 CAS #
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (CITE specific references, e.f., state files, sample analysis, reports)

01 UBSHW, 1990, SAMPLING PLAN, SIGNETICS CORPORATION
02 UDERR, 1991, FIELD ACTIVITIES REPORT
03 UDERR, 1991, ANALYTICAL RESULTS REPORT
04

II. HAZARDOUS CONDITIONS AND INCIDENTS

A. 01 GROUNDWATER CONTAMINATION 02 Observed Date 06/04/91 Potential
03 Population Potentially Affected 400 Alleged
04 Narrative Description:
GROUNDWATER GENERALLY FLOWS SOUTH-SOUTHWEST DIRECTION. OREM CITY WELL, A MUNICIPAL DRINKING WELL, IS LOCATED ONE-HALF MILE UPGRADIENT FROM SITE. GROUNDWATER MEASUREMENTS TAKEN BY UDERR PERSONNEL IN JUNE 1991, LOCATED GROUNDWATER APPROXIMATELY 76 FEET DEEP IN A PERMEABLE COURSE SAND AND GRAVEL LAYER. DATA INDICATES BENZENE AND TOLUENE IN ONE OF THE DOWNGRADIENT WELLS (JUNE 1991).

B. 01 SURFACE WATER CONTAMINATION 02 Observed Date 06/04/91 Potential
03 Population Potentially Affected 400 Alleged
04 Narrative Description:
PROVO RIVER RUNS ONE-QUARTER MILE SOUTHEAST OF THE FACILITY. PROVO RIVER RUNS INTO UTAH LAKE. THERE IS NO APPARENT SURFACE WATER CONTAMINATION DUE TO ASPHALT CAP.

C. 01 CONTAMINATION OF AIR 02 Observed Date __/__/__ Potential
03 Population Potentially Affected Alleged
04 Narrative Description:
THE SITE IS COVRED BY CEMENT AND ASPHALT. THERE IS LOW POTENTIAL FOR AIR RELEASE.

D. 01 FIRE/EXPLOSIVE CONDITIONS 02 Observed Date __/__/__ Potential
03 Population Potentially Affected 1900 Alleged
04 Narrative Description:
NO RECORDED HISTORY. UNDERGROUND TANKS CONTAINING FLAMMABLE SOLVENTS WERE REMOVED. THERE ARE SOME ABOVE GROUND TANKS ON-SITE.

E. 01 DIRECT CONTACT 02 Observed Date __/__/__ Potential
03 Population Potentially Affected 1360 Alleged
04 Narrative Description:
THE ENTIRE FACILITY IS FENCED AND THE ENTRANCE IS SECURED BY MONITORING EQUIPMENT AND SECURITY GUARDS. THE AREA CONTAINING FLAMMABLE SOLVENTS IS SECURED. THE AREA WHERE SPILL OCCURRED IS COVERED BY ASPHALT.

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

F. 01 CONTAMINATION OF SOIL 02 Observed Date __/__/__ Potential Alleged
03 Area Potentially Affected
04 Narrative Description:
SOIL SAMPLES COLLECTED NOVEMBER 1983, INDICATED NO DETECTABLE CONTAMINATION. NO SOIL SAMPLES WERE COLLECTED DURING THE SAMPLING INVESTIGAITON, JUNE 1991.

G. 01 DRINKING WATER CONTAMINATION 02 Observed Date 06/04/91 X Potential Alleged
03 Population Potentially Affected 64000
04 Narrative Description:
AN OREM CITY DRINKING WATER WELL IS LOCATED A HALF-MILE SOUTH OF THE FACILITY, SAMPLE ANALYZED SHOWED NO EVIDENCE OF CONTAMINATION.

H. 01 WORKER EXPOSURE/INJURY 02 Observed Date 06/04/91 X Potential Alleged
03 Workers Potentially Affected 1200
04 Narrative Description:
THE ENCLOSED AREA CONTAINING SOLVENTS IS CLOSELY MONITORED BY SECURITY GUARDS.

I. 01 POPULATION EXPOSURE/INJURY 02 Observed Date 06/04/91 X Potential Alleged
03 Population Potentially Affected 64000
04 Narrative Description:
IF DRINKING WATER WERE CONTAMINATED POSSIBLE FOR POTENTIAL EXPLOSURE/INJURY.

J. 01 DAMAGE TO FLORA 02 Observed Date __/__/__ Potential Alleged
03 Narrative Description:
NO RECORDED HISTORY.

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

K. 01 DAMAGE TO FAUNA 02 Observed Date __/__/__ Potential Alleged
03 Narrative Description:
NO RECORDED HISTORY.

L. 01 CONTAMINATION OF FOOD CHAIN 02 Observed Date __/__/__ Potential Alleged
03 Narrative Description:
NO FISHERIES OR POTENTIAL FOR SURFACE WATER RELEASE NEAR THE SITE.

M. 01 UNSTABLE CONTAINMENT OF WASTES 02 Observed Date __/__/__ Potential
(Soils/Runoff/Standing Liquids/Leaking Drums) X Alleged
03 Population Potentially Affected
04 Narrative Description:
THE NONCORROSIVE FLAMMABLE SOLVENTS WERE CONTAINED IN UNDERGROUND TANKS IN THE PAST. THE TANKS WERE REMOVED AND DISPOSED OF IN 1983. THE SOIL WAS CONTAMINATED FROM THE SPRAYING OF UNKNOWN QUANITIES OF SOLVENTS ON THE PARKING LOT, WHICH HAS SINCE BEEN COVERED BY ASPHALT.

N. 01 DAMAGE TO OFFSITE PROPERTY 02 Observed Date __/__/__ Potential Alleged
03 Narrative Description:
NO RECORDED HISTORY.

O. 01 CONTAMINATION OF SEWERS, STORM DRAINS, WWTPS 02 Observed Date __/__/__
03 Narrative Description: Potential Alleged
NO RECORDED HISTORY. AREA WHERE UNKNOWN QUANTITY OF SOLVENT WAS SPRAYED IS COVERED BY ASPHALT. POTENTIAL OF SEWER/STORE DRAINS/WWTPS AND RUNOFF IS SMALL.

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

P. 01 ILLEGAL/UNAUTHORIZED DUMPING 02 Observed Date __/__/__ Potential
03 Narrative Description: X Alleged
SPRAYING OF UNKNOWN QUANTITIES OF SOLVENT WASTES OCCURED UNTIL NOVEMBER 1980.

Q. 01 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS:
THERE ARE CURRENTLY ABOUT TWENTY-ONE WASTE STREAMS ON-SITE. NO HAZARDOUS SPILLS ON-SITE HAVE BEEN REPORTED.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 64000

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.f., state files, sample analysis, reports)

01 SITE VISITED DATED JUNE 4, 1991
02 UDERR OFFICE FILES
03 UDERR, 1990, SAMPING PLAN, SIGNETICS CORPORATION
04
05

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION NO.
UTD009667536

II. PERMIT INFORMATION

01 Type Of Permit Issued	02 Permit No.	03 Date Issues	04 Expira/Date	05 Comments
X NPDES		/ /	/ /	
UIC		/ /	/ /	
AIR		/ /	/ /	
RCRA		/ /	/ /	
RCRA INTERIM STATUS		/ /	/ /	
SPCC PLAN		/ /	/ /	
STATE		/ /	/ /	
LOCAL		/ /	/ /	
OTHER		/ /	/ /	
NONE		/ /	/ /	

III. SITE DESCRIPTIONS

01 Storage/Disposal (Ckeck all that apply)	02 Amount	03 Unit Of Measure	04 Treatment (Check all that apply)
Surface Impoundment			Incineration
Pile			Underground Injection
Drums, Above Ground			Chemical/Physical
X Tank, Above Ground			Biological
Tank, Below Ground			Waste Oil Processing
Landfill			Solvent Recovery
Landfarm			Other Recycling/Rcvry
Open Dump			Other
Other			

05 Buildings On Site:

06 Area Of Site: (Acres)

07 Comments:

IV. CONTAINMENT

01 Containment Of Wastes (Check one)

X Adequate, Secure — Inadequate, Poor
Moderate — Insecure, Unsound, Dangerous

02 Description Of Drums, Diking, Liners, Barriers, Etc.:
55-GALLON DRUMS ON-SITE; STORAGE OF VARIOUS CHEMICALS.

V. ACCESSIBILITY

01 Waste Easily Accessible: Yes X No

02 Comments:
SITE IS SECURED WITH FENCE/LOCKED GATE; MONITORED BY SECURITY GUARDS.
AREA WHICH SPILL OCCURRED IS COVERED WITH ASPHALT.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

01 UDERR, 1990, SAMPLING PLAN
02 UDERR, 1991, FIELD ACTIVITIES REPORT
03
04
05

II. DRINKING WATER SUPPLY

01 Type Of Drinking Supply (Check as applicable)	Surface	Well	02 Status: Endangered	Affected	Monitored	03 Distance To Site
Community		X				0.50(mi)
Non-Community						0.00(mi)

III. GROUNDWATER

01 Groundwater Use In Vicinity (Check one)

A. Only Source For Drinking
B. Commercial, Industrial, Irrigation
C. Not Used, Unusable
D. Drinking (Other sources available)
X E. Commercial, Industrial, Irrigation (No other water sources available)

02 Population Served By Groundwater 64000
03 Distance To Nearest Drinking Water Well 0.50(mi)
04 Depth To Groundwater 76(ft)
05 Direction Of Groundwater Flow SOUTHWEST
06 Depth To Aquifer Concerned 480-600(ft)
07 Potential Yld Of Aquifer UNKNOWN(gpd)
08 Sole Source Aquifer Yes X No
09 Description Of Wells (Including usage, depth and location relative to population and buildings)
OREM CITY DRINKNG WATER WELL; OVER 480 FEET IN DEPTH; LOCATED APPROXIMATELY ONE-HALF MILE SOUTH OF THE SITE.

10 Recharge Area Yes X No Comments:
11 Discharge Area X Yes No Comments:

IV. SURFACE WATER

01 Surface Water Use (Check one)

A. Reservoir, Recreation Drinking Water Source
X B. Irrigation, Economically Important Resources
C. Commercial, Industrial
D. Not Currently Used

02 Affected/Potentially Affected Bodies Of Water

Name:	Affected:	Distance To Site:
PROVO RIVER		0.25(mi)
		0.00(mi)
		0.00(mi)
		0.00(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 Total Population Within (Number of persons):
A. One (1) Mile Of Site 1360 B. Two (2) Miles Of Site 27500 C. Three (3) Miles Of Site 47200
02 Distance To Nearest Population .25(mi)
03 Number Of Buildings Within Two (2) Miles Of Site 72500
04 Distance To Nearest Off-Site Building 0.1(mi)
05 Population Within Vicinity Of Site (Provide narrative description of nature of population within vicinity of site, e.g., rural, village densely populated urban area)
THE SITE IS LOCATED IN AN INDUSTRIAL/RESIDENTIAL AREA THAT IS MODERATELY POPULATED.

VI. ENVIRONMENTAL INFORMATION

01 Permeability Of Unsaturated Zone (Check one)
A. 10^{-6} - 10^{-8} cm/sec
X B. 10^{-4} - 10^{-6} cm/sec
C. 10^{-2} - 10^{-3} cm/sec
D. Greater Than 10^{-3} cm/sec
02 Permeability Of Bedrock (Check one)
A. Impermeable Less than 10^{-6} cm/sec
B. Relatively Impermeable 10^{-4} - 10^{-6} cm/sec
X C. Relatively Permeable 10^{-2} - 10^{-4} cm/sec
D. Very Permeable Greater than 10^{-2} cm/sec
03 Depth To Bedrock UNKNOWN(ft)
04 Depth Of Contaminated Soil Zone UNKNOWN(ft)
05 Soil pH 7-8
06 Net Precipitation 3.0(in)
07 One Year 24 Hour Rainfall 2.00(in)
08 Slope:
A. Site slope 2(%)
B. Direction Of Site Slope SOUTH
C. Terrain Average Slope 0-1(%)
09 Flood Potential Site Is In 100 Year Flood Plain
10 Yes X No Site Is On Barrier Island, Coastal High Hazard Area, Riverine Floodway
11 Distance To Wetlands (5 Acre minimum)
A. Estuarine 0.00(mi)
B. Other 0.00(mi)
12 Distance To Critical Habitat (Of endangered species)
A. 0.00(mi)
B. Endangered Species:
13 Land Use In Vicinity Distance To:
A. Residential Areas: Commercial/Industrial 0.10(mi)
B. National/State Parks, Forests, Or Wildlife Reserves 7.00(mi)
C. Agricultural Lands: Prime Agricultural Land 0.00(mi)
D. Agricultural Lands: Agricultural Land 1.00(mi)
14 Description Of Site In Relation To Surrounding Topography:
THE SITE IS ZONED FOR INDUSTRIAL AND IS BOUNDED ON THE SOUTH BY UNIVERSITY PARKWAY, TO THE WEST BY 800 EAST STREET, AND ON THE EAST BY A SMALL FRONTAGE ROAD.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

01 UDERR, 1990, SAMPLING PLAN
02 UDERR, 1991, FIELD ACTIVITIES REPORT
03 SITE INSPECTION, 1991
04
05

II. SAMPLES TAKEN

	01 Number Of Samples Taken	02 Samples Sent To	03 Estimated Date Results Available
Groundwater	4	GULF SOUTH ENVIRONMENTAL	08/15/91
Surface Water			/ /
Waste			/ /
Air			/ /
Runoff			/ /
Spill			/ /
Soil			/ /
Vegetation			/ /
Other			/ /

III. FIELD MEASUREMENTS TAKEN

01 Type	02 Comments
pH, TEMP	THESE MEASUREMENTS TAKEN OF GROUNDWATER SAMPLES COLLECTED.
H Nu	READINGS TAKEN AT WELL CASING HEAD SPACE.

IV. PHOTOGRAPHS AND MAPS

01 Type: Ground Aerial

02 In Custody Of (Name of organization or individual):

03 Maps: X Yes No

04 Location Of Maps:
UDERR FILES

V. OTHER FIELD DATA COLLECTED (Provide Narrative Description)

NOT APPLICABLE.

VI. SOURCES OF INFORMATION (Cite Specific References, e.g., state files, sample analysis, reports)

01 UDERR FILES
02 SITE INSPECTION, 1991
03
04
05

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

I. IDENTIFICATION NO.
UTD009667536

PART 7 - OWNER INFORMATION

II. CURRENT OWNER(S)		PARENT COMPANY (If Applicable)	
01 Name SIGNETICS CORPORATION	02 D&B Number	08 Name	09 D&B Number
03 Street Address (P.O.B. or RFD#) 811 EAST ARQUES AVENUE		10 Street Address (P.O.B. or RFD#)	
04 SIC Code:		11 SIC Code:	
05 City: SUNNYVALE	06 State: CA	12 City:	13 State:
07 Zip Code: 94086		14 Zip Code:	
01 Name	02 D&B Number	08 Name	09 D&B Number
03 Street Address (P.O.B. or RFD#)		10 Street Address (P.O.B. or RFD#)	
04 SIC Code:		11 SIC Code:	
05 City	06 State:	12 City:	13 State:
07 Zip Code:		14 Zip Code:	
01 Name	02 D&B Number	08 Name	09 D&B Number
03 Street Address (P.O.B. or RFD#)		10 Street Address (P.O.B. or RFD#)	
04 SIC Code:		11 SIC Code:	
05 City:	06 State:	12 City:	13 State:
07 Zip Code:		14 Zip Code:	

III. PREVIOUS OWNERS List Most Recent First		REALTY OWNER(S) If Applicable, List Most Recent First	
01 Name NOT APPLICABLE	02 D&B Number	08 Name	09 D&B Number
03 Street Address (P.O.B. or RFD#)		10 Street Address (P.O.B. or RFD#)	
04 SIC Code:		11 SIC Code:	
05 City:	06 State:	12 City:	13 State:
07 Zip Code:		14 Zip Code:	
01 Name	02 D&B Number	08 Name	09 D&B Number
03 Street Address (P.O.B. or RFD#)		10 Street Address (P.O.B. or RFD#)	
04 SIC Code:		11 SIC Code:	
05 City:	06 State:	12 City:	13 State:
07 Zip Code:		14 Zip Code:	

IV. SOURCES OF INFORMATION (Cite Specific References, e.g., state files, sample analysis, reports)

01 UDERR FILES
02
03
04
05

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

I. IDENTIFICATION NO.
UTD009667536

PART 8 - OPERATOR INFORMATION

II. CURRENT OPERATOR (Provide If Different From Owner)

01 Name: SIGNETICS CORPORATION
02 D&B Number:
03 Street Address (P.O.B. or RFD#): 1275 SOUTH 800 EAST
04 SIC Code:
05 City: OREM
06 State: UT
07 Zip Code: 84057
08 Years Of Operation: 1980-PRESENT (11 YEARS)
09 Name Of Owner:

OPERATOR'S PARENT COMPANY (If Applicable)

10 Name:
11 D&B Number:
12 Sreet Address (P.O.B. or RFD#):
13 SIC Code:
14 City:
15 State:
16 Zip Code:

III. PREVIOUS OPERATOR(S) (List Most Recent First; Provide Only If Different From Owner)

01 Name: NOT APPLICABLE
02 D&B Number:
03 Street Address (P.O.B. or RFD#):
04 SIC Code:
05 City:
06 State:
07 Zip Code:
08 Years Of Operation:
09 Name Of Owner During This Period:

PREVIOUS OPERATOR'S PARENT COMPANIES (If Applicable)

10 Name:
11 D&B Number:
12 Sreet Address (P.O.B. or RFD#):
13 SIC Code:
14 City:
15 State:
16 Zip Code:

01 Name:
02 D&B Number:
03 Street Address (P.O.B. or RFD#):
04 SIC Code:
05 City:
06 State:
07 Zip Code:
08 Years Of Operation:
09 Name Of Owner During This Period:

10 Name:
11 D&B Number:
12 Sreet Address (P.O.B. or RFD#):
13 SIC Code:
14 City:
15 State:
16 Zip Code:

IV. SOURCES OF INFORMATION (Cite Specific References, e.g., state files, sample analysis, reports)

01 UDERR FILES
02
03
04
05

I. IDENTIFICATION NO.
UTD009667536

II. ON SITE GENERATOR

01 Name 02 D&B Number
NOT APPLICABLE
03 Street Address (P.O.B. or RFD#)

04 SIC Code:
05 City: 06 State:
07 Zip Code:

III. OFF-SITE GENERATOR(S)

01 Name 02 D&B Number 08 Name 09 D&B Number
NOT APPLICABLE
03 Street Address (P.O.B. or RFD#) 10 Street Address (P.O.B. or RFD#)

04 SIC Code: 11 SIC Code:
05 City 06 State: 12 City: 13 State:
07 Zip Code: 14 Zip Code:

01 Name 02 D&B Number 08 Name 09 D&B Number

03 Street Address (P.O.B. or RFD#) 10 Street Address (P.O.B. or RFD#)

04 SIC Code: 11 SIC Code:
05 City: 06 State: 12 City: 13 State:
07 Zip Code: 14 Zip Code:

IV. TRANSPORTER(S)

01 Name 02 D&B Number 08 Name 09 D&B Number
NOT APPLICABLE
03 Street Address (P.O.B. or RFD#) 10 Street Address (P.O.B. or RFD#)

04 SIC Code: 11 SIC Code:
05 City: 06 State: 12 City: 13 State:
07 Zip Code: 14 Zip Code:

01 Name 02 D&B Number 08 Name 09 D&B Number

03 Street Address (P.O.B. or RFD#) 10 Street Address (P.O.B. or RFD#)

04 SIC Code: 11 SIC Code:
05 City: 06 State: 12 City: 13 State:
07 Zip Code: 14 Zip Code:

IV. SOURCES OF INFORMATION (Cite Specific References, e.g., state files, sample analysis, reports)

01 UDERR FILES
02
03
04
05

II. PAST RESPONSE ACTIVITIES

A. 01 Water Supply Closed 02 Date __/__/__ 03 Agency:
04 Description:
N/A

B. 01 Temporary H2O Supply Provided 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

C. 01 Permanent H2O Supply Provided 02 Date __/__/__ 03 Agency:
04 Description:
N/A

D. 01 Spilled Material Removed 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

E. 01 Contaminated Soil Removed 02 Date __/__/__ 03 Agency:
04 Description:
N/A

F. 01 Waste Repackaged 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

G. 01 Waste Disposed Elsewhere 02 Date __/__/__ 03 Agency:
04 Description:
N/A

H. 01 On Site Burial 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

I. 01 In Situ Chemical Treatment 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

J. 01 In Situ Biological Treatment 02 Date __/__/__ 03 Agency:
04 Description:
N/A

K. 01 Encapsulation 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

II. PAST RESPONSE ACTIVITIES (Continued)

L. 01 Emergency Waste Treatment 02 Date __/__/__ 03 Agency:
04 Description:
N/A

M. 01 Cutoff Walls 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

N. 01 Emergency Diking/Surface Water Diversion 02 Date __/__/__ 03 Agency:
04 Description:
N/A

O. 01 Cutoff Trenches/Sump 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

P. 01 Subsurface Cutoff Wall 02 Date __/__/__ 03 Agency:
04 Description:
N/A

Q. 01 Barrier Walls Constructed 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

R. 01 Capping/Covering 02 Date __/__/__ 03 Agency:
04 Description:
THE SPILL AREA HAS BEEN CAPPED WITH ASPHALT.

S. 01 Bulk Tankage Repaired 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

T. 01 Grout Curtain Constructed 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

U. 01 Bottom Sealed 02 Date __/__/__ 03 Agency:
04 Description:
N/A

V. 01 Gas Control 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

II. PAST RESPONSE ACTIVITIES (Continued)

W. 01 Fire Control 02 Date __/__/__ 03 Agency:
04 Description:
N/A

X. 01 Leachate Treatment 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

Y. 01 Area Evacuated 02 Date __/__/__ 03 Agency:
04 Description:

Z. 01 Access To Site Restricted 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

1. 01 Population Relocated 02 Date __/__/__ 03 Agency:
04 Description:
N/A

2. 01 Other Remedial Activities 02 Date __/__/__ 03 Agency:
04 Desciption:
N/A

III. SOURCES OF INFORMATION (Cite Specific References, e.g., state files, sample analysis, reports)

01
02
03
04
05

I. IDENTIFICATION NO.
UTD009667536

II. ENFORCEMENT INFORMATION

01 Past Regulatory/Enforcement Action Yes X No

02 Description Of Federal, State, Local Regulatoy/Enforcement Action:

III. SOURCES OF INFORMATION (Cite Specific References, e.g., state files, sample analysis, reports)

01 UDERR FILES
02
03
04
05

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-GW-1

MHR581

Lab Name: N.F.T. INC. Contract: 68-D0-0145

Lab Code: NFT Case No.: 16576 SAS No.: SDG No.: MHR581

Matrix (soil/water): WATER Lab Sample ID: 1F05-1

Level (low/med): LOW Date Received: 6/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	346.00			P
7440-36-0	Antimony	18.00	U		P
7440-38-2	Arsenic	2.30	B		F
7440-39-3	Barium	82.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	74300.00			P
7440-47-3	Chromium	5.20	B		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	4.40	B		P
7439-89-6	Iron	16600.00			P
7439-92-1	Lead	2.50	B		F
7439-95-4	Magnesium	23000.00			P
7439-96-5	Manganese	280.00		E	P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	4570.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	11900.00			P
7440-28-0	Thallium	2.00	U	W	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	28.30			P
	Cyanide				NR

Color Before: BROWN Clarity Before: TURBID Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO. S-GW-2

1

INORGANIC ANALYSIS DATA SHEET

MHR582

Lab Name: N.F.T. INC. Contract: 68-D0-0145

Lab Code: NFT Case No.: 16576 SAS No.: SDG No.: MHR581

Matrix (soil/water): WATER Lab Sample ID: 1F05-2

Level (low/med): LOW Date Received: 6/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22400.00			P
7440-36-0	Antimony	18.00	U		P
7440-38-2	Arsenic	5.20	B		P
7440-39-3	Barium	391.00			P
7440-41-7	Beryllium	4.50	B		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	103000.00			P
7440-47-3	Chromium	17.80			P
7440-48-4	Cobalt	11.10	B		P
7440-50-8	Copper	20.50	B		P
7439-89-6	Iron	32600.00			P
7439-92-1	Lead	24.90			P
7439-95-4	Magnesium	24000.00			P
7439-96-5	Manganese	590.00		E	P
7439-97-6	Mercury	.13	B		CV
7440-02-0	Nickel	19.60	B		P
7440-09-7	Potassium	10900.00			P
7782-49-2	Selenium	2.00	U		P
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	12900.00			P
7440-28-0	Thallium	2.00	U		P
7440-62-2	Vanadium	30.20	B		P
7440-66-6	Zinc	140.00			P
	Cyanide				NR

Color Before: BROWN Clarity Before: TURBID Texture:

Color After: TAN Clarity After: TURBID Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MHR583

Lab Name: N.F.T. INC. Contract: 68-D0-0145

Lab Code: NFT Case No.: 16576 SAS No.: SDG No.: MHR581

Matrix (soil/water): WATER Lab Sample ID: 1F05-3

Level (low/med): LOW Date Received: 6/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	42.30	B		P
7440-36-0	Antimony	18.00	U		P
7440-38-2	Arsenic	2.00	B		P
7440-39-3	Barium	63.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	52100.00			P
7440-47-3	Chromium	7.70	B		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	15600.00			P
7439-92-1	Lead	1.00	U		P
7439-95-4	Magnesium	13200.00			P
7439-96-5	Manganese	281.00		E	P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	3590.00	B		P
7782-49-2	Selenium	2.00	U		P
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	12300.00			P
7440-28-0	Thallium	2.00	U	W	P
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	39.80			P
	Cyanide				NR

Color Before: BLACK Clarity Before: TURBID Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.
5-GW-4

1
INORGANIC ANALYSIS DATA SHEET

MHR584

Lab Name: N.F.T. INC. Contract: 68-D0-0145

Lab Code: NFT Case No.: 16576 SAS No.: SDG No.: MHR581

Matrix (soil/water): WATER Lab Sample ID: 1F05-4

Level (low/med): LOW Date Received: 6/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	52.20	B		P
7440-36-0	Antimony	18.00	U		P
7440-38-2	Arsenic	2.10	B		F
7440-39-3	Barium	44.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	9350.00			P
7440-47-3	Chromium	5.60	B		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	8.10	B		P
7439-89-6	Iron	436.00			P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	6270.00			P
7439-96-5	Manganese	32.20			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	74800.00			P
7782-49-2	Selenium	2.00	U	W	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	75200.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	39.80			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MHR585

Lab Name: N.F.T. INC. Contract: 68-D0-0145

Lab Code: NFT Case No.: 16576 SAS No.: SDG No.: MHR581

Matrix (soil/water): WATER Lab Sample ID: 1F05-5

Level (low/med): LOW Date Received: 6/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	377.00			P
7440-36-0	Antimony	19.20	B		P
7440-38-2	Arsenic	2.20	B		F
7440-39-3	Barium	81.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	75100.00			P
7440-47-3	Chromium	6.10	B		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	4.00	B		P
7439-89-6	Iron	17900.00			P
7439-92-1	Lead	2.50	B		F
7439-95-4	Magnesium	22900.00			P
7439-96-5	Manganese	308.00		E	P
7439-97-6	Mercury	.13	B		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	4410.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	11800.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	27.00			P
	Cyanide				NR

Color Before: BLACK Clarity Before: TURBID Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

007

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

MHR586 5-6W-7

Lab Name: N.F.T. INC. Contract: 68-D0-0145

Lab Code: NFT Case No.: 16576 SAS No.: SDG No.: MHR581

Matrix (soil/water): WATER Lab Sample ID: 1F05-6

Level (low/med): LOW Date Received: 6/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17.20	B		P
7440-36-0	Antimony	18.00	U		P
7440-38-2	Arsenic	1.60	B		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	29.00	U		P
7440-47-3	Chromium	4.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	7.50	B		P
7439-92-1	Lead	1.00	U		P
7439-95-4	Magnesium	19.00	U		P
7439-96-5	Manganese	1.00	U	E	P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	303.00	U		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	233.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	8.20	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH429

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-01

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF10F

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	2	J
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HH430

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-02

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF106

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 5-GW-3

HH439

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-03

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF10H

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	JB
67-64-1	Acetone	4	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	23	
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HH440

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-04

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF10I

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	2	J
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH441

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-05

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF10J

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH442

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-06

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF10K

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	27	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 5-6W-6

HH443

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 06323-07

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: >OF10L

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: not dec. Date Analyzed: 06/10/91

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	29	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH441

.AUCKS TESTING LABS Contract: 68D00153

.AUCKS Case No.: 16576 SAS No.: SDG No.: HH429

oil/water) WATER Lab Sample ID: 9106323-5

vol: 1000 (g/ml)ML Lab File ID: >ZF148

(low/med) LOW Date Received: 06/07/91

: decanted: (Y/N) N Date Extracted: 06/11/91

ed Extract Volume: (ul) Date Analyzed: 06/14/91

Volume: 2.0(uL) Dilution Factor:

up: (Y/N)N pH:

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY AUG 27 1991 DIV. OF ENVIRONMENTAL RESPONSE AND REMEDIATION

AUG 1991 Utah Department of Environmental Quality Division of Solid and Hazardous Waste

CONCENTRATION UNITS:

S NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

2nd of 2 fax transmittals
Postit brand fax transmittal memo 7671 # of pages ▸ 18
To Michael Sherk From Peter Ferguson
Co. Dept. Co. Versar A/E
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH441

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-5

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF148

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HH441

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-5

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF148

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.627009	BUTANOIC ACID, 4-CHLORO-	9.28	3	JN
2.	UNKNOWN HYDROCARBON	26.64	2	JN
3.	UNKNOWN	29.45	2	JN
4.	UNKNOWN	30.16	4	JN
5.	UNKNOWN	38.89	12	JN
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EPA SAMPLE 4718

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH442

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-6

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF149

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH442

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-6

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >ZF149

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	21	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

SITE ASSESSMENT PROJECT SAS031

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH442

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-6

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF149

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	29.46	3	JN
2.	UNKNOWN	36.41	3	JN
3.	UNKNOWN	44.87	3	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH429

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-1

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >ZF141

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SITE ASSESSMENT PROJECT SAS031

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH429

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-1

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF141

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

SITE ASSESSMENT PRIVILEGED SAS031

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH429

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-1

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF141

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108930	CYCLOHEXANOL	8.40	3	JN
2. 627009	BUTANOIC ACID, 4-CHLORO	9.28	4	JN
3.	UNKNOWN	17.98	4	JN
4.	UNKNOWN	30.14	3	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH430

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-2

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF142

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

COPY

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH430

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-2

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF142

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

HH430

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-2

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF142

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted:06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.108930	CYCLOHEXANOL	8.40	5	JN
2.627009	BUTANOIC ACID, 4-CHLORO-	9.28	3	JN
3.	UNKNOWN	12.73	3	JN
4.	UNKNOWN	17.98	2	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH439

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-3

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF143

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

COPY

SEMIVOLATILE ORGANICS

HH439

LAUCKS TESTING LABS Contract: 68D00153

LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

(soil/water) WATER Lab Sample ID: 9106323-3

wt/vol: 1000 (g/ml)ML Lab File ID: >ZF143

(low/med) LOW Date Received: 06/07/91

Moisture: decanted: (Y/N) N Date Extracted: 06/10/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	6	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 17/20

HH439

LAUCKS TESTING LABS Contract: 68D00153

LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

(soil/water) WATER Lab Sample ID: 9106323-3

t/vol: 1000 (g/ml)ML Lab File ID: >ZF143

(low/med) LOW Date Received: 06/07/91

sture: decanted: (Y/N) N Date Extracted: 06/10/91

centrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

jection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

Number TICs found: 6

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.58	2	JN
2. 627009	BUTANOIC ACID, 4-CHLORO-	9.27	4	JN
3. 629787	HEPTADECANE	23.68	3	JN
4.	UNKNOWN HYDROCARBON	25.29	4	JN
5.	UNKNOWN	26.63	3	JN
6.	UNKNOWN	27.91	2	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH440

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-4

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF147

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	1	J
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	1	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	1	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WH440

Name: LAUCKS TESTING LABS Contract: 68D00153

Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: WH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-4

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF147

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HH440

Name: LAUCKS TESTING LABS Contract: 68D00153

Code: LAUCKS Case No.: 16576 SAS No.: SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-4

Sample wt/vol: 1000 (g/ml)ML Lab File ID: >ZF147

Level: (low/med) LOW Date Received: 06/07/91

% Moisture: decanted: (Y/N) N Date Extracted: 06/11/91

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 06/14/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH:

Number TICs found: 18

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.57	2	JN
2. 4017929	BICYCLO[4.1.0]HEPTAN-3-OL, 3	13.83	2	JN
3.	UNKNOWN	14.60	4	JN
4. 26444199	ETHANONE, 1-(METHYLPHENYL)-	15.29	6	JN
5. 544763	HEXADECANE	22.39	6	JN
6. 629787	HEPTADECANE	23.88	10	JN
7. 74645980	DODECANE, 2,7,10-TRIMETHYL-	23.96	4	JN
8.	UNKNOWN HYDROCARBON	25.29	9	JN
9.	UNKNOWN HYDROCARBON	25.43	3	JN
10.	UNKNOWN HYDROCARBON	26.65	10	JN
11. 112958	EICOSANE	27.93	6	JN
12. 7098217	TRITETRACONTANE	29.16	4	JN
13.	UNKNOWN	29.46	3	JN
14.	UNKNOWN HYDROCARBON	30.75	2	JN
15.	UNKNOWN HYDROCARBON	31.17	2	JN
16.	UNKNOWN HYDROCARBON	36.84	2	JN
17.	UNKNOWN HYDROCARBON	45.38	5	JN
18.	UNKNOWN HYDROCARBON	45.57	3	JN
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SITE ASSESSMENT PROFILE SAS031

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW429

Lab Name: LAUCKS TESTING LABS Contract: 68D00122

Lab Code: LAUCKS Case No.: 16576 SAS No.: _____ SDG No.: MW429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: RI1620

% Moisture: decanted: (Y/N) N Date Received: 06/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 06/10/91

Concentrated Extract Volume: 10000(uL) Date Analyzed: 06/29/91

Injection Volume: 1.0(uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. S-SW-2

HH430

Lab Name: LAUCKS TESTING LABS Contract: 68D00133

Lab Code: LAUCKS Case No.: 16573 SAS No.: _____ SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-02

Sample wt/vol: 1000 (g/ml) ML Lab File ID: RI1621

% Moisture: decanted: (Y/N) N Date Received: 06/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 06/10/91

Concentrated Extract Volume: 10000(uL) Date Analyzed: 06/29/91

Injection Volume: 1.0(uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-1	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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EPA SAMPLE NO.

HH439

Lab Name: LAUCKS TESTING LABS Contract: 68D00132

Lab Code: LAUCKS Case No.: 15575 SAS No.: _____ SDG No.: HH423

Matrix: (soil/water) WATER Lab Sample ID: 9106323-03

Sample wt/vol: 1000 (g/ml) ML Lab File ID: RI1622

% Moisture: decanted: (Y/N) N Date Received: 06/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 06/10/91

Concentrated Extract Volume: 10000(uL) Date Analyzed: 06/29/91

Injection Volume: 1.0(uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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EPA SAMPLE NO.
S-GW-4

HH440

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 16ET2 SAS No.: _____ SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-04

Sample wt/vol: 1000 (g/ml) ML Lab File ID: RI1625

% Moisture: decanted: (Y/N) N Date Received: 06/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 06/10/91

Concentrated Extract Volume: 10000(uL) Date Analyzed: 06/29/91

Injection Volume: 1.0(uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 10.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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EPA SAMPLE NO.

HH441

Lab Name: LAUCKS TESTING LABS Contract: 68D00153

Lab Code: LAUCKS Case No.: 15575 SAS No.: _____ SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-05

Sample wt/vol: 1000 (g/ml) ML Lab File ID: RI1626

% Moisture: decanted: (Y/N) N Date Received: 06/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 06/10/91

Concentrated Extract Volume: 10000(uL) Date Analyzed: 06/29/91

Injection Volume: 1.0(uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HH442

Lab Name: LAUCKS TESTING LABS Contract: 68D00133

Lab Code: LAUCKS Case No.: 16576 SAS No.: _____ SDG No.: HH429

Matrix: (soil/water) WATER Lab Sample ID: 9106323-06

Sample wt/vol: 1000 (g/ml) ML Lab File ID: RI1627

% Moisture: decanted: (Y/N) N Date Received: 06/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 06/10/91

Concentrated Extract Volume: 10000(uL) Date Analyzed: 06/29/91

Injection Volume: 1.0(uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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