4020004

Brownfield Environmental Assessment

For

LaSalle Park/ Beck's Lake

Prepared by:
Indiana
Department of
Environmental
Management

BROWNFIELD ENVIRONMENTAL ASSESSMENT

Of

LaSalle Park/Beck's Lake
(#BFD4020004)

South Bend, St. Joseph County, Indiana

For

City of South Bend

November 14, 2002

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SECTION I

1.0 INTRODUCTION

The United States Environmental Protection Agency (U.S. EPA) and the Indiana Department of Environmental Management (IDEM) have recognized the potential benefits of reintroducing inactive industrial and commercial properties back into the active real estate market. In an attempt to remove some of the barriers to redevelopment, IDEM has a Brownfield Environmental Assessment (BEA) incentive designed to promote the reuse of brownfields by assessing the environmental status at proposed sites. Brownfields are defined as abandoned, idled, or underused industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. The City of South Bend applied to the IDEM Brownfields Program for evaluation of the LaSalle Park/Beck's Lake site. This work is being performed under a Cooperative Agreement with the U.S. EPA Region 5.

1.1 Purpose

A BEA is designed to provide an environmental assessment of a brownfield site to determine if the site would be a suitable candidate for redevelopment into a property more beneficial to the local community. Information contained within a BEA will be used to evaluate the site, enabling prospective purchasers to assess their potential liability. Activities performed for the completion of a BEA include a historical information search, a site survey, the collection of environmental samples, and a determination of any on-site remediation activities prior to redevelopment consideration. Sites that may require removal action to remediate an immediate human health and/or environmental threat will be identified during the assessment.

1.2 Terms and Conditions

The observations described in this report were made under the conditions stated herein. The findings presented in this report are based solely upon the requested services and not on scientific tasks or procedures beyond the scope of the described services.

Regarding Federal and State environmental records, IDEM did not attempt to verify independently the accuracy or completeness of all information regarding these records during the course of this assessment.

The information that was reviewed for this assessment was limited to sources that were publicly available, obtainable within a reasonable time and cost, and practically reviewable as defined by American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-97). No other warranty, expressed or implied, is made.

1.3 Limitations and Exceptions of Assessment

The scope of this assessment has been developed to generally conform with ASTM Practice E 1527-97. Performance of this assessment included implementing the following tasks:

- a site walkover of the subject property;
- a review of IDEM files;
- a review of historical site uses;
- surface soil/sediment/surface water sampling.

1.4 Limiting Conditions and Methodology Used

IDEM's site visit to the property included a visual reconnaissance as suggested by ASTM Practice E 1527-97. A visual survey of the surrounding properties was made during the exterior site walkover. A site visit was conducted on June 13, 2001.

SECTION II

2.0 SITE DESCRIPTION

This section contains information about the LaSalle Park/Beck's Lake site location, site features, and surrounding area. Information was obtained during the preparation of the work plan and reconnaissance inspections of the site.

2.1 Site Location and Legal Description

The LaSalle Park/Beck's Lake property is located at 3419 West Washington Street, South Bend, St. Joseph County, Indiana, 46619. The site is situated north of Washington Street, south of Linden Avenue, east of Falcon Street, and west of Kaley Street in Portage Township. The property's location, which is the NE ¼ of the NE ¼ of Section 9, and the NW ¼ of the NW ¼ of Section 10, Township 37 North, Range 2 East, is identified on the Topographic Map provided in Appendix A.

2.2 Site and Vicinity Characteristics

The site consists of approximately 40 acres. A lake approximately eight acres in area (Beck's Lake) and a man-made hill built during the construction of LaSalle Park are located on the eastern half of the site. Playground equipment, baseball fields, and a community center are located on the western half of the site. The western part of the subject property and the hill are well maintained; the lake is surrounded by wetland vegetation. There is some household trash, tires, etc., in and around the lake. Several vacant lots across Washington Street (south of the park) are also part of the site.

Land use surrounding the LaSalle Park/Beck's Lake property is primarily residential, with some commercial and light industrial properties nearby. Adjacent land to the north (across Linden Avenue) is wooded, followed by a quarry, followed by Conrail Railroad tracks. To the east is a light industrial facility (Prime Source Supply, Inc.) between LaSalle Park and Kaley Avenue. To the south is residential property. To the west is an apartment complex and a small restaurant/bar. It was observed that many residents south of the park have gardens in their yards. There was also a large garden to the west across Falcon Street.

2.3 Description of Structures, Roads, Other Improvements on the Site

A recreation facility (Charles J. Black, Jr. Recreation Center) with a short drive and parking area is located on the southwest part of the property with access to Washington Street. The site also has a picnic shelter, tennis courts, basketball courts, volleyball courts, a baseball field and three playground areas. Washington Street separates the vacant properties from LaSalle Park.

2.4 National Flood Insurance Rate Map (FIRM)

According to the FIRM developed for South Bend, Indiana (Map Index, Community-Panel Number 180231 0003 C [panel not printed; entire area is Zone C], revised February 17, 1988) by the Federal Emergency Management Agency, the LaSalle Park/Beck's Lake property is classified as Zone C. Zone C is described as "areas of minimal flooding." See Appendix A.

2.5 National Wetland Inventory Map

A review of the 1987 National Wetlands Inventory Map (South Bend West, Ind.) prepared by the U.S. Department of the Interior, Fish and Wildlife Service, indicates that Beck's Lake, entirely located within LaSalle Park, is designated as POWHx (P = Palustrine, OW = Open Water, H = Permanently Flooded, x = Excavated). The rest of the subject property is not located in a wetland (see Appendix A) and is designated with a "Ω", indicating that it is an upland area (this designation may, however, include unclassified wetlands such as man-modified areas, non photo-identifiable areas and/or unintentional omissions). See the "Special Note" regarding the National Wetland Inventory Map in Appendix A.

2.6 Surface Water Drainage

The property is positioned on a relatively flat surface with the exception of one large man-made hill located near the center of the site. The property is mostly covered by vegetation. There is a small parking lot located on the southwest corner of LaSalle Park. Surface water drainage is to Beck's Lake and to the city storm sewers.

2.7 Endangered, Threatened or Rare Species, High Quality Natural Communities, and Natural Areas

The Indiana Department of Natural Resources (DNR) was contacted to determine if there are any significant natural features or endangered, threatened and rare species located in the vicinity of the site. According to the DNR, there is a historical record of the State Threatened Plant *Lathyrus venosus* (Smooth veiny pea) documented in the area. See Appendix D for information regarding whom to contact for further information.

2.8 Aerial Photograph

An aerial photograph is provided for the site from 1986. The park and lake appear much the same as they do now. See Appendix B.

2.9 Site Features Map

The site features map is included to indicate the current general layout of the structures and areas of suspected dumping located on the site. See Appendix A.

SECTION III

3.0 SITE HISTORY

This section contains information about the LaSalle Park/Beck's Lake site history, including ownership, past operations, potentially hazardous wastes and sources, past incidents, and regulatory status. Information was obtained through file searches, site representative interviews, and reconnaissance inspections of the site.

3.1 Ownership

According to the St. Joseph County Auditor records, the current owner is the City of South Bend Department of Parks and Recreation. The park was acquired from the South Bend Redevelopment Commission in the 1960's. According to the 1989 Screening Site Inspection Report (see Appendix C), prior to construction of the park, part of the property may have been used for housing. The St. Joseph County Assessors Office has no records of previous owners.

3.2 Site Use

According to the 1989 Screening Site Inspection Report, the LaSalle Park/Beck's Lake property was used as a dump during the 1950s. There are no records of licenses or permits for disposal activities.

Though the 1989 Report indicates that fishing was uncommon during the 1980s, during the October 16, 2001, sampling event, at least four residents of the area stopped by and indicated that they often fished in the lake.

The western end of the park has a recreation center with a parking lot, a picnic shelter, a baseball diamond, tennis courts, basketball courts, volleyball courts, and three playground areas. The man-made hill was constructed from concrete debris found on-site during construction of the park. The hill is approximately 25 feet in height and is used for sledding during winter months.

The property to the south and west of the park is primarily residential. There are some vacant lots on the south side of Washington Street that appear to have formerly been residential.

3.3 Redevelopment Plans

The city of South Bend intends on continuing using the property as a City Park. Vacant properties adjacent to the park may be developed as community gardens, as infill mixed housing and business development, or incorporated into adjoining residential properties.

3.4 Potential Concerns

Potential concerns associated with the LaSalle Park/Beck's Lake property include the presence of lead (4 samples) in surface soil and sediment above the RISC Residential Direct Contact Level. Arsenic (14 samples) was detected in surface soil and benzo(a)pyrene (2 samples) in sediment above their respective RISC Residential Default Closure Levels. Additionally, arsenic (1 sample) was detected in a surface soil sample above the RISC Industrial Default Closure Level.

3.5 Past Violations/Regulatory Documentation

A file search has revealed no past violations at the property.

SECTION IV

4.0 SOIL CHARACTERISTICS, GEOLOGY AND HYDROGEOLOGY

This section discusses the soil characteristics, geology and hydrogeology on-site and in the surrounding area as a basis for determining the potential for contaminants possibly attributed to the LaSalle Park/Beck's Lake site to migrate to groundwater in the vicinity of the site.

4.1 Soil Survey of St. Joseph County

The potential for contaminants to migrate is based on past waste disposal practices and the permeability of the soil. According to the Soil Survey of St. Joseph County, Indiana (1977), soil at the site is of the **Houghton-Adrian-Palms association**, which is a deep, depressional and nearly level, very poorly drained, organic soil on lake plains, outwash plains, and till plains. Specifically, four types of soil series make up the site: Gilford Sandy Loam (Gf), Houghton Muck, drained (Ho), Maumee mucky loamy fine sand (Mg) and Made land (Ma).

The northwest corner and a small area along the southern edge of LaSalle Park are comprised of the **Gilford Sandy Loam** soil. The Gilford series consists of deep, very poorly drained, nearly level and depressional soils on outwash plains. These soils are mainly on broad flats and along major streams. They formed in sandy material that was deposited as glacial outwash, lacustrine sediment, or stream alluvium. In a representative profile, the surface layer is sandy loam about 14 inches thick. It is black in the upper part and very dark gray in the lower part. The subsoil is 24 inches thick. It is mottled, gray, friable sandy loam in the upper 6 inches; mottled, gray, firm heavy sandy loam in the next 12 inches; and mottled, gray, very friable loamy sand in the lower 6 inches. The underlying material is gray sand that extends to a depth of 60 inches. Gilford soils have moderately rapid permeability and a moderate available water capacity. The organic-matter content is high in the surface layer. Runoff is very slow or ponded.

The southwest corner of the park is comprised of the **Maumee mucky loamy fine sand** soil. The Maumee series consists of deep, very poorly drained, nearly level and depressional soils on outwash plains. These soils are mainly on low depressional flats and along stream channels. They formed in sandy glacial outwash or stream alluvium. In a representative profile, the surface layer is loamy fine sand about 14 inches thick. It is dark gray in the upper part and very dark grayish brown in the lower part. The underlying material is dark-gray, friable fine sand in the upper 14 inches; light brownish-gray, friable fine sand in the next 4 inches; dark grayish-brown, friable sand in the next 16 inches; and gray, loose sand to a depth of 65 inches. Maumee soils have rapid permeability and a low available water capacity. The organic-matter content is high in the surface layer. Runoff is very slow or ponded.

The central part of the park is **Made Land**. Made Land consists of areas that are filled with cinders, slag, or a combination of these, smoothed over, and covered with soil material. Depending on the material used as fill, some areas are suitable for pasture or wildlife habitat and others are suitable for recreation facilities or building sites.

The land surrounding Beck's Lake is made up of **Houghton muck, drained** soil. This soil consists of deep, very poorly drained, organic soils that are nearly level or depressional. These soils are mainly on the broad Kankakee muck flats and in depressions on till plains. They formed in mixed organic material on lake plains, outwash plains, and till plains. In a representative profile, the surface layer is black muck about 9 inches thick. The layer below that is dark reddish-brown, friable muck 38 inches thick. The underlying material is gray medium and fine sand that extends to a depth of 60 inches. Houghton soils have rapid permeability and a high available water capacity. The organic-matter content is very high in the upper 54 inches. Runoff is very slow or ponded.

4.2 Regional Geology and Hydrogeology

According to the Hydrogeologic Atlas of Aquifers in Indiana, the LaSalle Park/Beck's Lake site is located in the Kankakee Outwash and Lacustrine Plain within the St. Joseph River Basin. The topography of the basin is variable. Much of the Kankakee Outwash and Lacustrine Plain area is a poorly drained, level plain covered by fine-grained alluvium and underlain by thick outwash sand and gravel.

Four thousand feet of sandstones, siltstones, shales, limestones, and dolomites of Cambrian, Ordovician, Silurian and Devonian ages overlie Precambrian igneous and metamorphic basement rocks in the St. Joseph River Basin. Paleozoic shale and limestone are present at the bedrock surface throughout the St. Joseph River Basin in Indiana. A gently rolling bedrock surface is interspersed with a few entrenched, preglacial valleys. Bedrock is overlain by thick glacial drift throughout the basin.

The Ellsworth Shale of Late Devonian and Early Mississipian age overlies the Antrim Shale, and is present at the bedrock surface in the western part of the basin. The lower part of the formation consists of alternating layers of gray-green shale and brownish-black shale. The upper part is a grayish-green shale that contains limestone and dolomite lenses. The Ellsworth Shale ranges in thickness from less than 40 feet to greater than 200 feet.

The St. Joseph River Basin is covered by thick, unconsolidated glacial deposits. Although the thickness of the drift in this basin ranges from 100 feet to 500 feet, thicknesses of 200 feet to 400 feet are typical. The sand and gravel units within the drift are the major aquifers of the basin.

The St. Joseph River Basin is an area of highly variable and complex glacial deposits. These deposits are variable in extent and thickness and are widespread over the entire area. Buried preglacial bedrock valleys, where they are filled with sand and gravel, are small but significant aquifers along the Indiana-Michigan State line. In the St. Joseph River Basin, groundwater flow in the unconsolidated aquifers is generally toward the St. Joseph River and its tributaries.

The primary unconsolidated aquifers in the South Bend area are the surficial sand and gravel aquifers. These aquifers consist mostly of outwash, outwash fan deposits, isolated hills and ridges of ice-contact stratified drift, and Holocene alluvium. Thicknesses of surficial sand and gravel aquifers range from a few feet to 160 feet. Precipitation is the principal source of recharge to the surficial sand and gravel aquifers. There are several potential bedrock aquifers in the St. Joseph River Basin. However, in over half of the area the potential bedrock aquifers are more than 300 feet below the land surface. Therefore, aquifers in the unconsolidated drift are more accessible, as well as adequate for all uses.

SECTION V

5.0 SITE RECONNAISSANCES AND SAMPLING

This section outlines observations during the site reconnaissance visits prior to, and during, on-site sampling and sampling procedures conducted for the October 16, 2001 sampling event at the LaSalle Park/Beck's Lake property.

5.1 Site Representative Interviews and Reconnaissance Inspections

IDEM staff conducted a site reconnaissance visit on June 13, 2001. General site conditions were noted and potential sample locations were determined. Staff met with Ms. Sherece Tolbert of the City of South Bend Department of Community and Economic Development.

5.2 Environmental Sampling to Address General Contamination

On October 16, 2001, IDEM staff conducted sampling at the LaSalle Park/Beck's Lake site in accordance with the U.S. EPA-approved work plan completed on October 11, 2001. Samples were collected by IDEM staff at locations determined during the June 13, 2001 on-site reconnaissance inspection.

5.3 Sample Collection Procedures

The October 16 sampling consisted of six (6) on-site surface soil samples, four (4) off-site surface soil samples, three (3) sediment samples from Beck's Lake, and three (3) surface water samples from Beck's Lake. Additionally, one (1) duplicate surface soil sample and one (1) off-site background surface soil sample were taken.

Disposable plastic scoops were used to collect the soil samples. The sediment samples were obtained using a Ponar Grab Sampler. The Ponar Grab Sampler was decontaminated following each sample. Water samples were taken by dipping the sample bottles at the surface of the water. Surface water and sediment samples from Beck's Lake were taken from a small, motorized inflatable boat provided by the South Bend Fire Department. Disposable gloves were worn while taking each sample.

Surface soil and sediment samples were placed into three 8-oz. clear glass jars (one for metals analysis, one for semi-volatile organic compound analysis, and one for pesticide/PCB analysis), and one 4-oz. jar (for volatile organic compound analysis). Surface water samples were put into six 1-liter bottles (two for semi-volatile organic compounds, two for metals and two for PCBs/pesticides) and two 40-milliliter bottles (for volatile organic compounds).

Sample field sheets were used to classify samples and to note soil, sediment and water sample depth, time of collection and sample location. Sample field sheets for surface soil locations are included in Appendix D.

5.4 Surface Soil Sample Locations (October 16, 2001)

Six surface soil samples were taken from LaSalle Park. Five sample locations were chosen due to their proximity to the lake and hill where it is believed the dumping occurred. One sample was taken from the west end of the park due to its proximity to a playground. Four samples (plus one duplicate) were taken at vacant properties on the south side of Washington Street. These sample locations were chosen due to the city's interest in developing these properties in the future and because they are close to Beck's Lake, which has been reported to have flooded onto these properties. The background sample was taken in a wooded area northwest of the park on the far side of an earthen floodwall. See Table 1 for surface soil sample location descriptions and analyses. See Sampling Location Map in Appendix A for sample locations.

5.5 Sediment Sample Locations (October 16, 2001)

Three sediment samples were taken from Beck's Lake. Sample collection was distributed across the lake (one from the west end, one from the center, and one from the east end). See Table 1 for sediment sample location descriptions and analyses. See Sampling Location Map in Appendix A for sample locations.

5.6 Surface Water Sample Locations (October 16, 2001)

Three surface water samples (plus one duplicate) were taken from Beck's Lake. The samples were distributed across the lake (one from the north end, one from the west end, and one from the east end). See Table 1 for surface water sample location descriptions and analyses sampled. See Sampling Location Map in Appendix A for sample locations.

Table 1

Surface Soil/Sediment/Surface Water Sample Location and Comments

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
BFD4020004

Sample ID #	EPA CLP #	Constituents Sampled For				Comments
		VOCs	SVOCs	PCBs/Pest	Metals	
SS1	E06X8	X	X	X		Background surface soil sample, north side of
	ME06X8				X	Linden St., west of floodwall, top 6 inches.
SS2	E06X9	X	X	X		Surface soil sample taken from SW corner of
	ME06X9				X	Washington and Iowa, 40 feet from each street.
SS3	E06Y0	X	X	X		Surface soil sample taken from SW corner of
	ME06Y0				X	Washington and Liberty, 40 feet from each street.
SS4	E06Y1	X	X	X		Surface soil sample taken from SE corner of
	ME06Y1				X	Washington and Liberty, 50 feet from each street.
SS5	E06Y2	X	X	X		Duplicate of SS4.
	ME06Y2				X	
SS6	E06Y3	X	X	X		Surface soil sample taken from SW corner of
	ME06Y3				X	Washington and Camden, under large tree.
SS7	E06Y4	X	X	X		Surface soil sample taken from west end of park,
	ME06Y4				X	near playground.
SS8	E06Y5	X	X	X		Surface soil sample taken from park, 30 feet from
	ME06Y5				X	NE corner of lake.
SS9	E06Y6	X	X	X		Surface soil sample taken from park, NW of hill
	ME06Y6				X	in slight depressional area.
SS10	E06Y7	X	X	X		Surface soil sample taken from park, SW corner
	ME06Y7				X	of hill near trees.
SS11	E06Y8	X	X	X		Surface soil sample taken from park, 30 feet from
	ME06Y8				X	NW corner of lake.
SS12	E06Y9	X	X	X		Surface soil sample taken from park, 40 feet west
	ME06Y9				X	of lake, just east of high point of hill.
SW1	E06U4	X	X	X		Surface water samples taken from north side of
	ME06U4				X	lake, top 2 inches.
SW2	E06U5	X	X	X		Duplicate of SW1.
	ME06U5				X	
SW3	E06U6	X	X	X		Surface water samples taken 50 feet west of
	ME06U6				X	east shoreline, top 2 inches.
SW4	E06U7	X	X	X		Surface water samples taken at west end of
	ME06U7				X	lake, top 2 inches.
SW5	E06W3	X	X	X		Trip blank, reverse osmosis water.
	ME06W3				X	
SD1	E06W2	X	X	X		Sediment sample taken 25 feet west of east
	ME06W2				X	shoreline, top 6 inches.
SD2	E06U8	X	X	X		Sediment sample taken from center of lake, top
	ME06U8				X	4 inches.
SD3	E06U9	X	X	X		Sediment sample taken 50 feet east of west
	ME06U9				X	shoreline, top 4 inches.

SECTION VI

6.0 ANALYTICAL RESULTS

All samples were collected on October 16, 2001 and were packed in ice-filled coolers. They were shipped on October 17 by IDEM via Overnight Federal Express under chain of custody to EPA-approved Contract Laboratory Program (CLP) laboratories for analysis. All inorganic (metals) samples were sent to Chemtech Consulting Group in Englewood, New Jersey; soil and sediment organic (volatile organic compounds [VOCs], semi-volatile organic compounds [SVOCs] and PCB/pesticides) samples were sent to Envirosystems, Inc. in Columbia, Maryland; and surface water organic samples were sent to SHEALY in Cayce, South Carolina. The analytical results were forwarded by the laboratories to U.S. EPA Region 5 for review and qualification.

Upon U.S. EPA acceptance of the results, they were forwarded to IDEM via e-mail on December 19, 2000 (inorganics) and January 2, 2001 (organics). The data received a level 2 electronic review by the U.S. EPA CADRE Program. The data is not validated since the necessary quality control/quality assurance documentation is not submitted with the analytical data. Therefore, the data may be used for informational purposes only and to guide future work at the site. The laboratory results of the sampling analyses are attached in Appendix D.

Sample results were compared to IDEM RISC residential and industrial default and/or direct contact closure levels. See Tables 2 through 9 (pages 6-2 through 6-14) for contaminants exceeding these levels.

Table 2

Metals Analysis

Surface Soil/Sediment Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: mg/kg

Sample #		Type/ID #	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb
Lab	IDEM	D.L.>												
RISC Residential Default Closure Level				*5.4*	*3.9*	*1,600*	*63*	*7.5*		*10,000*		*580*		*81*
RISC Industrial Default Closure Level				*37*	*20*	*5,900*	*2,300*	*77*		*10,000*		*1,700*		*230*
	ME06U8		8,290		**15.5**	178 B			58,200	62.8	9.4	146	38,600	**630**
	ME06U9		8,180		**18.1**	191 B			58,600	49.5	8.2	139	36,500	**649**
	ME06W2		6,430		**11.5**	193 B			145,000	42.7	6.8	108	35,500	**405**
	ME06X8		899		2.7	8.7 B			9,750	2.6	1.8	7.1	3,900	5.6
	ME06X9		3,810		**13.8**	434 B			28,700	19	3.0	44.4	10,100	**784**
	ME06Y0		3,040		**11.8**	112 B			74,600	6.4	3.6	27	21,900	58.8
	ME06Y1		3,390		**8.5**	71.4 B			32,100	7.1	3.0	24	15,700	46
	ME06Y2		2,810		**7.5**	66.1 B			27,100	6.1	2.7	23.2	13,200	41.8
	ME06Y3		1,530		**4.8**	29.9 B			26,600	4.3	2.3	13.6	6,680	26.1
	ME06Y4		5,850		**20.9**	90.4 B			19,200	10.1	4.0	27.1	18,600	43.8
	ME06Y5		4,390		**5.7**	57.9 B			15,500	10.7	4.2	12.8	9,790	29.2
	ME06Y6		3,170		**9.8**	58.0 B			5,120	15.1	2.5	25.3	11,600	**106**
	ME06Y7		2,870		**8.5**	146 B			15,800	10.4	3.8	50.5	11,000	**164**
	ME06Y8		2,300		**13.9**	71.1 B			44,200	6.0	2.7	24.4	12,000	54.9
	ME06Y9		24,900		**11**	110 B			58,400	9.0	2.9	33.9	18,900	67.1

* Blank (Type indicated)
** Field Duplicate
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 2

Metals Analysis (Page 2)

Surface Soil/Sediment Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: mg/kg

Sample #		Type/ID #	Mg	Mn	Hg	Ni	K	Se	Na	Tl	V	Zn
Lab	IDEM	D.L.>										
RISC Residential Default Closure Level					*2.1*	*950*		*5.2*		*2.8*		*10,000*
RISC Industrial Default Closure Level					*32*	*2,700*		*53*		*13*		*10,000*
	ME06U8		11,000	983	0.54	57.4 B	733 B		1,040		37.2 B	716
	ME06U9		10,800	770	1	37.3 B	871 B		803		36.8 B	674
	ME06W2		10,100	1,060	0.47	34.2 B	770 B		997		26.1 B	466
	ME06X8		4,890	47.9			154 B		51			17.8
	ME06X9		5,020	190	0.29	9.3 B	647 B	1.7	131		15.9 B	540
	ME06Y0		4,210	606			654 B	1.9	134			80.6
	ME06Y1		3,800	262	0.08		410 B		107		13 B	66.7
	ME06Y2		2,930	245			323 B		83			59.5
	ME06Y3		6,290	207			258 B		83			46.3
	ME06Y4		2,020	135	0.1	10.5 B	466 B	3.3	71		16.7 B	65.6
	ME06Y5		4,030	480	0.22		561 B		55		13.3 B	76.4
	ME06Y6		1,030	166			532 B	1.4	71		12.8 B	102
	ME06Y7		2,730	285	0.27		418 B	1.5	131			180
	ME06Y8		3,540	364			293 B		98			128
	ME06Y9		2,780	404	0.1		673 B	2.6	115			129

* Blank (Type indicated)
** Field Duplicate
B - Detected in the Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 3

PCBs/Pesticides/Herbicides Analysis

Surface Soil/Sediment Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/kg

Sample #		Type/ID #	4,4-DDT	Endrin Aldehyde	Alpha-Chlordane	Gamma-Chlordane	4,4-DDE	4,4-DDD
Lab	IDEM	D.L.>						
RISC Residential Default Closure Level			*20,000*	*990*	*960*	*9600*	*20,000*	*28,000*
RISC Industrial Default Closure Level			*86,000*	*15,000*	*39000*	*39000*	*86,000*	*120,000*
	E06U8							
	E06U9							
	E06W2		18	20	11	19		
	E06X8							
	E06X9		130		35	27	74	
	E06Y0							
	E06Y2							
	E06Y3							
	E06Y4		460				270	
	E06Y5DL		120					
	E06Y6		14					
	E06Y8		5.5				6.4	
	E06Y9							

* Blank (Type indicated)
** Field Duplicate
*** Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high

Empty Box indicates NON-DETECTABLE
NR - Not Run
NA - Not Available
Bold = above closure level

Table 4

Volatile Organic Analysis

Surface Soil/Sediment Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/kg

Sample #		Type/ID #	Methylene Chloride	Acetone	Carbon Disulfide	2-Butanone	1,1-Dichloroethane	Total TIC	TIC Conc
Lab	IDEM	D.L.>							
RISC Residential Default Closure Level			*23*	*3,100*	*10,000*		*58*		
RISC Industrial Default Closure Level			*1,800*	*41,000*	*82,000*		*58*		
	E06U8			69					
	E06U9		22 B	420	16	170			
	E06W2			220		72		1	43
	E06X8								
	E06X9							1	7
	E06Y0						2		
	E06Y1							1	13
	E06Y2						2		
	E06Y3						3		
	E06Y4						2		
	E06Y5								
	E06Y6						2		
	E06Y7								
	E06Y8								
	E06Y9								

* Blank (Type indicated)
** Field Duplicate
*** Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 5

Semi-Volatile Organic Analysis

Surface Soil/Sediment Sample Results

Site Name: LaSalle Park/Beck's Lake
Site Number: BFD 4020004
Location: South Bend, St. Joseph, Indiana
Date Sampled: 16-Oct-01
Date Reported: 06-Nov-01 & 07-Nov-01
Lab: Chemtech, Envirosystems, & Shealy

Units: ug/kg

Sample #		Type/ID #	Phenanthrene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	bis(2-Ethylhexyl)phthalate
Lab	IDEM	D.L.>						
RISC Residential Default Closure Level				*880,000*	*570,000*	*5,000*	*25,000*	*300,000*
RISC Industrial Default Closure Level				*880,000*	*570,000*	*15,000*	*25,000*	*980,000*
	E06U8			800***	860***		530***	1,800***
	E06U9		880***	1,700***	2,000***	830***	1,100***	3,200
	E06W2		640***	1,300***	1,600***	590***	910***	3,000
	E06X8							190***
	E06X9		140***	430***	560***	250***	310***	360***
	E06Y0		97***	160***	170***	86***	110***	120***
	E06Y1		250***	480***	510***	260***	280***	
	E06Y2		150***	190***	230***	110***	120***	53***
	E06Y3			59***	63***			110***
	E06Y4		80***	190***	200***	85***	110***	110***
	E06Y5		39***	82***	88***	45***	52***	
	E06Y6		640***	910***	1,100***	460***	520***	150***
	E06Y7		180***	290***	350***	160***	180***	42***
	E06Y8		220***	410***	440***	210***	240***	90***
	E06Y9		120***	160***	190***	75***	93***	100***

* Blank (Type indicated)
** Field Duplicate
***Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 5

Semi-Volatile Organic Analysis (Page 2)

Surface Soil/Sediment Sample Results

Site Name: LaSalle Park/Beck's Lake
Site Number: BFD 4020004
Location: South Bend, St. Joseph, Indiana
Date Sampled: 16-Oct-01
Date Reported: 06-Nov-01 & 07-Nov-01
Lab: Chemtech, Envirosystems, & Shealy

Units: ug/kg

Sample #		Type/ID #	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Total Unknowns	Unknowns Conc	Total TIC	TIC Conc
Lab	IDEM	D.L.>						
RISC Residential Default Closure Level			*5,000*	*39,000*				
RISC Industrial Default Closure Level			*15,000*	*39,000*				
	E06U8		500	860	7	24,890	3	6,630
	E06U9		1,100	760	13	29,700	2	1,900
	E06W2		910	780	10	16,380	6	4,940
	E06X8				5	1,820	1	110
	E06X9		300	260	13	10,020	5	8,950
	E06Y0		110	88	11	3,120	7	2,290
	E06Y1		250	210	8	3,940	2	380
	E06Y2		110	110	3	610	7	1,640
	E06Y3				7	4,690	5	1,730
	E06Y4		110	94	11	12,980	7	2,280
	E06Y5				8	3,163	1	130
	E06Y6		490	420	11	4,980	6	1,380
	E06Y7		160	140	6	2,687	2	960
	E06Y8		210	200	8	3,820	3	890
	E06Y9		77	67	7	3,080	5	2,810

* Blank (Type indicated)
** Field Duplicate
***Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 5

Semi-Volatile Organic Analysis (Page 3)

Surface Soil/Sediment Sample Results

Site Name: LaSalle Park/Beck's Lake
Site Number: BFD 4020004
Location: South Bend, St. Joseph, Indiana
Date Sampled: 16-Oct-01
Date Reported: 06-Nov-01 & 07-Nov-01
Lab: Chemtech, Envirosystems, & Shealy

Units: ug/kg

Sample #		Type/ID #	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Benzo(g,h,i)perylene	Benzaldehyde	Anthracene	Diethylphthalate
Lab	IDEM	D.L.>						
RISC Residential Default Closure Level			*500*	*3,100*			*51,000*	*450,000*
RISC Industrial Default Closure Level			*1,500*	*3,100*			*51,000*	*1,300,000*
	E06U8							
	E06U9		800	660	590			830
	E06W2		710	670	680	1,100		
	E06X8							
	E06X9		280	170	150			
	E06Y0		95					
	E06Y1		210	100	73		77	
	E06Y2		100	60				
	E06Y3							
	E06Y4		95					
	E06Y5		45					56
	E06Y6		420	350	160		120	140
	E06Y7		150	85	61			
	E06Y8		220	110	86			
	E06Y9		71					

* Blank (Type indicated)
** Field Duplicate
***Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 5

Semi-Volatile Organic Analysis (Page 4)

Surface Soil/Sediment Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/kg

Sample #		Type/ID #	Fluorene	Carbazole	Dibenzo(a,h)anthracene
Lab	IDEM	D.L.>			
RISC Residential Default Closure Level			*170,000*	*5,900*	*500*
RISC Industrial Default Closure Level			*1,100,000*	*20,000*	*1,500*
	E06U8				
	E06U9				
	E06W2				
	E06X8				
	E06X9				
	E06Y0				
	E06Y1				
	E06Y2				
	E06Y3				
	E06Y4				
	E06Y5				
	E06Y6		45***	56	60***
	E06Y7				
	E06Y8				
	E06Y9				

* Blank (Type indicated)
** Field Duplicate
***Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE

NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 6

Metals Analysis

Surface Water Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/L

Sample #		Type/ID #	Al	Sb	Ba	Be	Ca	Cr	Cu	Fe	Pb	Mg	Mn	Ni
Lab	IDEM	D.L.>												
RISC Residential Default Closure Level				*6.0*	*2,000*	*4.0*		*100*	*1,300*		*15*			*730*
RISC Industrial Default Closure Level				*41*	*7,200*	*200*		*150,000*	*3,800*		*42*			*2,000*
	ME06U4		216		39.3 B		29,300			1,040	11.2	4,020	113	
	ME06U5		273		36.7 B		27,300			926	10.1	3,730	102	
	ME06U6		251		39.2 B		28,600			957	11.1	3,890	101	24.1 B
	ME06U7		313		39.5 B		27,500			1,340	16.6	3,830	118	

* Blank (Type indicated)
** Field Duplicate
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE
NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 6

Metals Analysis (Page 2)

Surface Water Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/L

Sample #		Type/ID #	K	Ag	Na	Tl	V	Zn
Lab	IDEM	D.L.>						
RISC Residential Default Closure Level				*180*		*2.0*		*11,000*
RISC Industrial Default Closure Level				*510*		*9.2*		*31,000*
	ME06U4		2120 B		12,900			42
	ME06U5		2070 B	2.4	12,200			35.5
	ME06U6		2350 B	5.5	12,100			70.8
	ME06U7		2050 B		11,300			49.2

* Blank (Type indicated)
** Field Duplicate
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE
NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 7

PCBs/Pesticides/Herbicides Analysis

Surface Water Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/L

Sample #		Type/ID #	Beta-BHC	Endosulfan II	Endrin Ketone	Endrin Aldehyde	Gamma-Chlordane	Alpha-Chlordane	Aldrin
Lab	IDEM	D.L.>							
RISC Residential Default Closure Level			*0.47*	*220*	*2.0*	*2.0*	*2.0*	*2.0*	*0.05*
RISC Industrial Default Closure Level			*1.6*	*510*	*31*	*31*	*8.2*	*8.2*	*0.17*
	E06U4			0.0021***	0.0028***	0.0021***	0.0030***		
	E06U5						0.010	0.0045***	
	E06U6					0.0024***	0.013	0.0021***	0.0014***
	E06U7					0.0068***	0.011	0.0069***	

* Blank (Type indicated)
** Field Duplicate
*** Compound Detected Below Reporting Limit
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE
NR - Not Run
NA - Not Available

Table 8

Volatile Organic Analysis

Surface Water Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/L

Sample #		Type/ID #	Acetone	Methylene Chloride	Chlorobenzene
Lab	IDEM	D.L.>			
RISC Residential Default Closure Level			*770*	*5.0*	*100*
RISC Industrial Default Closure Level			*10,000*	*380*	*2,000*
	E06U4				
	E06U5				
	E06U6				
	E06U7		31		
	E06W3		31		0.68

* Blank (Type indicated)
** Field Duplicate
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE
NR - Not Run
NA - Not Available
Bold = above action level or MCL
Estimated

Table 9

Semi-Volatile Organic Analysis

Surface Water Sample Results

Site Name:	**LaSalle Park/Beck's Lake**
Site Number:	BFD 4020004
Location:	South Bend, St. Joseph, Indiana
Date Sampled:	16-Oct-01
Date Reported:	06-Nov-01 & 07-Nov-01
Lab:	Chemtech, Envirosystems, & Shealy

Units: ug/L

Sample #		Type/ID #	Di-n-butylphthalate	Benzo(a)anthracene	Ideno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Pyrene
Lab	IDEM	D.L.>						
RISC Residential Default Closure Level			*3,700*	*1.2*	*0.022*	*0.12*		*140*
RISC Industrial Default Closure Level			*10,000*	*3.9*	*0.022*	*0.39*		*140*
	E06U4							
	E06U5							
	E06U6							
	E06U7							

* Blank (Type indicated)
** Field Duplicate
B - Detected in The Method Blank; Data may be biased high
Empty Box indicates NON-DETECTABLE
NR - Not Run
NA - Not Available
Bold = above closure level
Estimated

Table 10

Sample Results Summary

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
BFD4020004

Sample ID #	EPA CLP #	Contaminant	Level	Cleanup Goal	Source
SW4	E06U7 ME06U7	Lead	16.6 ppb	15.0 ppb/42.0 ppb	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SD1	E06W2 ME06W2	Lead Arsenic Benzo(a)pyrene	405 ppm 11.5 ppm 710 ppb	400 ppm/1,300 ppm 3.9 ppm/20.0 ppm 500 ppb/1,500 ppb	RISC Residential Direct Contact Level/RISC Industrial Direct Contact Level RISC Residential Default Closure Level/RISC Industrial Default Closure Level RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SD2	E06U8 ME06U8	Lead Arsenic	630 ppm 15.5 ppm	400 ppm/1,300 ppm 3.9 ppm/20.0 ppm	RISC Residential Direct Contact Level/RISC Industrial Direct Contact Level RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SD3	E06U9 ME06U9	Lead Arsenic Benzo(a)pyrene	649 ppm 18.1 ppm 800 ppb	400 ppm/1,300 ppm 3.9 ppm/20.0 ppm 500 ppb/1,500 ppb	RISC Residential Direct Contact Level/RISC Industrial Direct Contact Level RISC Residential Default Closure Level/RISC Industrial Default Closure Level RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS2	E06X9 ME06X9	Lead Arsenic	784 ppm 13.8 ppm	400 ppm/1,300 ppm 3.9 ppm/20.0 ppm	RISC Residential Direct Contact Level/RISC Industrial Direct Contact Level RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS3	E06Y0 ME06Y0	Arsenic	11.8 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS4	E06Y1 ME06Y1	Arsenic	8.5 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS5	E06Y2 ME06Y2	Arsenic	7.5 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS6	E06Y3 ME06Y3	Arsenic	4.8 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS7	E06Y4 ME06Y4	Arsenic	20.9 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS8	E06Y5 ME06Y5	Arsenic	5.7 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS9	E06Y6 ME06Y6	Arsenic	9.8 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS10	E06Y7 ME06Y7	Arsenic	8.5 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS11	E06Y8 ME06Y8	Arsenic	13.9 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level
SS12	E06Y9 ME06Y9	Arsenic	11.0 ppm	3.9 ppm/20.0 ppm	RISC Residential Default Closure Level/RISC Industrial Default Closure Level

SECTION VII

7.0 CONCLUSION & RECOMMENDATIONS

IDEM recommends that the following be conducted and/or considered:

- Surface soil, sediment and surface water were sampled to determine the health risks associated with direct contact with soil, sediment and water at the park, soil at the neighboring vacant lots, and to determine if contamination in the lake posed a risk to residents who may eat fish caught in the lake. Contaminant levels are compared to the IDEM RISC Residential and Industrial Cosure Levels. Residential and Industrial Closure Levels have been developed based on several variables; therefore, a definitive conclusion cannot be drawn for a park without conducting a site specific risk assessment. Groundwater and subsurface soils were not sampled for this report due to the lack of exposure to these media.

LEAD

- The level of lead (784 ppm) detected in surface soil sample SS2 taken at the vacant lot on the southwest corner of Washington Street and Iowa Street could be a concern depending on intended use (gardens, play areas for children, etc.). The RISC Residential Direct Contact Closure Level is 400 ppm for lead, and the RISC Industrial Direct Contact Closure Level is 1,300 ppm. It is unclear what the source of lead is, but it could be from lead-based paint in former housing on the property or deposited from auto exhaust. This area should be further investigated prior to reuse. Additionally, depending on the intended future use of the other vacant lots (i.e. community gardens), additional sampling for lead may be necessary to ensure that lead contamination is not present. The October 16, 2001 sampling took only one sample from each lot; there could be lead in other portions of the vacant lots that were not sampled.

- All three sediment samples taken from Beck's Lake indicate levels of lead (405, 630 and 649 ppm) that exceed the RISC Residential Direct Contact Closure Level (400 ppm) but are below the RISC Industrial Direct Contact Closure Level (1,300 ppm). Because it is unlikely that anyone will come into direct contact with the lake sediment, there is little risk associated with this contaminant via direct contact. Lead was detected in one water sample (16.6 ppb) taken from Beck's Lake that exceeded the RISC Residential Default Closure Level (15 ppb) but was below the RISC Industrial Default Closure Level (42 ppb); however, these levels are for drinking water. There should be no concern for risk associated with direct contact with the surface water.

ARSENIC

- Arsenic levels (ranging from 4.8 ppm to 20.9 ppm) were detected above the RISC Residential Default Closure Level (3.9 ppm) in all three sediment samples and in 11 surface soil

samples. Additionally, one of the surface soil samples (SS7) detected arsenic levels (20.9 ppm) above the RISC Industrial Default Closure Level (20 ppm). This sample was located in the area of the LaSalle Park playground. Additional investigation in the area of the playground is recommended to determine if the level of arsenic present is a health risk. The U.S. EPA Removal Action Level for arsenic in residential soil is 230 ppm.

BENZO(A)PYRENE

- Benzo(a)pyrene was detected in two sediment samples (800 and 710 ppm) above the RISC Residential Default Closure Level (500 ppm) but below the RISC Industrial Default Closure Level (1,500 ppm). It should also be noted that these results are estimated. The Residential Default Closure Level in RISC is the Direct Contact Level. Because it is unlikely that anyone will come into contact with the lake sediment, there is little risk associated with this contaminant via direct contact.

Benzo(a)pyrene can accumulate in the sediment within aquatic systems. Information on what levels of benzo(a)pyrene in sediment are unsafe for fish populations is inconclusive, and there is evidence that many organisms metabolize and excrete benzo(a)pyrene rapidly. However, because there is evidence that local residents do fish in the lake, IDEM recommends that fish tissue be sampled for the presence and levels of benzo(a)pyrene as a precaution.

SUMMARY

Further investigation is recommended for lead in the vacant lot (surface soil sample # SS2), for arsenic in the area of the playground (surface soil sample # SS7), and for benzo(a)pyrene in fish tissue. Please refer to Sample Results Map in Appendix A for sample locations. It should also be reiterated that no subsurface soil or groundwater sampling was conducted at this site due to the unliklihood of exposure through these media. Because of the high likelihood that dumping of hazardous substances occurred at the site in the past, additional investigation should be conducted in the future if site conditions or site uses change.

SECTION VIII

8.0 REFERENCES

Federal Emergency Management Agency; National Flood Insurance Program; Flood Insurance Rate Map (FIRM), Community-Panel Numbers 180231 0003 C, map revised February 17, 1988.

Indiana Administration Department; State Land Office; Aerial photograph – St. Joseph County, Indiana; Spring 1986.

Indiana Department of Environmental Management; IDEM file room.

Indiana Department of Environmental Management; Risk Integrated System of Closure (RISC) User's Guide and Technical Resource Guidance Document, February 15, 2001.

Indiana Department of Natural Resources; Indiana Natural Heritage Data Center; Endangered, Threatened and Rare Species; Ronald P. Hellmich.

Indiana Department of Natural Resources; Water Well Summary; http://www.state.in.us/dnr/water/wellwater/index.html.

On-site reconnaisance; Conducted by Dan Chesterson and Mark Jaworski; Indiana Department of Environmental Management; June 13, 2001.

On-site sampling activity; Conducted by Dan Chesterson, Mark Jaworski and Doug Fisher; Indiana Department of Environmental Management; October 16, 2001.

Screening Site Inspection Report; prepared by Ecology and Environment, Inc.; June 7, 1989.

Toxicological Profile for Benzo(a)pyrene; U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR); May 1990.

ToxFaqs (Fact Sheets); U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR); Arsenic (July 2001), Benzo(a)pyrene (September 1996), and Lead (June 1999).

United States Department of Agriculture, Soil Conservation Service; *Soil Survey of St. Joseph County, Indiana*; 1977.

United States Department of Interior; Fish and Wildlife Service; National Wetlands Inventory Map, South Bend West, 1987.

United States Department of the Interior Geological Survey; 7.5 Minute Series Topographic Map; South Bend West, Indiana (St. Joseph County) Quadrangle; 1986 (revised).

United States Geological Survey; Water-Resources Investigations Report 92-4142; *Hydrogeologic Atlas of Aquifers in Indiana*; 1994.

APPENDIX A

MAPS

- Topographic Map
- Site Features Map
- Sampling Location Map
- Sample Results Map
- Flood Insurance Rate Map
- National Wetlands Inventory Map

Topographic Map

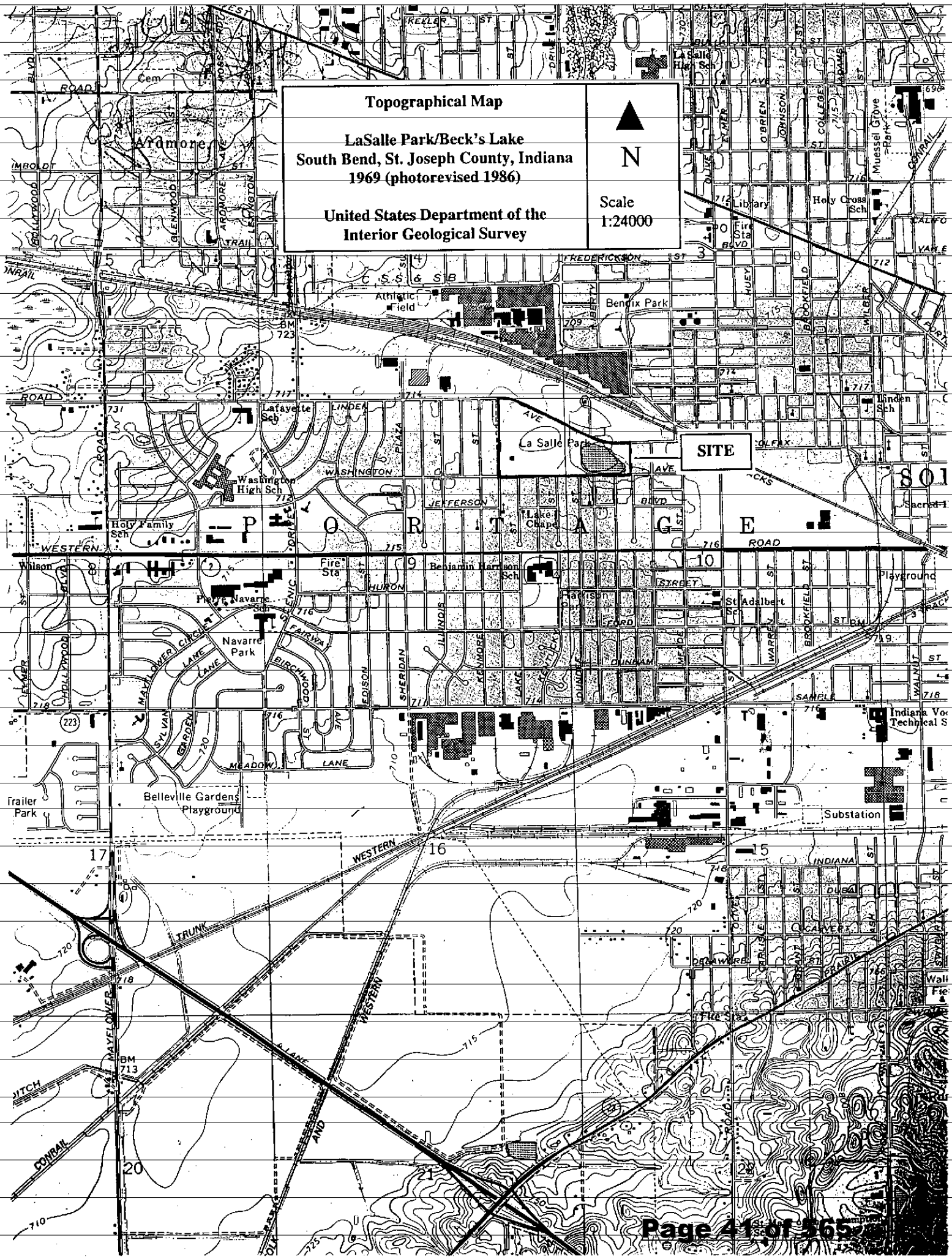
Topographical Map

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
1969 (photorevised 1986)

United States Department of the Interior Geological Survey

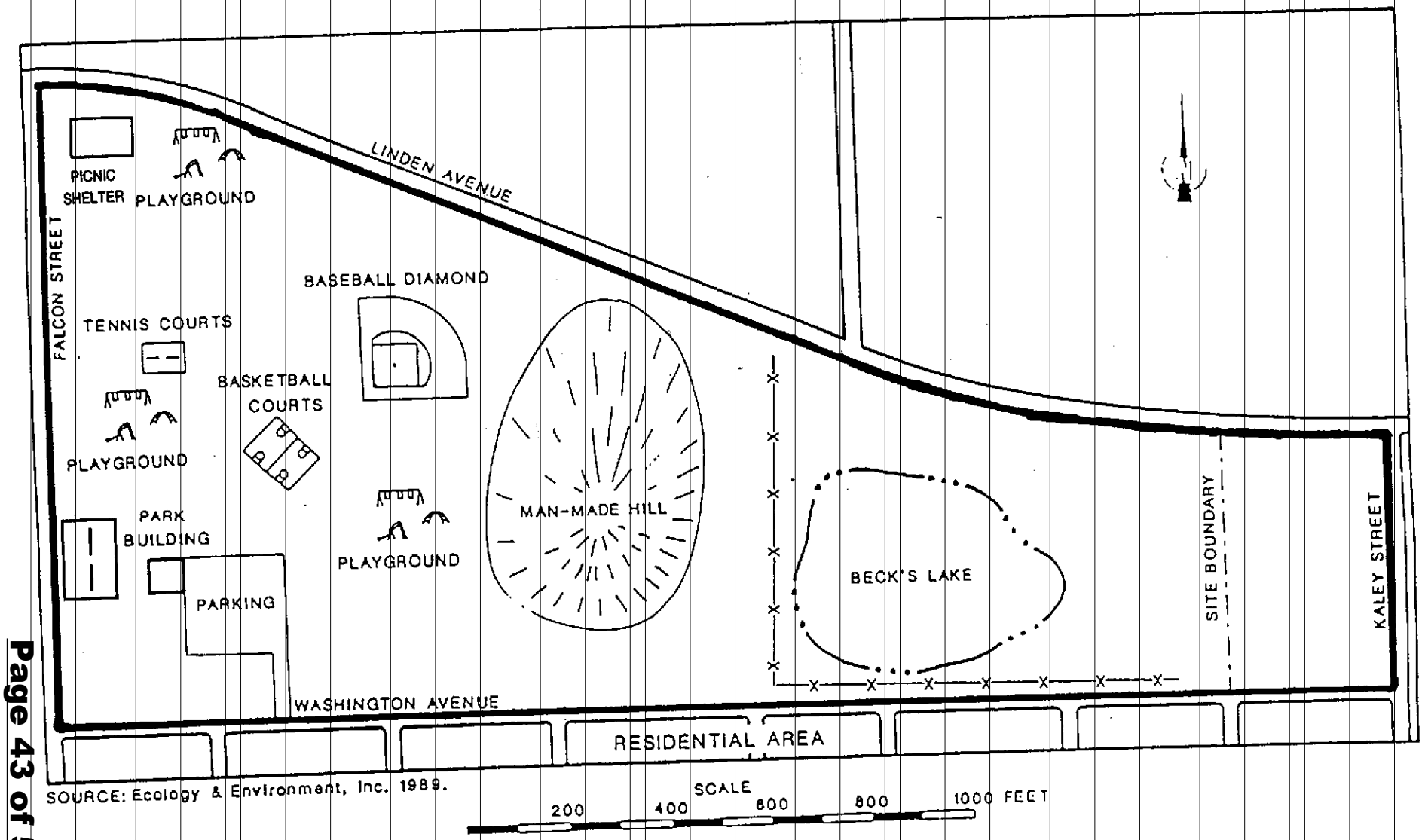
N

Scale 1:24000



Site Features Map

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana

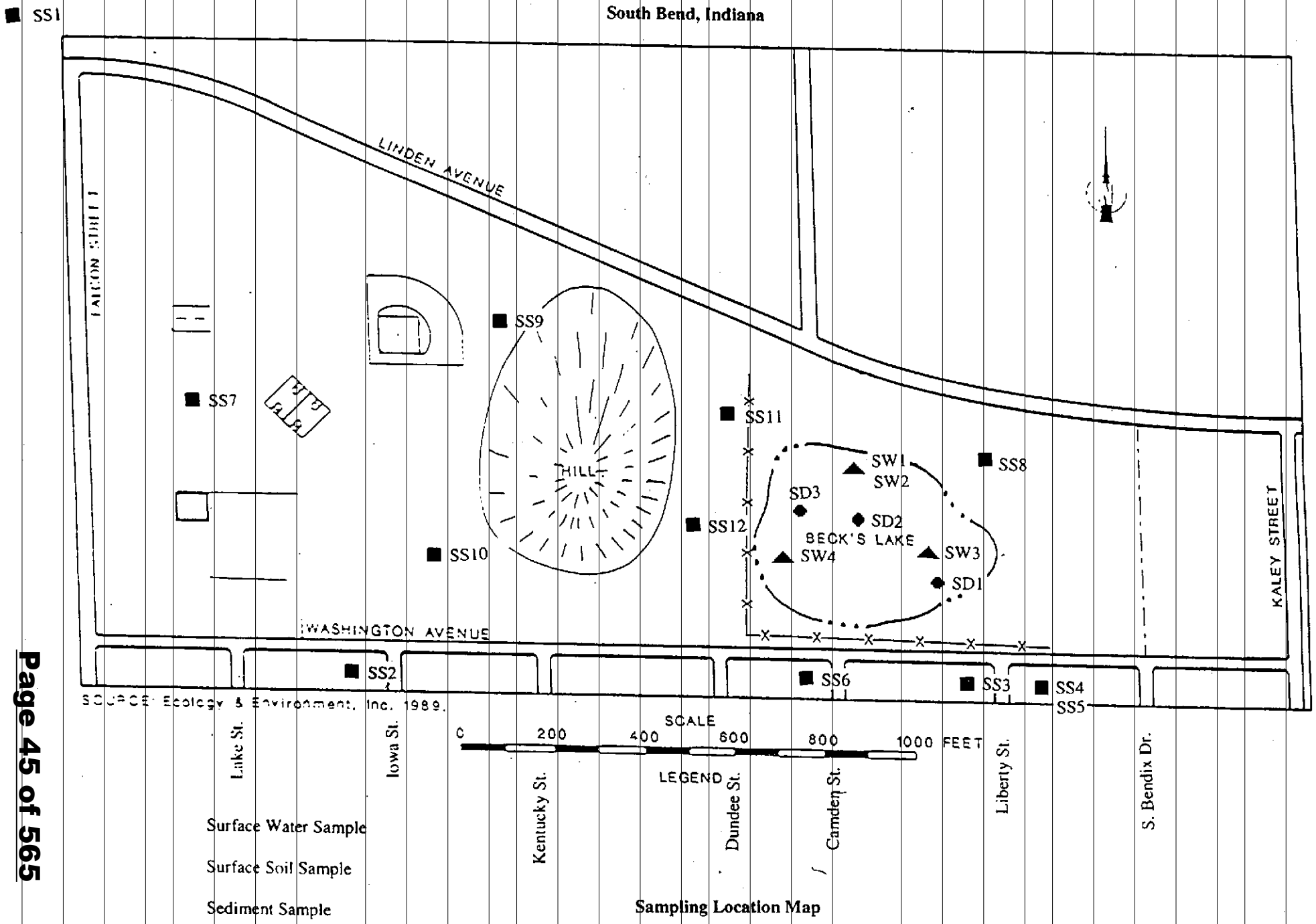


SOURCE: Ecology & Environment, Inc. 1989.

Site Features Map

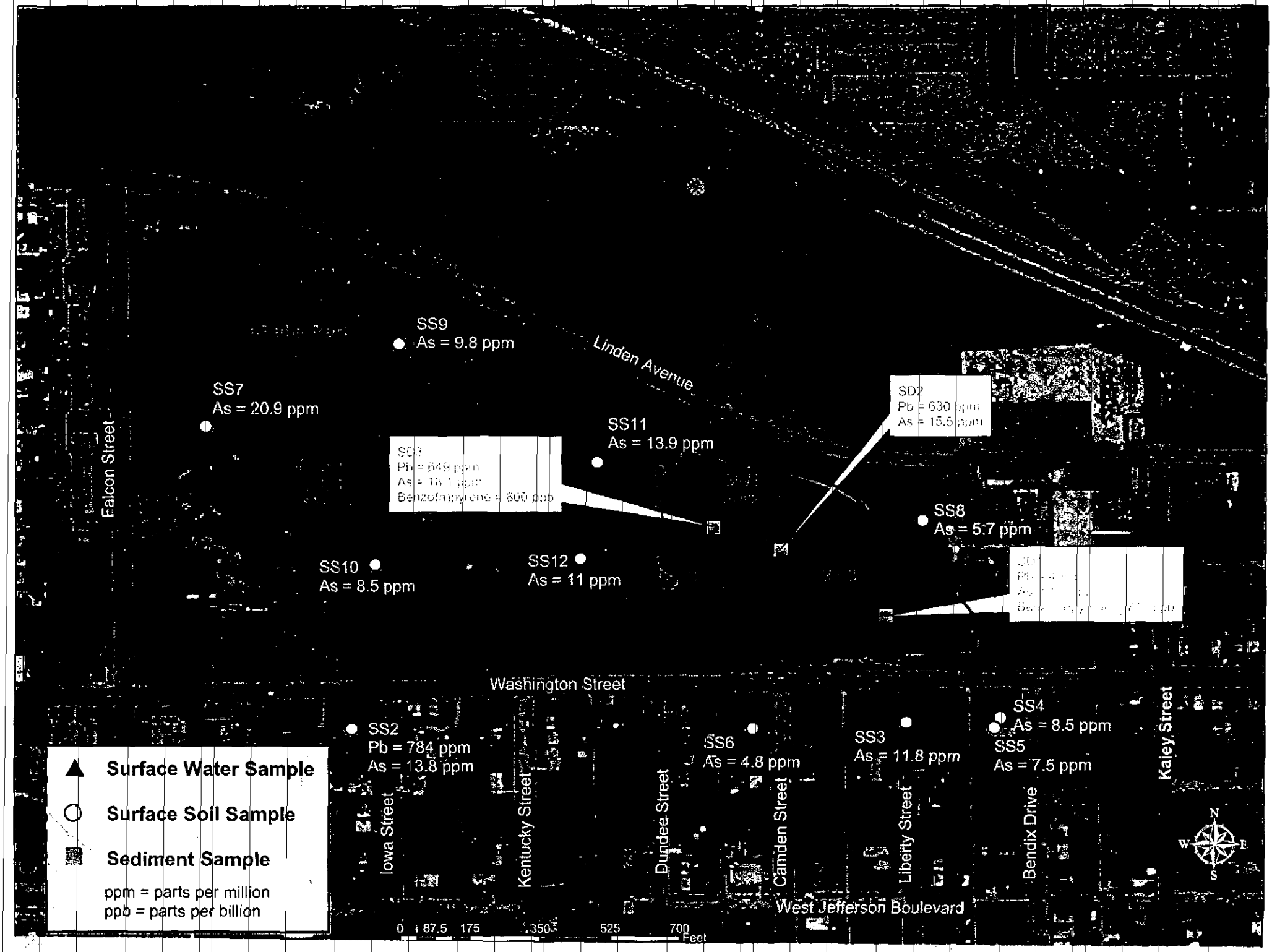
Sampling Location Map

LaSalle Park/Beck's Lake
South Bend, Indiana



Sampling Location Map

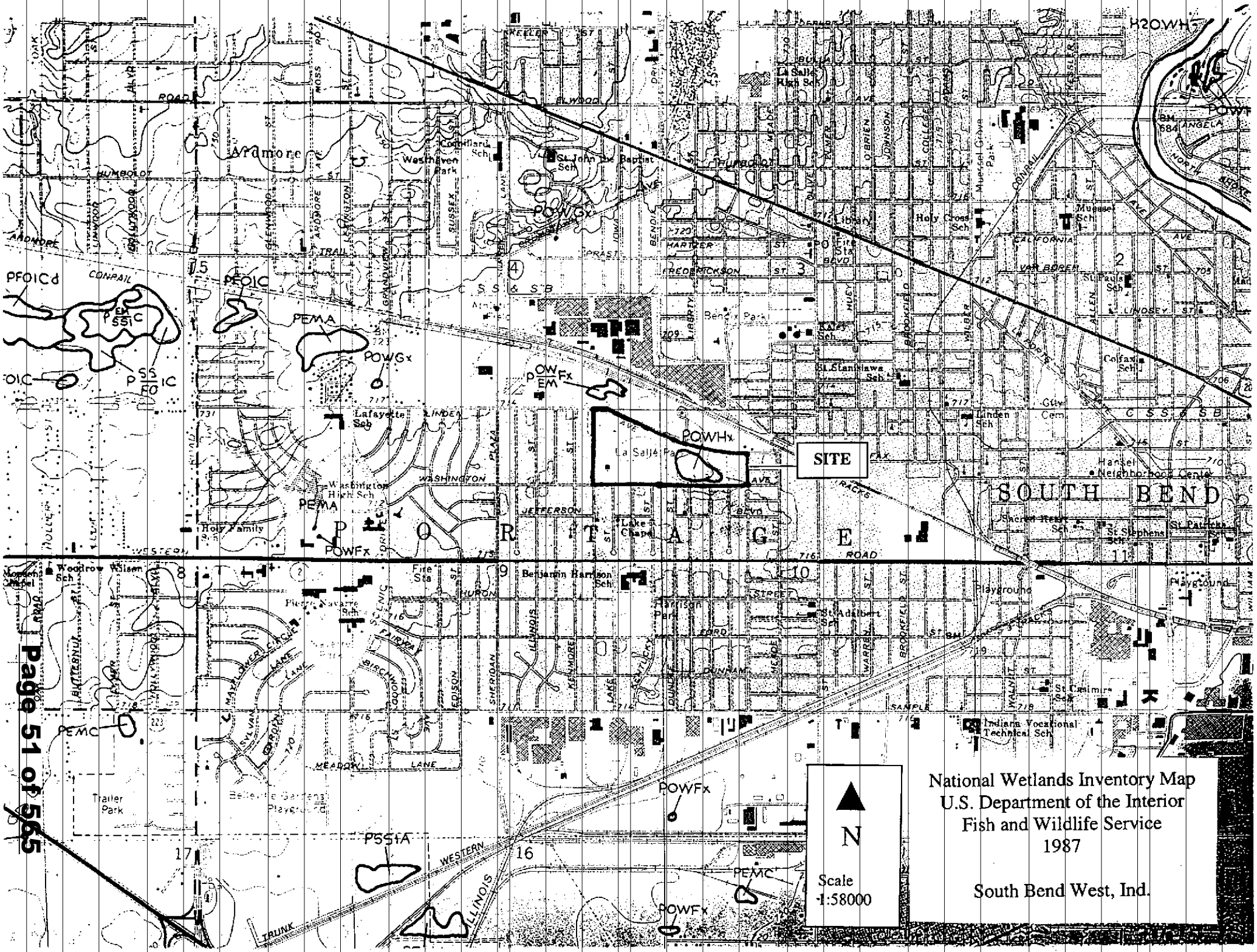
Sample Results Map


SS9
As = 9.8 ppm
Linden Avenue
SS7
As = 20.9 ppm
Falcon Street
SS11
As = 13.9 ppm
SD2
Pb = 630 ppm
As = 15.5 ppm
SD3
Pb = 649 ppm
As = 18.1 ppm
Benzo(a)pyrene = 800 ppb
SS8
As = 5.7 ppm
SS10
As = 8.5 ppm
SS12
As = 11 ppm
Washington Street
SS2
Pb = 784 ppm
As = 13.8 ppm
SS6
As = 4.8 ppm
SS3
As = 11.8 ppm
SS4
As = 8.5 ppm
SS5
As = 7.5 ppm
Kaley Street
Iowa Street
Kentucky Street
Dundee Street
Camden Street
Liberty Street
Bendix Drive
West Jefferson Boulevard
Surface Water Sample
Surface Soil Sample
Sediment Sample
ppm = parts per million
ppb = parts per billion
0 87.5 175 350 525 700
Feet
N
W
E
S

Flood Insurance Rate Map

According to the Flood Insurance Rate Map developed for South Bend, Indiana by the Department of Federal Emergency Management Agency, the LaSalle Park/Beck's Lake property is classified as Zone C. Zone C is described as "areas of minimal flooding". Because the entire map is in Zone C, the FIRM panel was not printed.

National Wetlands Inventory Map



National Wetlands Inventory Map
U.S. Department of the Interior
Fish and Wildlife Service
1987

South Bend West, Ind.

National Wetland Inventory Map

Special Note
(per South Bend West Map, 1987)

This document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography in accordance with **Classification of Wetlands and Deepwater Habitats of the United States** (FWS/OBS – 79/31 December 1979). The aerial photographs typically reflect conditions during the specific year and season when they were taken. In addition, there is a margin of error inherent in the use of the aerial photographs. Thus a detailed on the ground and historical analysis of a single site may result in a revision of the wetland boundaries established through photographic interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on this document.

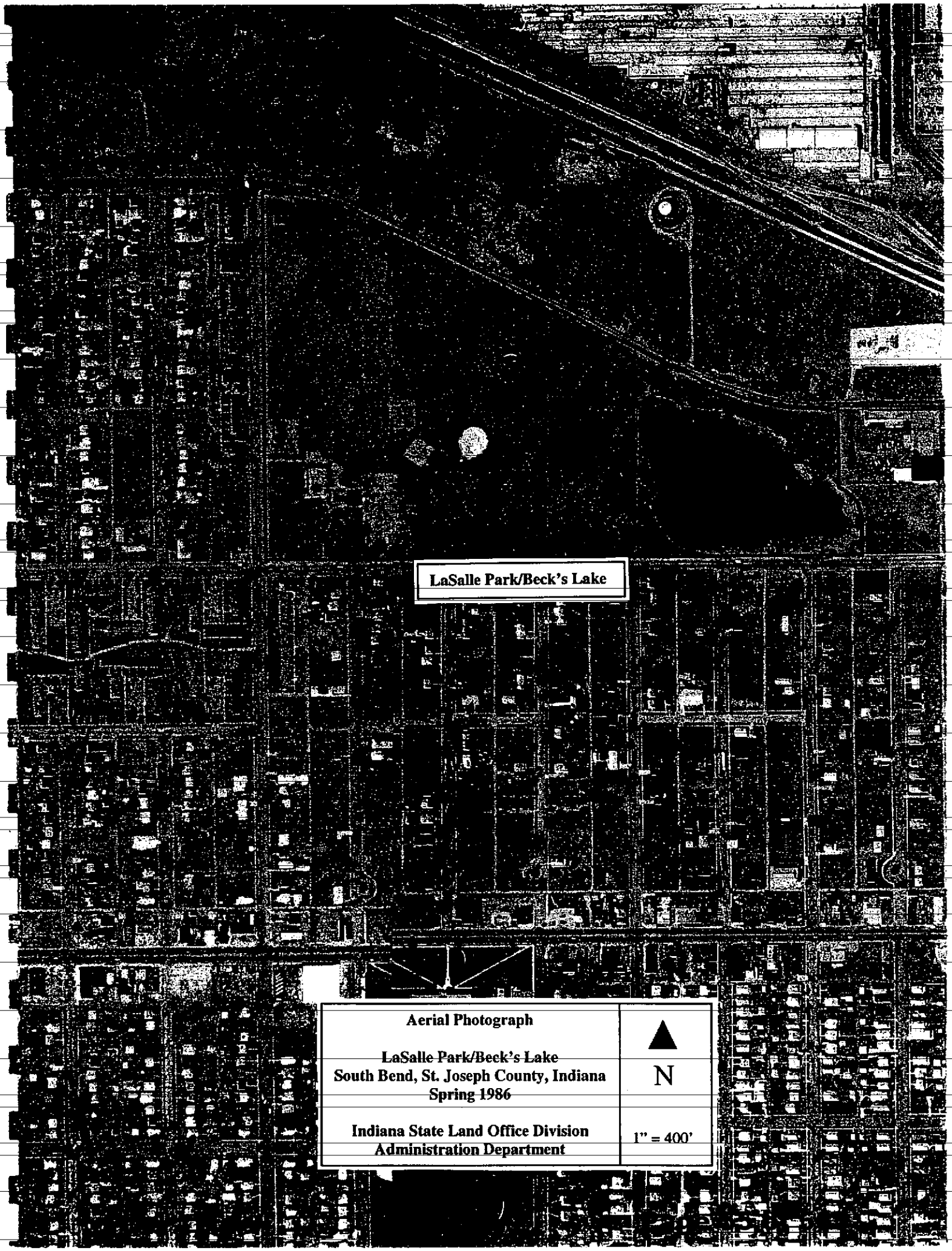
Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State or local government or to establish the geographical scope of the regulatory programs of government agencies. **Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.**

APPENDIX B

PHOTOGRAPHS

- Aerial Photograph
- Site Photographs
- Sampling Photographs

Aerial Photograph



Aerial Photograph

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
Spring 1986

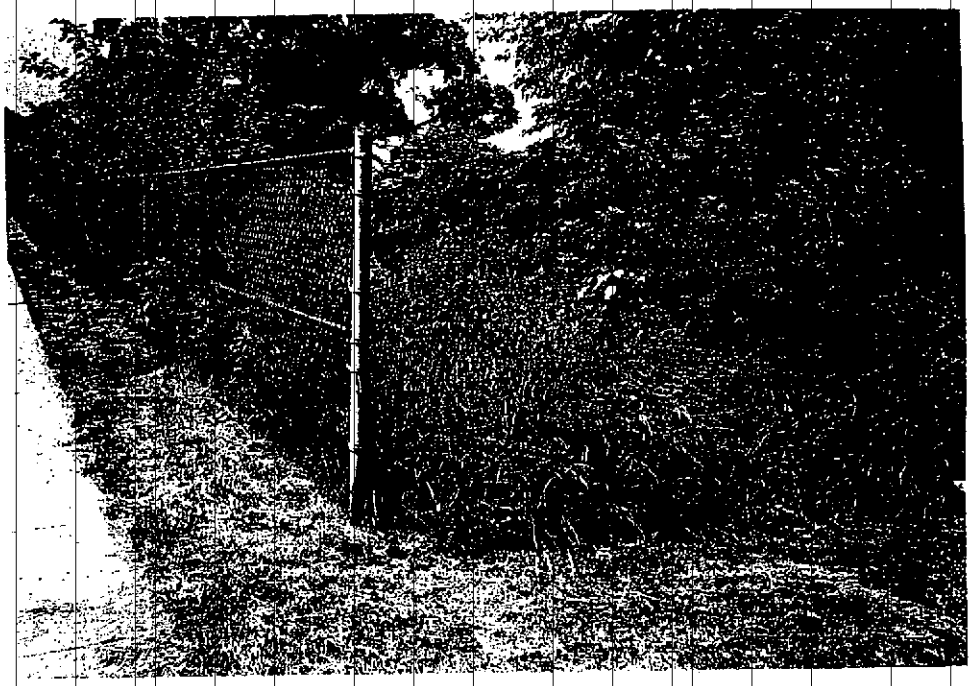
Indiana State Land Office Division
Administration Department

N

1" = 400'

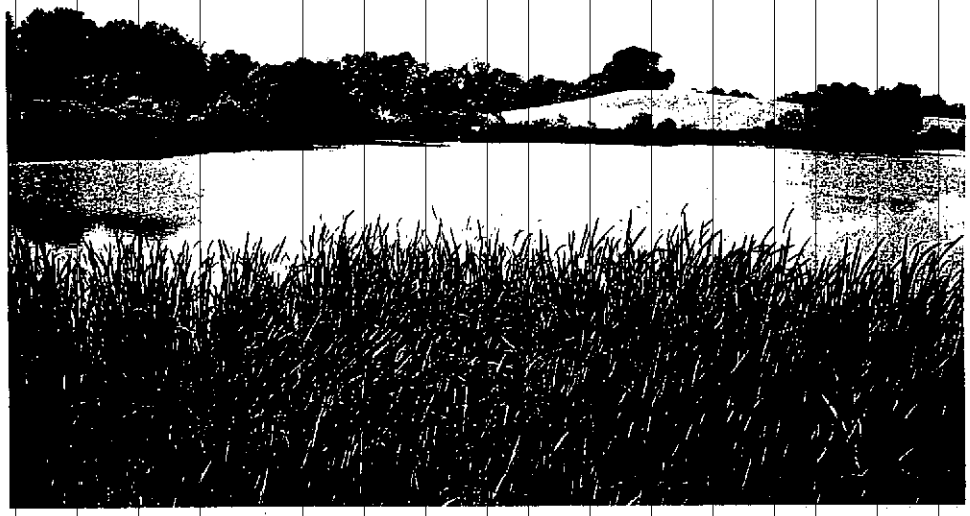
Site Photographs

Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View from east end of park facing east; nearby residences in background and light industrial facility to left.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: Fence along Washington Street just south of lake.

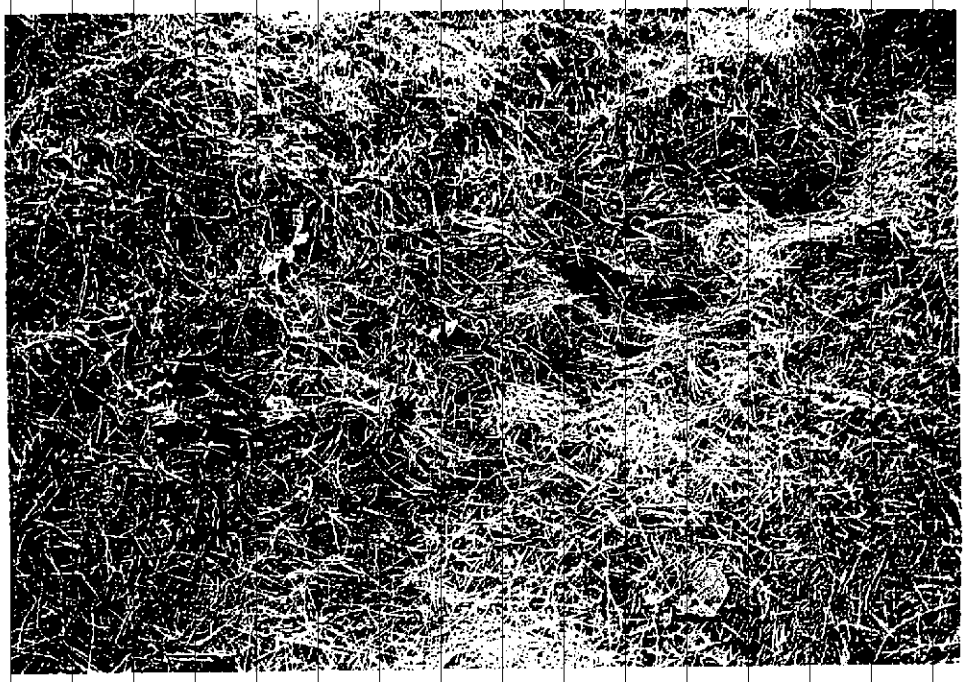
Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: Debris at northern shore of Beck's Lake.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View from eastern edge of Beck's Lake to west; man-made hill in background.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View of lake from south side through fence along Washington Street.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View of Beck's Lake from west shore facing east.



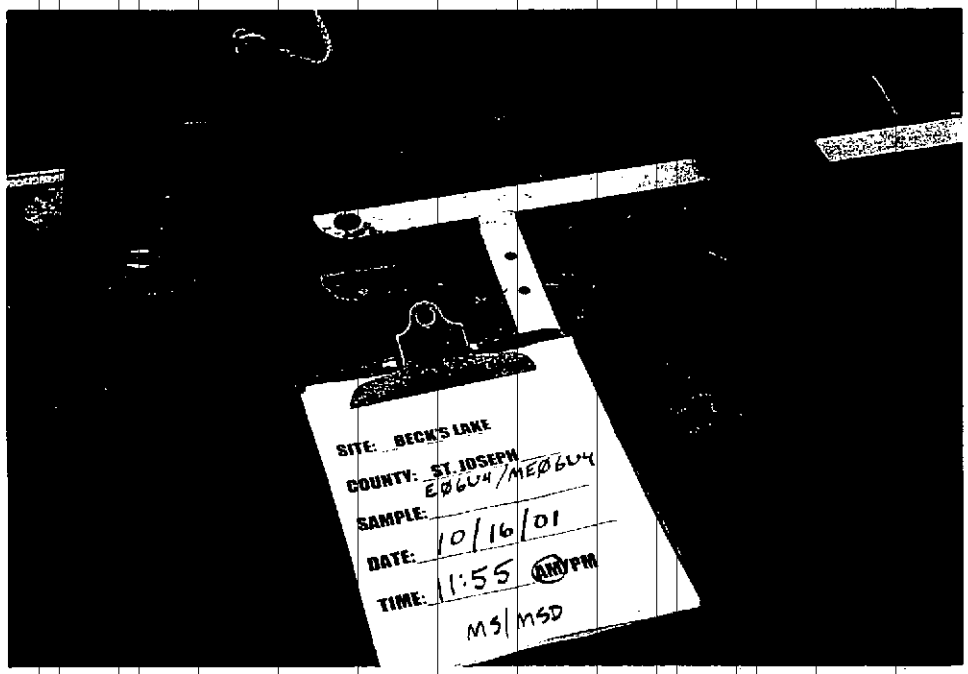
Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: Standing water in LaSalle Park near northwest corner of lake.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View of man-made hill in LaSalle Park.

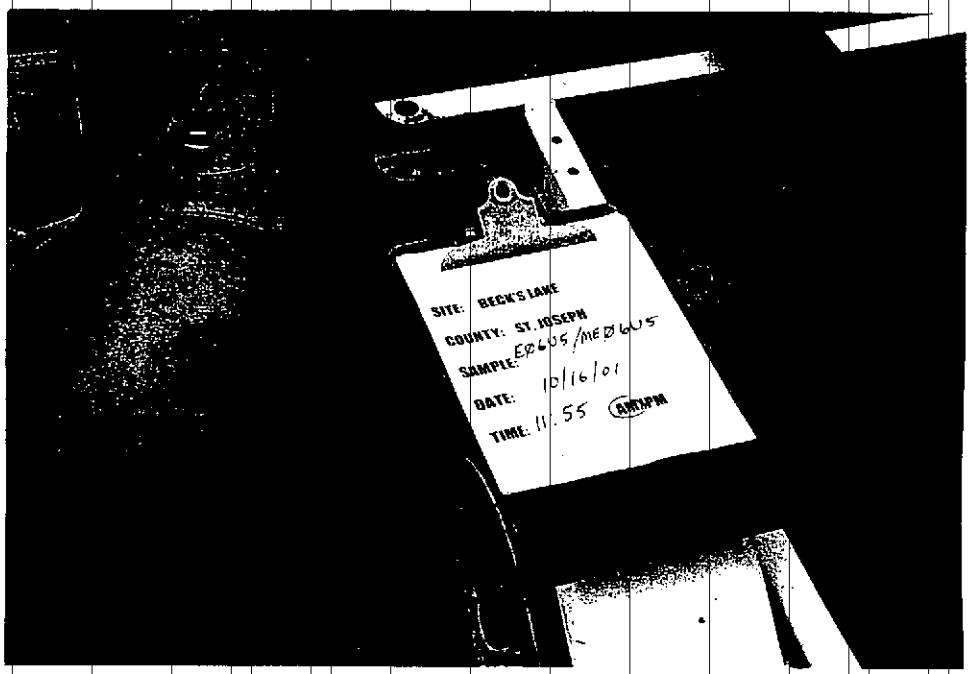
Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View of playground near base of hill.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Date: 6-13-2001
Weather: Hot and sunny
Photo By: Dan Chesterson
Description: View of baseball diamond and community facility.

Sampling Photographs

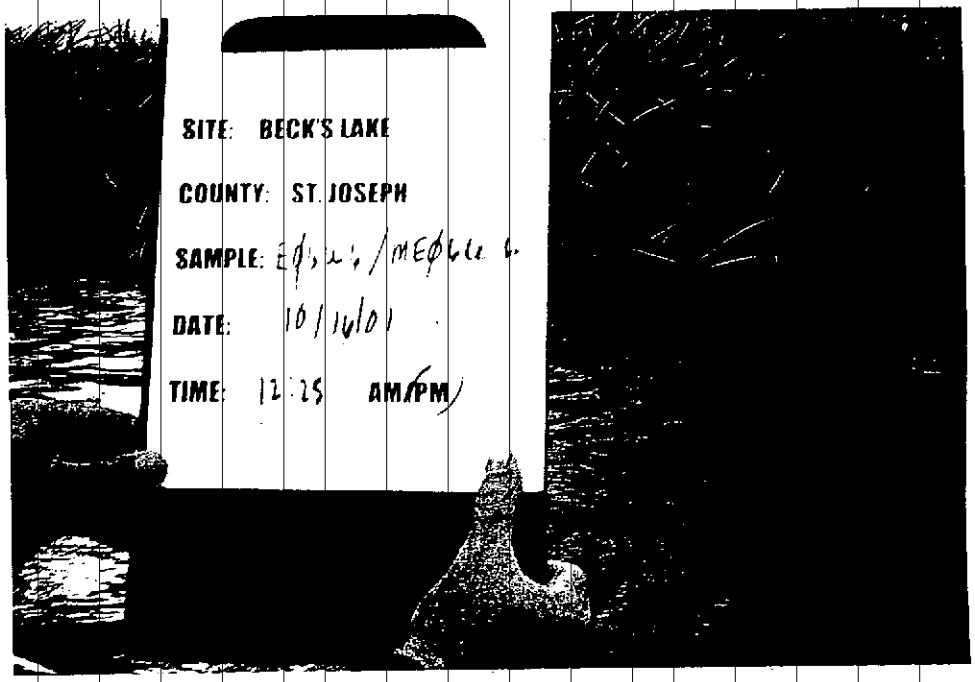


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U4/ME06U4 (SW1)
Date: 10-16-2001
Time: 11:55 ~~11:30~~ AM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Surface water sample taken from north side of lake; 6 feet from shore, 150 feet west of western edge of lake. Grayish in color with slight sewage smell. Top 2 inches.

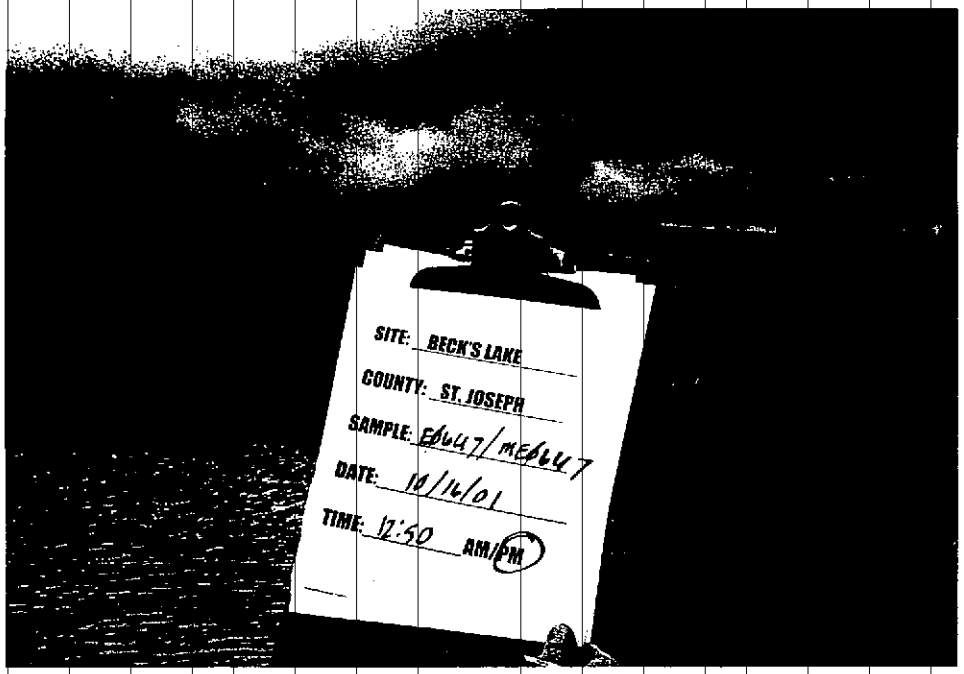


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U5/ME06U5 (SW2)
Date: 10-16-2001
Time: 11:55 ~~11:30~~ AM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Duplicate of SW1.

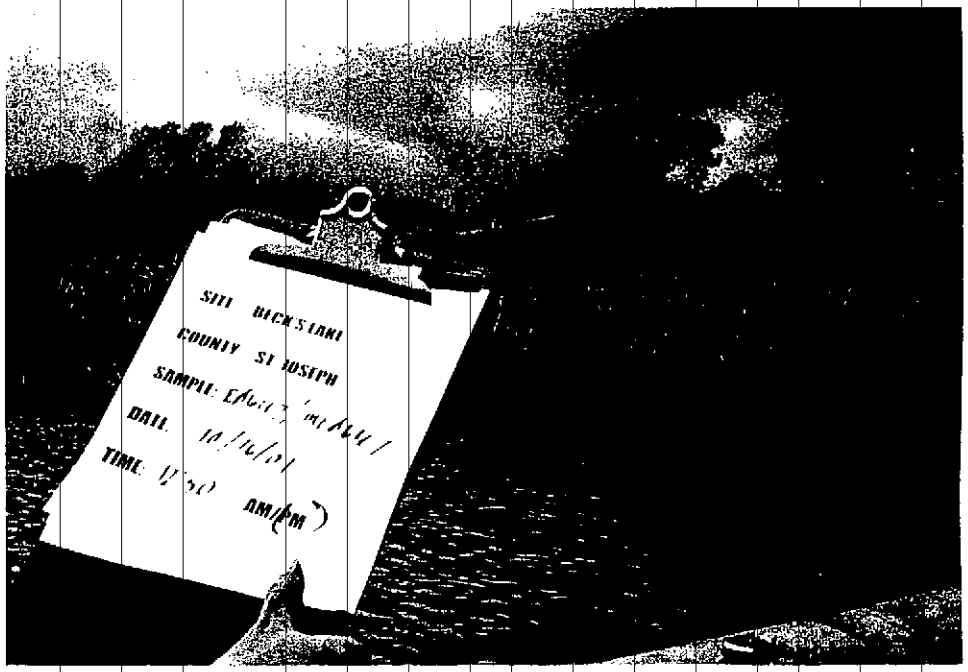
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U6/ME06U6 (SW3)
Date: 10-16-2001
Time: 12:25 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Surface water sample taken from east end of lake, 50 feet west of shoreline. Top 2 inches.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U6/ME06U6 (SW3)
Date: 10-16-2001
Time: 12:25 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Surface water sample taken from east end of lake, 50 feet west of shoreline. Top 2 inches.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U7/ME06U7 (SW4)
Date: 10-16-2001
Time: 12:50 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Surface water sample taken at west end of lake, 70 feet west of bank. No odor, some particulates. Top 2 inches.



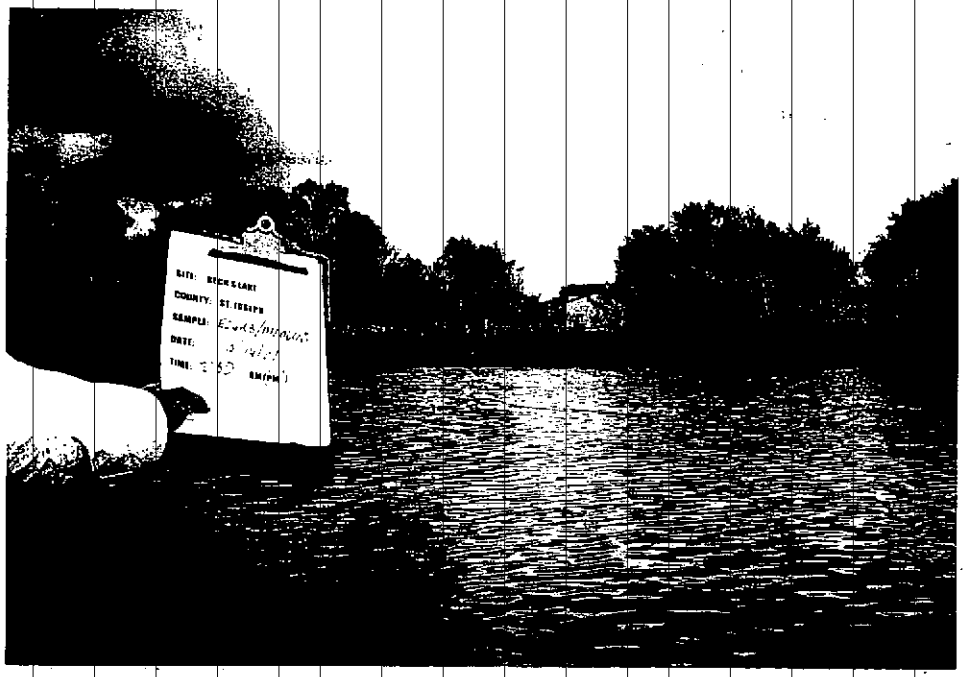
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U7/ME06U7 (SW4)
Date: 10-16-2001
Time: 12:50 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Surface water sample taken at west end of lake, 70 feet west of bank. No odor, some particulates. Top 2 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN

Sample #: E06W2/ME06W2 (SD1)
Date: 10-16-2001
Time: 2:30 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Sediment sample taken from east end of lake, 25 feet west of shoreline. Dark black silty. Top 6 inches. Sample obtained using ponar dredge sampler.

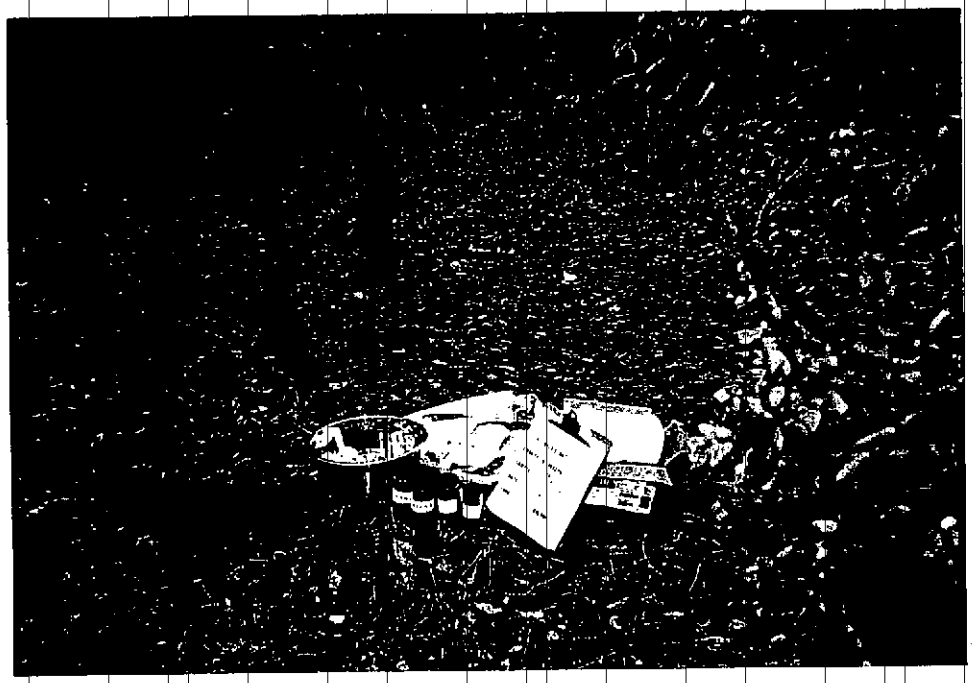
Site: LaSalle Park/Beck's Lake
South Bend, IN

Sample #: E06W2/ME06W2 (SD1)
Date: 10-16-2001
Time: 2:30 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Sediment sample taken from east end of lake, 25 feet west of shoreline. Dark black silty. Top 6 inches. Sample obtained using ponar dredge sampler.



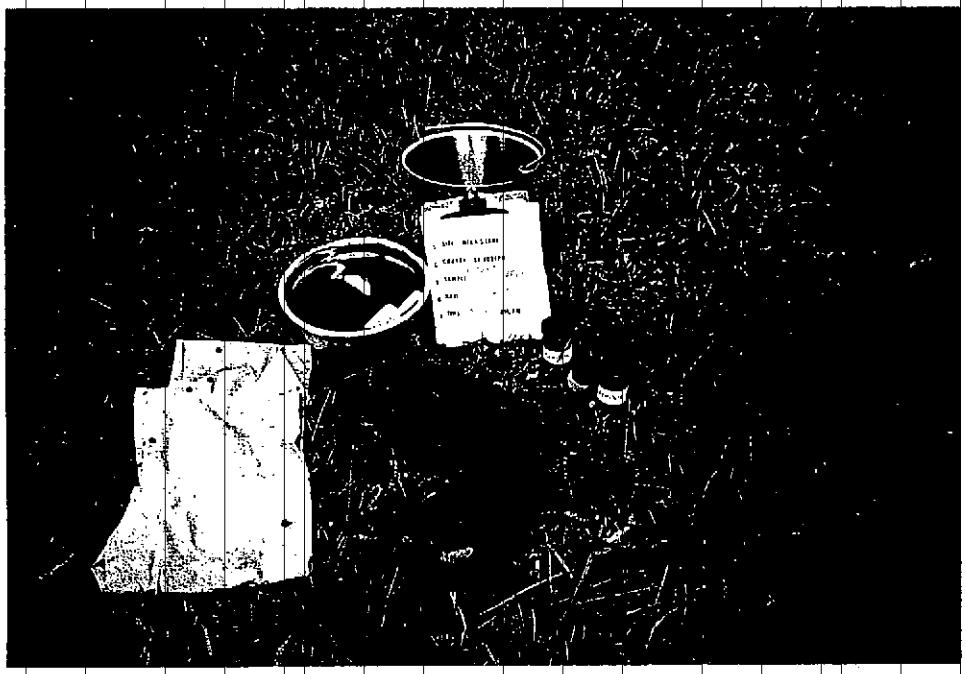
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U8/ME06U8 (SD2)
Date: 10-16-2001
Time: 2:50 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Sediment sample taken from middle of lake. Dark black silty. Top 4 inches. Sample obtained using ponar dredge sampler.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06U8/ME06U8 (SD2)
Date: 10-16-2001
Time: 2:50 PM
Weather: Cold, overcast and rainy
Photo By: Mark Jaworski
Description: Sediment sample taken from middle of lake. Dark black silty. Top 4 inches. Sample obtained using ponar dredge sampler.

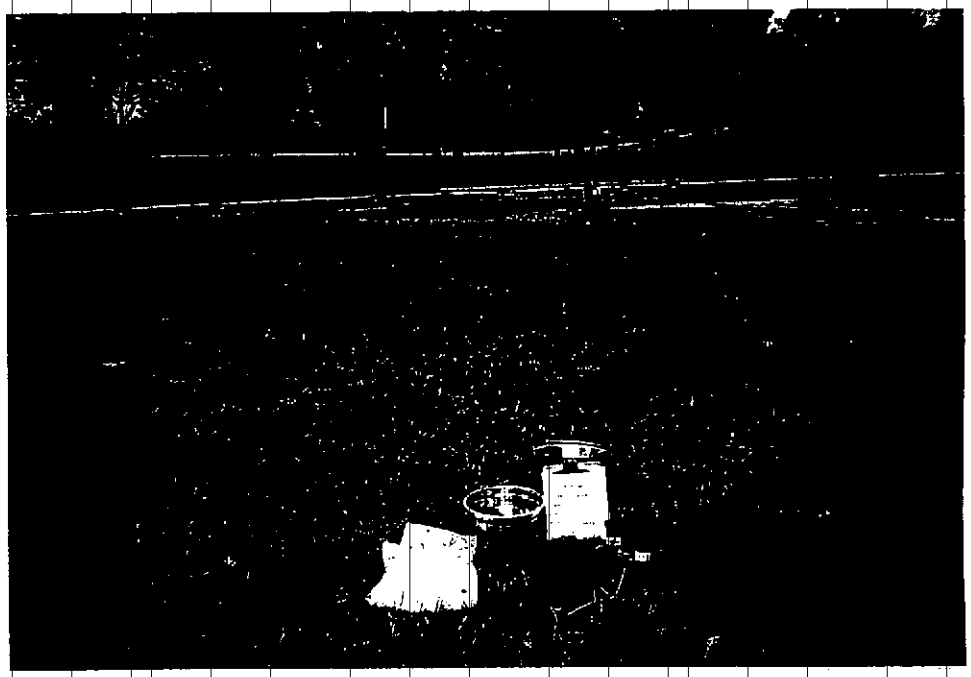


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06X8/ME06X8 (SS1)
Date: 10-16-2001
Time: 4:05 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil background sample. Taken west of LaSalle Park, north of Linden Street just west of Kenmore. Taken from wooded area on north side of floodwall. Light brown loamy sand. Top 6 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06X8/ME06X8 (SS1)
Date: 10-16-2001
Time: 4:05 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil background sample. Taken west of LaSalle Park, north of Linden Street just west of Kenmore. Taken from wooded area on north side of floodwall. Light brown loamy sand. Top 6 inches.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06X9/ME06X9 (SS2)
Date: 10-16-2001
Time: 3:30 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of Washington and Iowa Streets, approximately 40 feet from each street. Dark brown loam.

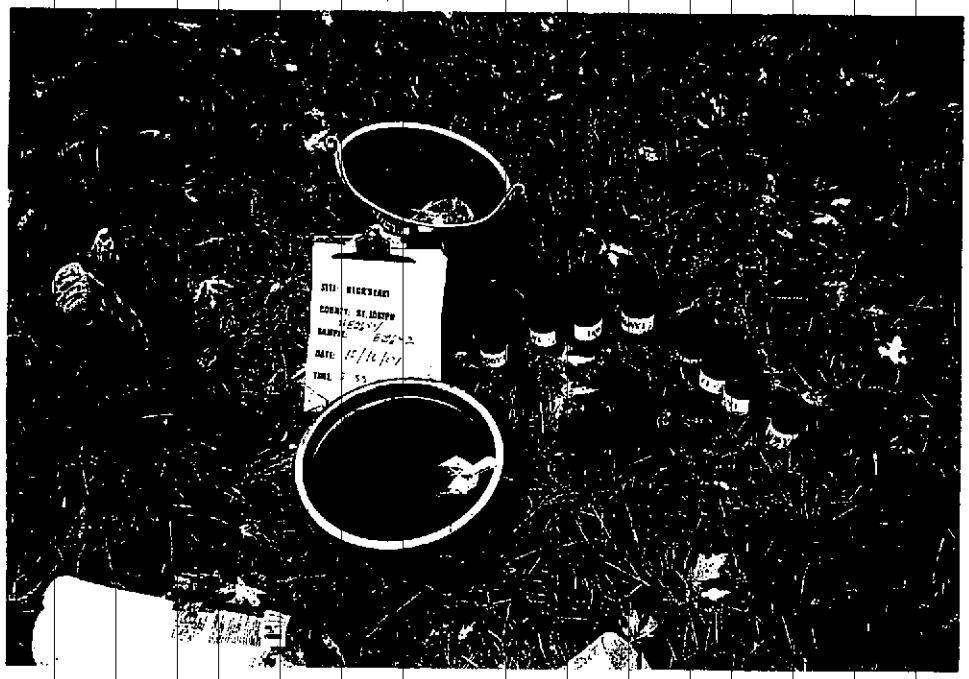


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06X9/ME06X9 (SS2)
Date: 10-16-2001
Time: 3:30 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of Washington and Iowa Streets, approximately 40 feet from each street. Dark brown loam.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y0/ME06Y0 (SS3)
Date: 10-16-2001
Time: 2:45 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of Washington and Liberty Streets, approximately 40 feet from each street. Dark brown sandy loam. Top 5 inches.

2nd Picture for SS3 not available

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y0/ME06Y0 (SS3)
Date: 10-16-2001
Time: 2:45 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of Washington and Liberty Streets, approximately 40 feet from each street. Dark brown sandy loam. Top 5 inches.



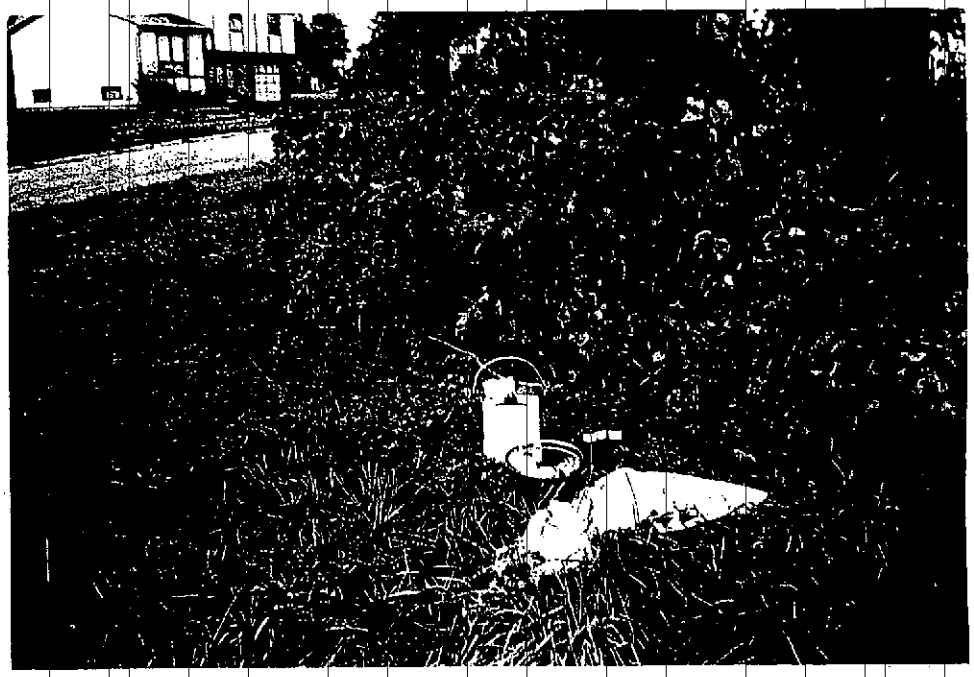
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y1/ME06Y1 (SS4)
Date: 10-16-2001
Time: 2:55 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken from southeast corner of Washington and Liberty Streets, approximately 50 feet from each street. Dark brown sandy loam. Top 6 inches. (Placard mistakenly reads "ME06Y1/ E06Y2")

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y1/ME06Y1 (SS4)
Date: 10-16-2001
Time: 2:55 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken from southeast corner of Washington and Liberty Streets, approximately 50 feet from each street. Dark brown sandy loam. Top 6 inches. (Placard mistakenly reads "ME06Y1/ E06Y2")

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y2/ME06Y2 (SS5)
Date: 10-16-2001
Time: 3:00 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Duplicate of SS4.

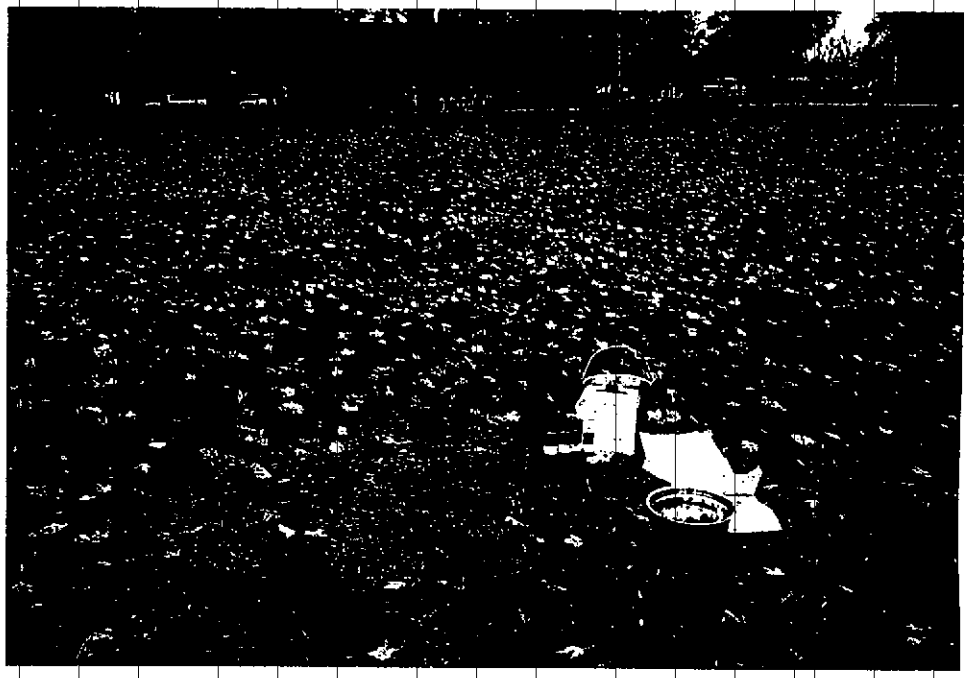
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y2/ME06Y2 (SS5)
Date: 10-16-2001
Time: 3:00 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Duplicate of SS4.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y3/ME06Y3 (SS6)
Date: 10-16-2001
Time: 3:40 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of Washington and Camden Streets, under large tree. Dark brown sandy loam. Top 6 inches.

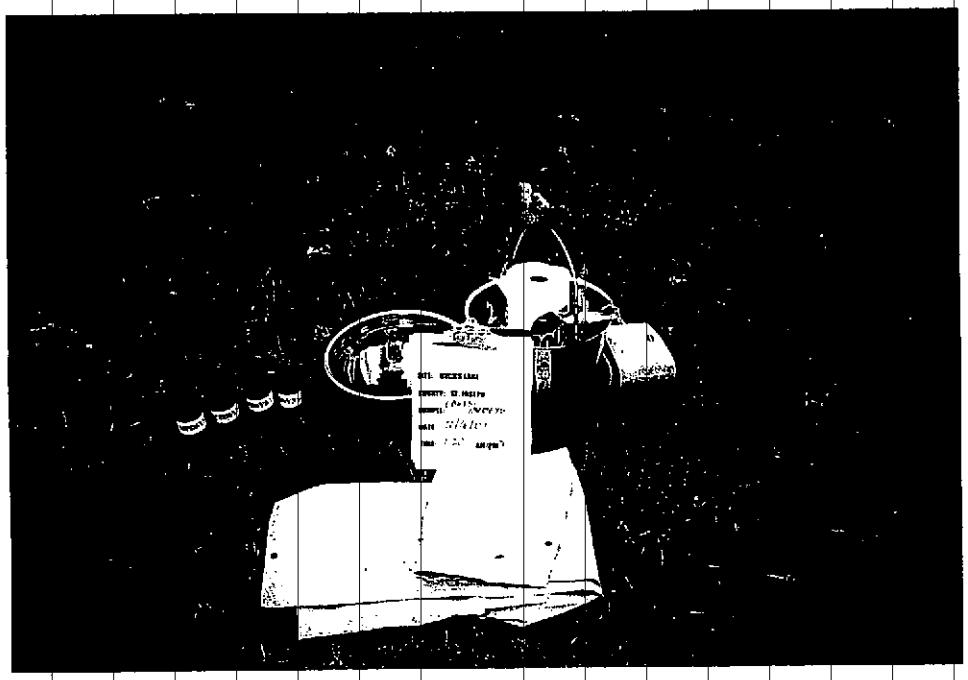


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y3/ME06Y3 (SS6)
Date: 10-16-2001
Time: 3:40 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of Washington and Camden Streets, under large tree. Dark brown sandy loam. Top 6 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y4/ME06Y4 (SS7)
Date: 10-16-2001
Time: 2:10 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil taken at LaSalle Park near playground on west end of park. Dark brown loam. Top 6 inches.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y4/ME06Y4 (SS7)
Date: 10-16-2001
Time: 2:10 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil taken at LaSalle Park near playground on west end of park. Dark brown loam. Top 6 inches.

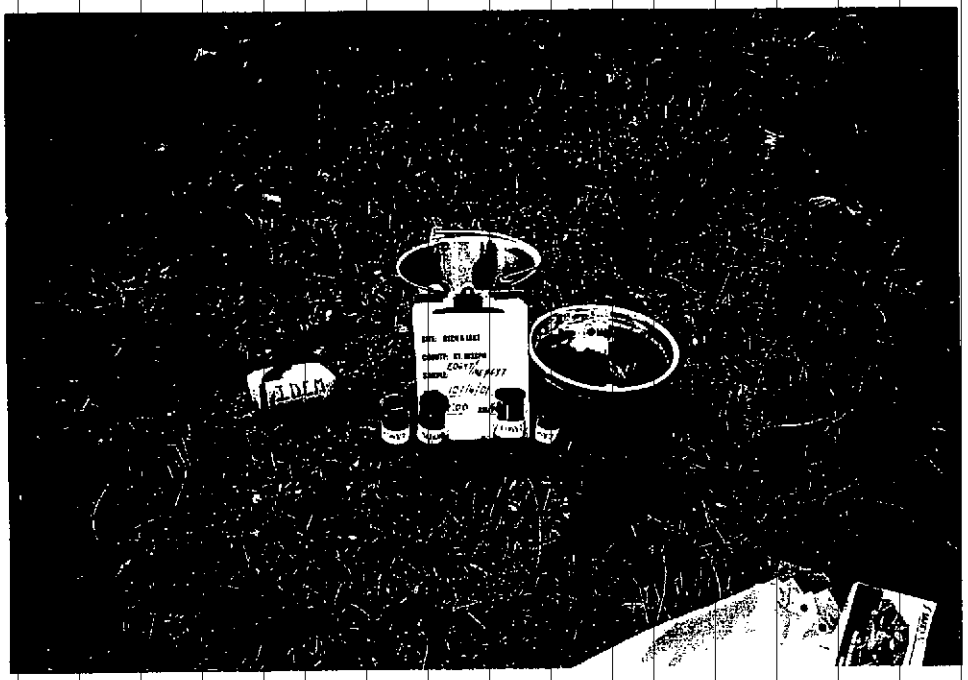


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y5/ME06Y5 (SS8)
Date: 10-16-2001
Time: 1:20 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken near northeast corner of lake, approximately 30 feet from lake edge. Light brown sandy loam. Top 6 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y5/ME06Y5 (SS8)
Date: 10-16-2001
Time: 1:20 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken near northeast corner of lake, approximately 30 feet from lake edge. Light brown sandy loam. Top 6 inches.

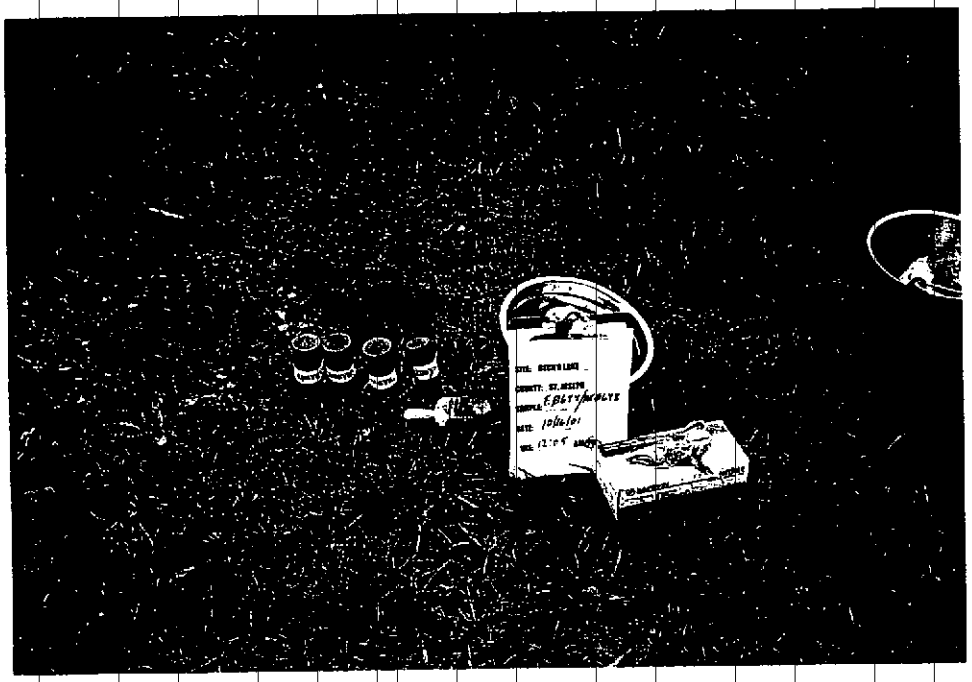
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y6/ME06Y6 (SS9)
Date: 10-16-2001
Time: 12:50 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken northwest of hill in slight depression area. Brown sandy loam. Top 4 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y6/ME06Y6 (SS9)
Date: 10-16-2001
Time: 12:50 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken northwest of hill in slight depression area. Brown sandy loam. Top 4 inches.

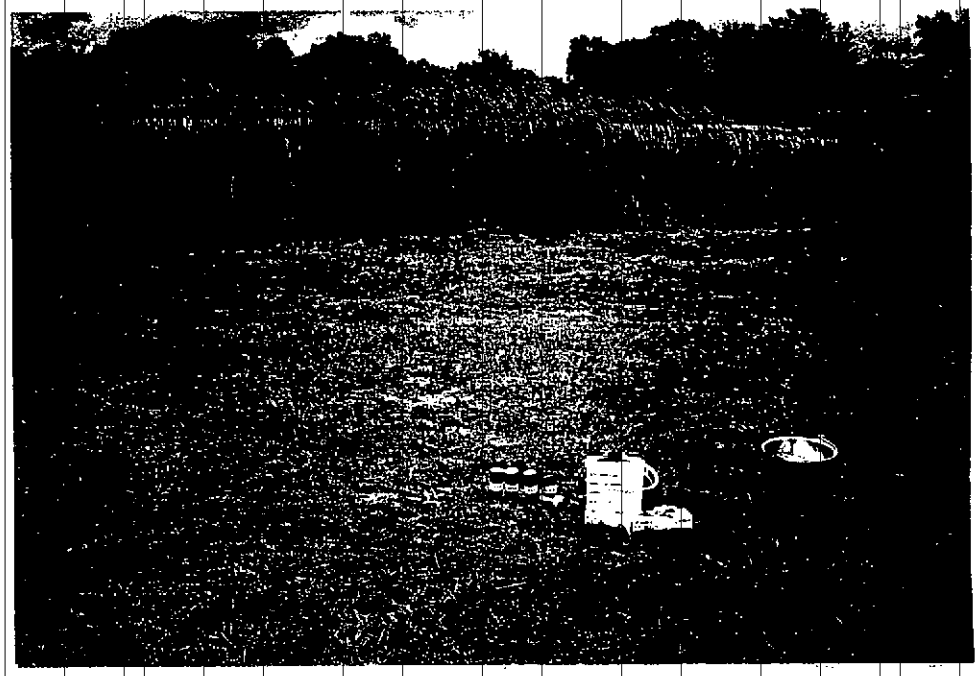


Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y7/ME06Y7 (SS10)
Date: 10-16-2001
Time: 1:00 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of hill near trees. Brown sandy loam. Top 4 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y7/ME06Y7 (SS10)
Date: 10-16-2001
Time: 1:00 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken at southwest corner of hill near trees. Brown sandy loam. Top 4 inches.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y8/ME06Y8 (SS11)
Date: 10-16-2001
Time: 12:05 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken approximately 30 feet from northwest corner of lake. Wet brown sandy loam. Top 6 inches.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y8/ME06Y8 (SS11)
Date: 10-16-2001
Time: 12:05 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken approximately 30 feet from northwest corner of lake. Wet brown sandy loam. Top 6 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y9/ME06Y9 (SS12)
Date: 10-16-2001
Time: 12:30 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken approximately 40 feet west of lake, just east of highest point of hill. Brown sandy loam. Top 6 inches.

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: E06Y9/ME06Y9 (SS12)
Date: 10-16-2001
Time: 12:30 PM
Weather: Cold, overcast and rainy
Photo By: Dan Chesterson
Description: Surface soil sample taken approximately 40 feet west of lake, just east of highest point of hill. Brown sandy loam. Top 6 inches.

APPENDIX C

SUPPLEMENTAL INFORMATION

- Indiana Department of Natural Resources Water Well Summary
- Indiana Department of Natural Resources Endangered, Threatened or Rare Species
- 1989 Screening Site Inspection Report (w/out photos and laboratory data sheets)
- ATSDR ToxFaqs (Fact Sheets) for Arsenic, Benzo(a)pyrene (Polycyclic Aromatic Hydrocarbons), and Lead

Indiana Department of Natural Resources
Water Well Summary

SEARCH OTHER FIELDS

IDNR's Division of Water - Ground Water Section

Please enter your search criteria in the form below and click on the "Search" button at the end of the form. An abbreviated table of information will be returned.

Note: Selecting a small geographic area, such as township, range, and section, will greatly reduce search time.

You will have the opportunity to download data to your local PC for use in a spreadsheet program such as Microsoft Excel. There is a five-cent fee per downloaded record. Instant Access users must also pay an Instant Access fee. For more information on download capability visit accessIndiana's Premium Services page.

Optional: To better serve our customers please indicate which of the following best describes you or your organization.

○ Individual ○ Consultant ○ Driller ○ Education ◉ Government ○ Realtor ○ Other

County:	ST. JOSEPH		*Example:* Noble	
Twp/Rng/Sec	Township	Range	Section (from, through)	Grant (from, through)
	37N	2E	3 - 4	-
	37N	2E	9 - 10	-
			-	-
			-	-
Example	38N	3E	from 16 through 30	from 41 through 43
UTM Coordinate		Min	Max	
	Easting			
	Northing			
	Example	E-475000,477000	N-4400000,4402000	
Topo Map	South Bend West		*Examples*	
Test Rate	Select only those wells tested >= 70GPM ☐ Yes			
UTM Only	Select only those wells with UTM coordinates? ☐ Yes			
Date Completed	Select only wells drilled from		to	
	Date Format: *mm-dd-yyyy*			

Start Search | Reset

About the Ground Water Section | About this Service | Database Search Help | Search by Well Reference Number
Back to Database Homepage | DNR Home

Well Summary

There were 68 matches.

Click on the Reference Number for more information about any specific well. If you wish to purchase a tab-delimited file, please click "Download Tab-Delimited File".

Download Tab-Delimited File

Reference Number	*Driving directions to well*		*Date completed*
46399	BERGAN W. OF OLIVE TO MEADE, THEN S. TO 2036 N. MEADE ST SOUTH BEND, IN 46628		Jun 16, 1993
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	DAVE COKER	2036 N. MEADE ST. SOUTH BEND IN	()-
Building Contractor	DAVE COKER CONSTRUCTION	3516 SORIN ST. SOUTH BEND IN	(000)233-7009
Drilling Contractor	S.J. TATAY DRILLING CONTRACT	25020 ST. RD. 2 SOUTH BEND, IN	(000)233-1006
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW1/4 of Section 3	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 100.0		

Reference Number	*Driving directions to well*		*Date completed*
46410	CR 6 WEST TO CLEVELAND RD. , CLEVELAND RD. WEST TO BENDIK DRIVE, WOUTH TO US. HWY 20, GO E. 1 1/2 BLOCKS TO FREEMONT , GO THRU 2 STOP SIGNS, HOUSE 2 N		Jan 12, 1994
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	LEIF BOUSKILL	1729 FREEMONT ST. SOUTH BEND	(219)289-7743
Building Contractor			
Drilling Contractor	BOHS WELL DRILLING INC	1434 KILBOURN ST. ELKHART IN	(219)294-6085
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW1/4 of Section 3	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 57.0		

Reference Number	*Driving directions to well*			*Date completed*
57106	NOT IN USGS BULLETIN #3			
Owner-Contractor	*Name*	*Address*		*Telephone*
Well Owner	BENDIX AVIATION CORP.			()-
Building Contractor				
Drilling Contractor	A.L. COX AND COMPANY, INC.			()-
Administrative	*County:* St. Joseph		*Township:* 37N *Range:* 2E	
	Section: NE1/4of the SE1/4 of Section 4		*Topo map:* South Bend West	
	Grant Number:			
	Subdivision name:		*Lot number:*	
	Depth: 205.0			

Reference Number	*Driving directions to well*			*Date completed*
57107	ARDMORE 4 MI W OF SOUTH BEND			Oct 01, 1965
Owner-Contractor	*Name*	*Address*		*Telephone*
Well Owner	MERRIL	GRANVIEW AVE		()-
Building Contractor				
Drilling Contractor	REDDISH DRILLING	23205 ARDMORE ST SOUTH BEND IN		()-
Administrative	*County:* St. Joseph		*Township:* 37N *Range:* 2E	
	Section: of Section 4		*Topo map:* South Bend West	
	Grant Number:			
	Subdivision name:		*Lot number:*	
	Depth: 40.0			

Reference Number	*Driving directions to well*			*Date completed*
57108				Jul 29, 1960
Owner-Contractor	*Name*	*Address*		*Telephone*
Well Owner	VERN CRAMNER	ARDMORE TRL SOUTH BEND IN		()-
Building Contractor				
Drilling Contractor	REDDISH DRILLING	23205 ARDMORE TRL		()-
Administrative	*County:* St. Joseph		*Township:* 37N *Range:* 2E	
	Section: of Section 4		*Topo map:* South Bend West	
	Grant Number:			
	Subdivision name:		*Lot number:*	
	Depth: 45.0			

Reference Number	Driving directions to well		Date completed
57109	35'W OF PLANT 4 ANNEX 12S OF BUILDING 25		

Owner-Contractor	Name	Address	Telephone
Well Owner	BENDIX CORP	SOUTH BEND IN	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	GRANGER IN	()-

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of the NW1/4of the SE1/4 of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: PEERLESS MIDWEST *Lot number:*

Depth: 50.0

Reference Number	Driving directions to well		Date completed
57110			Apr 01, 1975

Owner-Contractor	Name	Address	Telephone
Well Owner	DICKENSON		()-
Building Contractor			
Drilling Contractor	LAYNE NORTHERN		()-

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of the NW1/4of the NW1/4 of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 109.0

Reference Number	Driving directions to well		Date completed
57111	1 BLK S OF NEW YORK CENTRAL AND SO BEND. CHICAGO SOUTH SHORE RR TRACKS ON GRANDVIEW AVE		Jun 14, 1971

Owner-Contractor	Name	Address	Telephone
Well Owner	MRS KOCSIS	430 GRANDVIEW AVE	()-
Building Contractor			
Drilling Contractor	REDDISH DRILLING	23241 SIDNEY AVE	()-

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 40.0

Reference Number	Driving directions to well	Date completed
57113	ABOUT 1/2 BLK N OF ARDMORE DR ON E SIDE OF MEADOWVIEW	

Owner-Contractor	Name	Address	Telephone
Well Owner	PHYLLIS BANEY	55464 MEADOWVIEW	()-
Building Contractor			
Drilling Contractor	SRIVER DRILLING CO INC	59755 MARKET ST	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: SW1/4 of the SW1/4of the NW1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 64.0

Reference Number	Driving directions to well	Date completed
57114	E OF MAYFLOWER RD ON EDISON E OF MOSS RD ON S SIDE. ALSO AT LOCATION A DANCE STUDIO. 1 MI W OF SO BEND IN	Aug 06, 1966

Owner-Contractor	Name	Address	Telephone
Well Owner	WALTER BEATTY	22858 EDISON RD SOUTH BEND IN	()-
Building Contractor			
Drilling Contractor	NORRIS WELL DRILLING	RR 1 BOX 119 N LIBERTY IN	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: NW1/4 of the NW1/4of the NW1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 81.0

Reference Number	Driving directions to well	Date completed
57115	US 20 W OF SO BEND TO WOODLAND ST S 1/4 MI TO GROVE W ON GROVE 1 BLK	Oct 31, 1973

Owner-Contractor	Name	Address	Telephone
Well Owner	MIKE RICHARDS	55345 FAIRVIEW AVE	()-
Building Contractor			
Drilling Contractor	M L FALL WELL SERV	22111 JACKSON TR SOUTH BEND IN	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: SE1/4 of the NW1/4of the NW1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 62.0

Reference Number	Driving directions to well		Date completed
57116	APRX 740' S OF WESTMOOR ST AND 520' W OF BENDIX DR		Mar 26, 1982
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX CORP	PO BOX 10 S BEND	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	PO BOX 26 GRANGER	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NE1/4 of the SE1/4of the SE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 36.0		

Reference Number	Driving directions to well		Date completed
57117	APRX 430' S OF WESTMOOR ST AND 265' W OF BENDIX DR		Apr 02, 1982
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX CORP	PO BOX U0 S BEND	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	PO BOX 26 GRANGER	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SE1/4 of the NE1/4of the SE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 1.2		

Reference Number	Driving directions to well		Date completed
57118	BENDIX CORP PROPERTY		Feb 25, 1982
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX CORPORATION	S BEND	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	PO BOX 10 S BEND	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NE1/4 of the SW1/4of the SE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 30.0		

Reference Number	Driving directions to well	Date completed
57119	ARPX 870' S OF WESTMOOR ST AND 1430' W OF BENDIX DR	Mar 12, 1982

Owner-Contractor	Name	Address	Telephone
Well Owner	BENDIX CORP	PO BOX 10 S BEND	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	PO BOX 26 GRANGER	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: NE1/4 of the SW1/4of the SE1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 30.0

Reference Number	Driving directions to well	Date completed
57120	E SIDE OF BLDG 11 HEAT TREATMENT BLDG	Nov 01, 1966

Owner-Contractor	Name	Address	Telephone
Well Owner			
Building Contractor			
Drilling Contractor	LAYNE NORTHERN CO		()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 60.0

Reference Number	Driving directions to well	Date completed
57121	1/4 MI E OF MOSE RD ON ARDMORE TRL AND N ON FAIRVIEW AVE K 1/2 BLKS	Jun 08, 1963

Owner-Contractor	Name	Address	Telephone
Well Owner	EDWARD RUNYON JR	55301 FAIRVIEW AVE	()-
Building Contractor			
Drilling Contractor	C E SNELLENBERGER	922 LAWRENCE ST SOUTH BEND IN	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: NE1/4 of the SW1/4of the NW1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 61.9

Reference Number	Driving directions to well		Date completed
57122	575' S OF WESTMORE ST 1000' W OF BENDIX DR		Oct 10, 1966
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner			
Building Contractor			
Drilling Contractor	LAYNE NORTHERN		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the NE1/4of the SE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 56.0		

Reference Number	Driving directions to well		Date completed
57123	30' E OF PLANT 11 75' N OF MAIN DR PLANT 11 HEAT TREAT BLDG		Oct 25, 1966
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX AVIATION		()-
Building Contractor			
Drilling Contractor	LAYNE NORTHERN		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 30.0		

Reference Number	Driving directions to well		Date completed
57124	SE CORNER HEAT TREAT BLDG		Oct 26, 1966
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX AVIATION		()-
Building Contractor			
Drilling Contractor	LAYNE NORTHERN		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 70.0		

Reference Number	Driving directions to well		Date completed
57125	PLANT 11 HEAT TREAT BLDG		Oct 25, 1966
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX AVIATION		()-
Building Contractor			
Drilling Contractor	LAYNE NORTHERN CO		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 70.0		

Reference Number	Driving directions to well		Date completed
57126	ARDMORE GRANVIEW AVE SO BEND IN. 1/2 BLK S OF PENN CENTRAL TRACKS ABOUT 3/4 MI W OF BENDIX PRODUCTS		Jun 05, 1970
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CLOSE	GRANVIEW AVE	()-
Building Contractor			
Drilling Contractor	REDDISH DRILLING	SOUTH BEND IN	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 44.0		

Reference Number	Driving directions to well		Date completed
57127	2ND HOUSE E OF GRANDVIEW ON S SIDE ARDMORE TRL WELL IS ON S SIDE OF HOUSE		Jul 23, 1959
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CHERRY BROS SHEET METAL	22824 ARDMORE TRL	()-
Building Contractor			
Drilling Contractor	SRIVER DRILLING CO INC	60885 US 31	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 58.0		

Reference Number	Driving directions to well		Date completed
57128	FROM USGS BULLETIN #3, SJ 6-14A, NORTHWEST CORNER OF LASALLE LAKE		Jan 01, 1921
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the SE1/4of the SE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 203.0		

Reference Number	Driving directions to well		Date completed
57129	NOT IN USGS BULLETIN #3		Sep 01, 1941
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	BENDIX AVIATION CORP.		()-
Building Contractor			
Drilling Contractor	A.L. COX AND COMPANY, INC.		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NE1/4of the SE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 182.0		

Reference Number	Driving directions to well		Date completed
57130	ARDMORE HEIGHTS 1 1/2 BLKS N OF ARDMORE TRL ON GLENN RD W SIDE OF RD		Oct 07, 1971
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	EUGENE SAYER	55291 GLENN RD	()-
Building Contractor			
Drilling Contractor	REDDISH DRILLING	23241 SIDNEY AVE	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name: ARDMORE HEIGHTS	*Lot number:*	
	Depth: 44.0		

Reference Number	Driving directions to well			Date completed
57131	28 BETWEEN EVANS AND LAWRENCE STS			Sep 02, 1960
Owner-Contractor	*Name*	*Address*		*Telephone*
Well Owner	A W ROBDE	55378 N GRANDVIEW		()-
Building Contractor				
Drilling Contractor	J O REDMAN	54736 N SOUTH BEND IN		()-
Administrative	*County:* St. Joseph		*Township:* 37N *Range:* 2E	
	Section: of Section 4		*Topo map:* South Bend West	
	Grant Number:			
	Subdivision name:		*Lot number:*	
	Depth: 57.0			

Reference Number	Driving directions to well			Date completed
57132	WELL SJ G18A, USGS BULLETIN 3, NORTHWEST CORNER OF KALEY PARK, AT CREEK			Jan 01, 1921
Owner-Contractor	*Name*	*Address*		*Telephone*
Well Owner	CITY OF SOUTH BEND			()-
Building Contractor				
Drilling Contractor				
Administrative	*County:* St. Joseph		*Township:* 37N *Range:* 2E	
	Section: SE1/4 of the NW1/4of the SW1/4 of Section 3		*Topo map:* South Bend West	
	Grant Number:			
	Subdivision name:		*Lot number:*	
	Depth: 196.0			

Reference Number	Driving directions to well			Date completed
57133	FROM USGS BULLETIN #3 SJ 23-2/ COLFAX AVENUE AND MICHIGAN STREET			Sep 01, 1941
Owner-Contractor	*Name*	*Address*		*Telephone*
Well Owner	BENDIX AVIATION CORP.			()-
Building Contractor				
Drilling Contractor	A.L. COX AND COMPANY			()-
Administrative	*County:* St. Joseph		*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the SW1/4of the SW1/4 of Section 3		*Topo map:* South Bend West	
	Grant Number:			
	Subdivision name:		*Lot number:*	
	Depth: 210.0			

Reference Number	Driving directions to well	Date completed
57134	NOT IN USGS BULLETIN #3	Sep 01, 1941

Owner-Contractor	Name	Address	Telephone
Well Owner	BENDIX AVIATION CORP.		()-
Building Contractor			
Drilling Contractor	A.L. COX COMPANY, INC.		()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: SW1/4of the SW1/4 of Section 3 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 205.0

Reference Number	Driving directions to well	Date completed
57136	3113 LINCOLN WAY WEST, FROM USGS BULLETIN #3 SJ56	Mar 28, 1940

Owner-Contractor	Name	Address	Telephone
Well Owner	SOUTH BEND SAND & GRAV CO.		()-
Building Contractor			
Drilling Contractor	SMITH-MONROE COMPANY	INDIANA-MICHIGAN WATER DEVELOPMENT COMPA	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: SW1/4 of the NW1/4of the NW1/4 of Section 3 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 157.0

Reference Number	Driving directions to well	Date completed
58235	APRX 755' S OF WESTMOOR ST AND 1675' W OF BENDIX DR	Mar 04, 1982

Owner-Contractor	Name	Address	Telephone
Well Owner	BENDIX CORP	PO BOX 10 S BEND	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	PO BOX 26 GRANGER	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: NE1/4 of the SW1/4of the SE1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 27.0

Reference Number	Driving directions to well		Date completed
72732	200' N, 55465 WOODLAND, SOUTH BEND, IN		Jul 25, 1994
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	HUDAK, IRENE	55465 WOODLAND SOUTH BEND, IN	(219)233-9735
Building Contractor			
Drilling Contractor	MAURER WELL DRILLING	51711 EMMONS RD. SOUTH BEND, IN	(219)272-7524
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4of the NW1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 55.0		

Reference Number	Driving directions to well		Date completed
72822	DUNHAM STREET AND CAMDEN STREET, FROM USGS BULLETIN #3 SJ 6-9A		Jan 01, 1921
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW1/4 of the SW1/4of the SW1/4 of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 182.0		

Reference Number	Driving directions to well		Date completed
72877	FROM USGS BULLETIN #3 SJ 6-8A SAMPLE STREET AND CAMDEN STREET		Jan 01, 1921
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the SW1/4of the SW1/4 of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 194.0		

Reference Number	*Driving directions to well*		*Date completed*
72882	Dunham Street and Camden Street, from USGS Bulletin #3. Sj 6-9A		
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	City of South Bend		
Building Contractor			
Drilling Contractor			
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW¼ of the SW¼of the SW¼ of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 182.0		

Reference Number	*Driving directions to well*		*Date completed*
72887	FROM USGS BULLETIN #3 SJ 6-12A/ CAMDEN STREET, 150 FT. SOUTH OF WEST WASHINGTON STREET		Jan 01, 1921
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the SW1/4of the NW1/4 of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 210.0		

Reference Number	*Driving directions to well*		*Date completed*
72892	120' W OF JACKSON ST 220 N OF WASHINGTONST		Mar 31, 1970
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	OBRIEN CORP		()-
Building Contractor			
Drilling Contractor	LAYNE NORTHERN CO	MISHAWAKA	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the NE1/4of the NE1/4 of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 160.0		

Reference Number	Driving directions to well		Date completed
72897			Aug 06, 1934
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	SINGER MANUFACTURING	SOUTH BEND, IN	()-
Building Contractor			
Drilling Contractor	LAYNE-NORTHERN CO.		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the SE1/4of the NE1/4 of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 118.0		

Reference Number	Driving directions to well		Date completed
72902	FORD STREET AND CAMDEN STREET, FROM USGS BULLETIN #3 SJ 6-10A		Jan 01, 1921
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the NW1/4of the SW1/4 of Section 10	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 198.0		

Reference Number	Driving directions to well		Date completed
72908	FROM USGS BEELLETERI 3, SJ G-1B. SAMPLE ST. & LAFAYETTE ST.		Jan 01, 1925
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor	AUSTIN DRILLING COMPANY		()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW1/4 of the NW1/4of the NW1/4 of Section 3	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 102.0		

Reference Number	Driving directions to well	Date completed
72917		Jan 16, 1953

Owner-Contractor	Name	Address	Telephone
Well Owner	HURNICH FURN. CO.	SOUTH BEND, IN	()-
Building Contractor			
Drilling Contractor	LAYNE-NORTHERN CO.	MISHAWAKA, IN	()-

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SE1/4 of the NE1/4of the NE1/4 of Section 10 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 119.0

Reference Number	Driving directions to well	Date completed
72976	FROM USGS BULLETIN #3/ SJ 6-7A/ SAMPLE STREET, JUST WEST OF OLIVE STREET	Jan 01, 1921

Owner-Contractor	Name	Address	Telephone
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of the SE1/4of the SW1/4 of Section 10 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 184.0

Reference Number	Driving directions to well	Date completed
72981	IOWA STREET AND HARON STREET, FROM USGS BULLETIN #3 SJ6-16A	Jan 01, 1921

Owner-Contractor	Name	Address	Telephone
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: NE1/4 of the NE1/4of the SE1/4 of Section 9 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 193.0

Reference Number	Driving directions to well	Date completed
72986	SAMPLE STREET AND FAKEN STREET (EXTENDED) FROM USGA BULLETIN #3, SJ 6-21A	Jan 01, 1921

Owner-Contractor	Name	Address	Telephone
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of the SE1/4of the SE1/4 of Section 9 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 200.0

Reference Number	Driving directions to well	Date completed
72991	CAMDEN STREET, 150 FT. SOUTH OF WEST WASHINGTON STREET, FROM USGS BULLETIN #3, SJ 6-11A	Jan 01, 1921

Owner-Contractor	Name	Address	Telephone
Well Owner	CITY OF SOUTH BEND		()-
Building Contractor			
Drilling Contractor			

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of the SW1/4of the NW1/4 of Section 10 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 211.0

Reference Number	Driving directions to well	Date completed
145687	400' S OF INTERSECTION WITH GROVES, 55274 KENSINGTON SOUTH BEND IN	Nov 29, 1994

Owner-Contractor	Name	Address	Telephone
Well Owner	KEVIN YOUNG	55274 KENSINGTON SOUTH BEND IN	(219)259-3952
Building Contractor			
Drilling Contractor	MAURER WELL DRILLING	51711 EMMONS RD SOUTH BEND	(219)272-7524

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: NW1/4 of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 65.0

Reference Number	Driving directions to well	Date completed
154214		Dec 27, 1978

Owner-Contractor	Name	Address	Telephone
Well Owner	EDWARD C TUCKER	55582 MEADOWVIEW SOUTH BEND IN	()-
Building Contractor			
Drilling Contractor	C E SNELLENBERGER	922 N LAWRENCE ST SOUTH BEND IN	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: SW1/4 of the SW1/4of the NW1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 58.2

Reference Number	Driving directions to well	Date completed
224940	SEE MAP	Jun 05, 1990

Owner-Contractor	Name	Address	Telephone
Well Owner	COKER CONST	24020 GROVE SOUTH BEND IN	(219)233-7009
Building Contractor	COKER CONST	3516 SORIN SOUTH BEND IN	(219)233-7009
Drilling Contractor	S J TATAY DRILLING CONTR INC	25020 SR 2 SOUTH BEND IN	(219)232-1006

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 65.0

Reference Number	Driving directions to well	Date completed
224964	US 33, US 20 W TO BENDIX DR S ONE BLOCK TO ARDMORE TR W TO GRAND VIEW S	Jun 09, 1990

Owner-Contractor	Name	Address	Telephone
Well Owner	ERMA PAGEL	55615 GRANDVIEW SOUTH BEND IN	(219)232-5280
Building Contractor			
Drilling Contractor	R K MAURER WELL SERVICE	51711 EMMONS RD SOUTH BEND IN	(000)272-7524

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: NW1/4of the SW1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 40.0

Reference Number	Driving directions to well	Date completed
225027	N OF US 20 ON BENDIX DR 1 MI TO LATHROP, TURN R TO OLIVE ST 1 BLK TO BERGAN ST, 4TH LOT AFTER CURVE ON L	Mar 21, 1990

Owner-Contractor	Name	Address	Telephone
Well Owner			
Building Contractor	NORM YODER	65287 CR 3 WAKARUSA	()-
Drilling Contractor	MARTINS WELL DRILLING	27046 CR 30 ELKHART	(219)862-2318

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: NW1/4 of Section 3 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 100.0

Reference Number	Driving directions to well	Date completed
262372	AT 2220 HUEY ST IN SO BEND W OF PORTAGE	Aug 12, 1988

Owner-Contractor	Name	Address	Telephone
Well Owner	PATTERSON	2220 HUEY, SO BEND	()-
Building Contractor	WILLIES CONST	US 20 W, ELKHART	()-
Drilling Contractor	S J TATAY WELL DRLG	56925 JOSEPH LN, SO BEND IN	()-

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: of Section 3 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 78.0

Reference Number	Driving directions to well	Date completed
262433	SO BEND IND. SE CORNER OF WESTERN AVE AND OLIVE ST. 2322 WESTERN AVE	Oct 26, 1989

Owner-Contractor	Name	Address	Telephone
Well Owner	AMOCO OIL CO	1400 E TOUGH AVE, DESPLAINES IL	(312)827-9681
Building Contractor	SAME AS ABOVE		()-
Drilling Contractor	EXPLORATION TECHNOLOGY INC	1402 EMIL ST, MADISON WI	(608)258-9550

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: of Section 10 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 20.0

Reference Number	Driving directions to well	Date completed
262477	APPROX. 700' S. OF WESTMORE ST. & 450' W. OF BENDIX DRIVE	Apr 11, 1985

Owner-Contractor	Name	Address	Telephone
Well Owner	ALLIED CORPORATION	BENDIX ENERGY CONTROLS DIV. SOUTH BEND,I	()-
Building Contractor			
Drilling Contractor	PEERLESS-MIDWEST,INC.	51255 BITTERSWEET RD. PO BOX 26, GRANGER	()-

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 26.0

Reference Number	Driving directions to well	Date completed
262539	ON CORNER OF MEADOWVIEW AND HARTZER N OF ARDMORE TRAIL. SEE MAP	Dec 18, 1989

Owner-Contractor	Name	Address	Telephone
Well Owner	LULA, MARY ANN	55428 MEADOWVIEW, SO BEND IN	(219)234-3965
Building Contractor	SAME AS ABOVE		()-
Drilling Contractor	S J TATAY DRLG CONT INC	25020 SR 2, SO BEND IN	(219)232-1006

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 92.0

Reference Number	Driving directions to well	Date completed
271272	55260 GLENN AVE SOUTH BEND, IN46628	Mar 26, 1996

Owner-Contractor	Name	Address	Telephone
Well Owner	GENE HESS	55260 GLENN AVE., SOUTH BEND IN	(000)234-5196
Building Contractor			
Drilling Contractor	S. J. TATAY	25020 ST. RD 2 SOUTH BEND, IN	(000)232-1006

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: NW1/4 of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 78.0

Reference Number	Driving directions to well		Date completed
272233	APPROX 700 FT S OF WESTMORE ST AND 450 FT W OF BENDIX DR		Apr 15, 1985
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	ALLIED CORP/BENDIX ENERGY CONT	SOUTH BEND IN	()-
Building Contractor			
Drilling Contractor	PEERLESS MIDWEST INC	51255 BITTERSWEET RD, PO BOX 26, GRANGER	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 36.0		

Reference Number	Driving directions to well		Date completed
274901	CLEVELAND RD. W TO BENDING DR., S TO SR20 GO E (TOWARD TOWN) FEW BLOCKS TO MEADE, GO N HOUSE ON E(RH)SIDE		May 02, 1996
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	RAOOFAB GHANI	1718 NORTH MEADE ST. SOUTH BEND	()-
Building Contractor	C.R. BAINTER CONSTRUCTION	18704 US 20 EAST BRISTOL	(219)293-5452
Drilling Contractor	BOH'S WELL DRILLING INC	1111 D.I DRIVE ELKHART	(219)266-6021
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW1/4 of Section 3	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 48.0		

Reference Number	Driving directions to well		Date completed
286187	BENDIT DR TO ARDMORE TR W 3 1/2 MI HSE ON NE COR OF ORCHID		Apr 28, 1997
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	JOHN DALE	ORCHID ST S BEND IN	(000)287-9438
Building Contractor	MODULAR HOME		()-
Drilling Contractor	SRIVER DRLG CO INC	2320 W INDIANA AVE	(219)288-5302
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NE1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 46.0		

Reference Number	Driving directions to well		Date completed
293319	.5 MI OFF MAYFLOWER E		
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	FLOYD MCAFEE	FILLMORE RD	()-
Building Contractor			
Drilling Contractor	SRIVER	SOUTH BEND, IN	()-
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4 of the SW1/4of the SW1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 44.0		

Reference Number	Driving directions to well		Date completed
298503	GO E ON SR2 TOWARD S BEND TO PINE RD THEN N APPROX 1.5 MI PAST RR TRACKS TO ARDMORE TR THEN E THRU 2 STOP SIGNS THEN N ON GRANDVIEW TO 55356 GRANDVIEW		Dec 23, 1997
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	SULT WELL DRILLING	59218 HOLLYWOOD BLVD., S BEND, IN	(000)282-1864
Building Contractor			
Drilling Contractor	S.R. MANSFIELD WELL DRILLING	58560 QUINCE RD., S BEND, IN	(000)234-6789
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: SW1/4of the NW1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 56.0		

Reference Number	Driving directions to well		Date completed
307643	TAKE US20 W FROM SOUTH BEND OT MAYFLOWER RD THEN S TO EDISON THEN E TO WOODLAND THEN S TO GROVE ST THEN W TO 22776 GROVE ST		Mar 25, 1998
Owner-Contractor	*Name*	*Address*	*Telephone*
Well Owner	SULT WELL DRLNG	59218 HOLLYWOOD BLVD., SOUTH BEND, IN	(000)282-1864
Building Contractor			
Drilling Contractor	S.R. MANSFIELD WELL DRLNG	58560 QUINCE RD, S BEND, IN	(000)234-6789
Administrative	*County:* St. Joseph	*Township:* 37N *Range:* 2E	
	Section: NW1/4 of Section 4	*Topo map:* South Bend West	
	Grant Number:		
	Subdivision name:	*Lot number:*	
	Depth: 75.0		

Reference Number	Driving directions to well	Date completed
318838	10' W OF DOCK 10 (PLANT #3) NEAR MW#6, NAPTHA PRODUCT RECOVERY WELL #98A	Nov 18, 1998

Owner-Contractor	Name	Address	Telephone
Well Owner	ALLIED SIGNAL	717 N BENDIX DRIVE, SOUTH BEND, IN	()
Building Contractor			
Drilling Contractor	PEERLESS-MIDWEST INC.	55860 RUSSELL IND. PKWY., MISHAWAKA, IN	(219)254-9050

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: SE1/4 of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 20.0

Reference Number	Driving directions to well	Date completed
322031	55666 LEXINGTON, SOUTH BEND	Jan 19, 1999

Owner-Contractor	Name	Address	Telephone
Well Owner	WILLIAM CAHALL	55666 LEXINGTON SOUTH BEND, IN	(219)232-4631
Building Contractor			
Drilling Contractor	MAURER WELL DRLNG INC.	51711 EMMONS RD, SOUTH BEND, IN	(219)272-7524

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 130.0

Reference Number	Driving directions to well	Date completed
322032	55666 LEXINGTON, SOUTH BEND	Jan 19, 1999

Owner-Contractor	Name	Address	Telephone
Well Owner	WILLIAM CAHALL	23443 ARDMORE TRAIL, SOUTH BEND, IN	(219)232-4631
Building Contractor			
Drilling Contractor	MAURER WELL DRLNG INC.	51711 EMMONS RD, SOUTH BEND, IN	(219)272-7524

Administrative
County: St. Joseph *Township:* 37N *Range:* 2E
Section: of Section 4 *Topo map:* South Bend West
Grant Number:
Subdivision name: *Lot number:*
Depth: 130.0

Reference Number	Driving directions to well	Date completed
322033	TAKE US31 BYPASS TO MAYFLOWER RD THEN N ABOUT 3 MI THEN E ON EDISON RD TO MOSS RD ABOUT .25 MI THEN S ON MOSS TO ARDMORE TR THENE TO GRANDVIEW THEN N	Feb 17, 1999

Owner-Contractor	Name	Address	Telephone
Well Owner	MELTON FOSTER	55444 GRANDVIEW, SOUTH BEND, IN	(000)233-2043
Building Contractor			
Drilling Contractor	S.R. MANSFIELD WELL DRLNG	58560 QUINCE RD., SOUTH BEND, IN	(000)234-6789

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 63.0

Reference Number	Driving directions to well	Date completed
322034	TAKE US31 BYPASS TO MAYFLOWER RD THEN ABOUT 3 MI THEN E ON EDISON RD TO MOSS RD (ABOUT .25 MI) THEN S ON MOSS TO ARDMORE TR THEN E TO GRANDVIEW THEN N	Feb 08, 1999

Owner-Contractor	Name	Address	Telephone
Well Owner	ELNORA SEGETY	55303 GRANDVIEW SOUTH BEND IN	(000)232-7280
Building Contractor			
Drilling Contractor	S.R. MANSFIELD WELL DRLNG	58560 QUINCE RD., SOUTH BEND, IN	(000)234-6789

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 65.5

Reference Number	Driving directions to well	Date completed
334655	DOCK 10, 18' W OF #4, TW #98B, DEPRESSION WELL	Dec 08, 1998

Owner-Contractor	Name	Address	Telephone
Well Owner	ALLIED SIGNAL	717 N BENDIX DRIVE, SOUTH BEND, IN	()-
Building Contractor			
Drilling Contractor	PEERLESS-MIDWEST INC.	55860 RUSSELL IND. PKWY., MISHAWAKA, IN	(219)254-9050

Administrative

County: St. Joseph *Township:* 37N *Range:* 2E

Section: SW1/4 of the NE1/4of the SE1/4 of Section 4 *Topo map:* South Bend West

Grant Number:

Subdivision name: *Lot number:*

Depth: 43.0

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Indiana Department of Natural Resources
Endangered, Threatened or Rare Species

DNR Indiana Department of Natural Resources

Frank O'Bannon, Governor
Larry D. Macklin, Director
Division of Nature Preserves
402 W. Washington Street, Rm. W267
Indianapolis, IN 46204-2739

March 25, 2002

Mr. Dan Chesterson
IDEM/OLQ Brownfields Program
100 N. Senate Avenue
PO Box 6015
Indianapolis, IN 46206-6015

Dear Mr. Chesterson:

I am responding to your request for information on the endangered, threatened, or rare (ETR) species, high quality natural communities, and natural areas documented from a brownfields project area, Lasalle Park, South Bend, Indiana. The Indiana Natural Heritage Data Center has been checked and following you will find information on the ETR species and significant areas documented from the project area.

1. There is a historical record from 1929 of the state threatened plant *Lathyrus venosus*, smooth veiny pea, documented in Section 3, Township 37 North, Range 2 East.

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. You should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
(812)334-4261

At some point, you may need to contact the Department of Natural Resources' Environmental Review Coordinator so that other divisions within the department have the opportunity to review your proposal. For more information, please contact:

Larry Macklin, Director
Department of Natural Resources
attn: Stephen H. Jose
Environmental Coordinator
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204
(317)232-4080

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DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

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Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)232-8059 if you have any questions or need additional information.

Sincerely,

Ronald P. Hellmich

Ronald P. Hellmich
Indiana Natural Heritage Data Center

1989 Screening Site Inspection Report
(w/out photos and laboratory data sheets)

SCREENING SITE INSPECTION REPORT
FOR
THE BECK'S LAKE SITE
SOUTH BEND, INDIANA
U.S. EPA ID: IND980904379
SS ID: NONE
TDD: F05-8611-149
PAN: FIN0476SA

JUNE 7, 1989

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

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FOR
SCREENING SITE INSPECTION REPORT
FOR
THE BECK'S LAKE SITE
SOUTH BEND, INDIANA
U.S. EPA ID: IND980904379
SS ID: NONE
TDD: F05-8611-149
PAN: FIN0476SA

Prepared by: Zelma Zieman Date: 6/12/89
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FIT Report Preparer
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FIT Unit Manager
Ecology and Environment, Inc.

Approved by: Date: 6/12/89
Jerome D. Oskvarek
FIT Office Manager
Ecology and Environment, Inc.

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1. INTRODUCTION

Ecology and Environment, Inc. (E & E), Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Beck's Lake site under contract number 68-01-7347.

The site was initially discovered when the Bendix Corporation submitted a U.S. EPA Notification of Hazardous Waste Site (103[c] notification) on March 28, 1984 (Bendix Corporation 1984). The Beck's Lake site is one of 17 sites located in the South Bend, Indiana area identified by the Bendix Corporation as a potential hazardous waste site (Allied Corporation 1986). The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by Susanne Buthman of the Indiana State Board of Health (ISBH) on May 31, 1985 (ISBH 1985). PA preparation, as well as additional pre-remedial activities performed by ISBH in the past, is presently conducted by the Indiana Department of Environmental Management (IDEM).

A site inspection (SI) including the installation of monitoring wells was to be performed at the Beck's Lake site, but changes in the U.S. EPA Pre-Remedial Program strategy shifted the objective of the inspection to an SSI. The SSI was conducted to determine whether TCL compounds or TAL analytes are present at the site, and to characterize more fully the site if a listing site inspection (LSI) is eventually conducted at the site. The SSI of the Beck's Lake site was conducted on April 20, 1988, under TDD F05-8611-149, issued on November 1, 1986.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of five soil samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

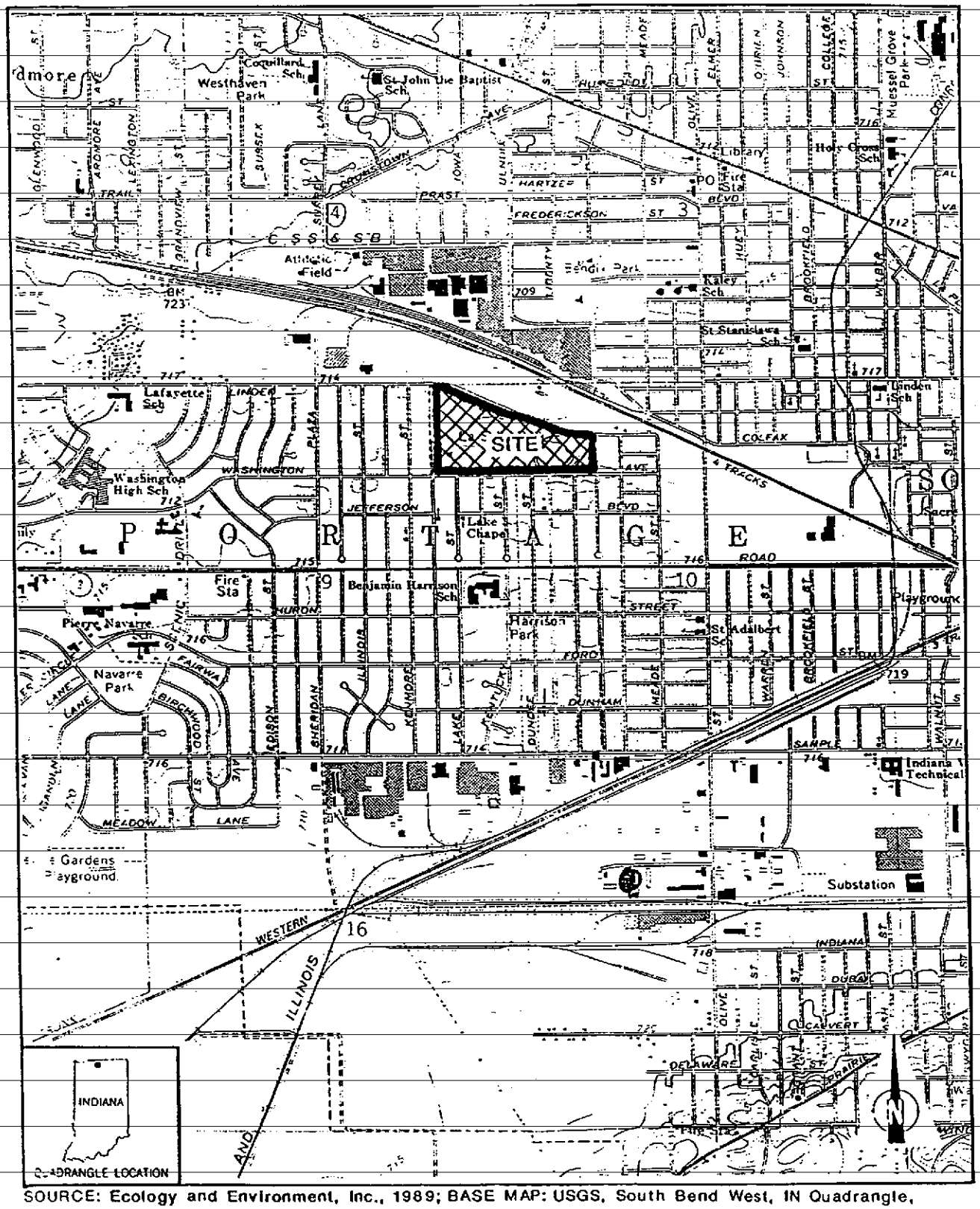
This section includes information obtained from federal, state, and local file information reviewed by FIT and the site representative interview.

2.2 SITE DESCRIPTION

The Beck's Lake site is an inactive open-style dump that accepted industrial waste in the 1950s. Approximately 15 acres was used for waste disposal. In the 1960s, the Beck's Lake site became part of a city park named La Salle Park (Bendix Corporation 1984; ISBH 1985; St. Joseph County Health Department 1984). La Salle Park is approximately 40 acres in size and is bordered by Falcon Street to the west, Linden Avenue to the south, Kaley Street to the east, and Washington Avenue to the north. The site is located in a residential area on the western boundary of South Bend, Indiana, in St. Joseph County (T.37N., R.2E., sections 9 and 10) (United States Geological Survey [USGS] 1969) (see Figure 2-1). A lake approximately 8 acres in area named Beck's Lake and a man-made hill built during the construction of La Salle Park are located on the eastern half of the park (USGS 1969). A 4-mile radius map of the Beck's Lake site is provided in Appendix A.

2.3 SITE HISTORY

The Beck's Lake site is currently owned by the city of South Bend. In the 1960s, the city of South Bend acquired the property and built La Salle Park (ISBH 1985; South Bend City Park Department 1988). Karl



SOURCE: Ecology and Environment, Inc., 1989; BASE MAP: USGS, South Bend West, IN Quadrangle, 7.5 Minute Series, 1969, Photorevised 1980.

SCALE

0 0.5 1 MILE

FIGURE 2-1 SITE LOCATION

Stevens, superintendent of the South Bend City Park Department, indicated that prior to the construction of La Salle Park, part of the property may have been used for housing or housing development (South Bend City Park Department 1988). The St. Joseph County Assessor Office has no records of previous owners (St. Joseph County Assessor Office 1988).

The Beck's Lake site is believed to have operated as an open dump with unrestricted access during the 1950s (ISBH 1985; St. Joseph County Health Department 1988). The St. Joseph County Health Department does not have any license or permit records of disposal activities at the Beck's Lake site (St. Joseph County Health Department 1988).

During the 1930s and 1940s, the area surrounding Beck's Lake was a wetland. Development in the area has reduced the wetland area to the present day size of Beck's Lake (St. Joseph County Health Department 1988). A United States Department of Agriculture (USDA) soil survey indicates man-made land and drained Houghton muck is present to the immediate west and north of Beck's Lake, respectively (USDA 1977).

The 103(c) notification information provided to the U.S. EPA in 1984 was gathered during a Bendix internal investigation and is based on the recollections of former employees and haulers (Bendix Corporation 1984). The 103(c) notification states that approximately 15 acres surrounding, and including, Beck's Lake were used for disposal. According to the 103(c) notification, types of waste that may have been disposed include organic substances, inorganic substances, solvents, heavy metals, acids, bases, and asbestos.

Additional correspondence from the Bendix Corporation to E & E indicates that paint wastes, hydroxide sludge, soluble oil and water mixtures, chromic acid, wastewater treatment sludge, nickel waste, stoddard solvents or naptha, foundry sand, and cyanide waste may have been disposed of at the 17 Bendix sites (Allied Corporation 1986; 1986a).

No engineered liners or leachate collection systems are known to have been installed at the site (St. Joseph County Health Department 1988). According to federal, state, and local file information reviewed by FIT, no regulatory-related response activities have occurred at the Beck's Lake site.

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the Beck's Lake site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Beck's Lake site is provided in Appendix B. The U.S. EPA Immediate Removal Action Checksheet for the site is provided in Appendix C.

3.2 SITE REPRESENTATIVE INTERVIEW

A meeting between representatives from the Bendix Corporation and representatives from FIT was conducted at 11:00 a.m. on March 14, 1986. Representing Bendix were Michael Stepanek, Counsel--Aerospace Sector; Karl Miller, Counsel--Automotive Sector; and Gerald Budzin, Manager--Environmental Control. Representing FIT were Bridget Haugh and Richard Dagnall (E & E 1986).

Supplemental information was sent to E & E from Bendix regarding the 17 disposal areas identified in the 103(c) notification on April 7, 1986, and on April 28, 1986 (Allied Corporation 1986; 1986a).

Zelma Zieman of FIT conducted telephone interviews regarding the Beck's Lake site with Paul Trost, of the St. Joseph County Health Department, on December 15, 1988, and with Karl Stevens, superintendent of the South Bend City Parks Department, on December 15, 1988.

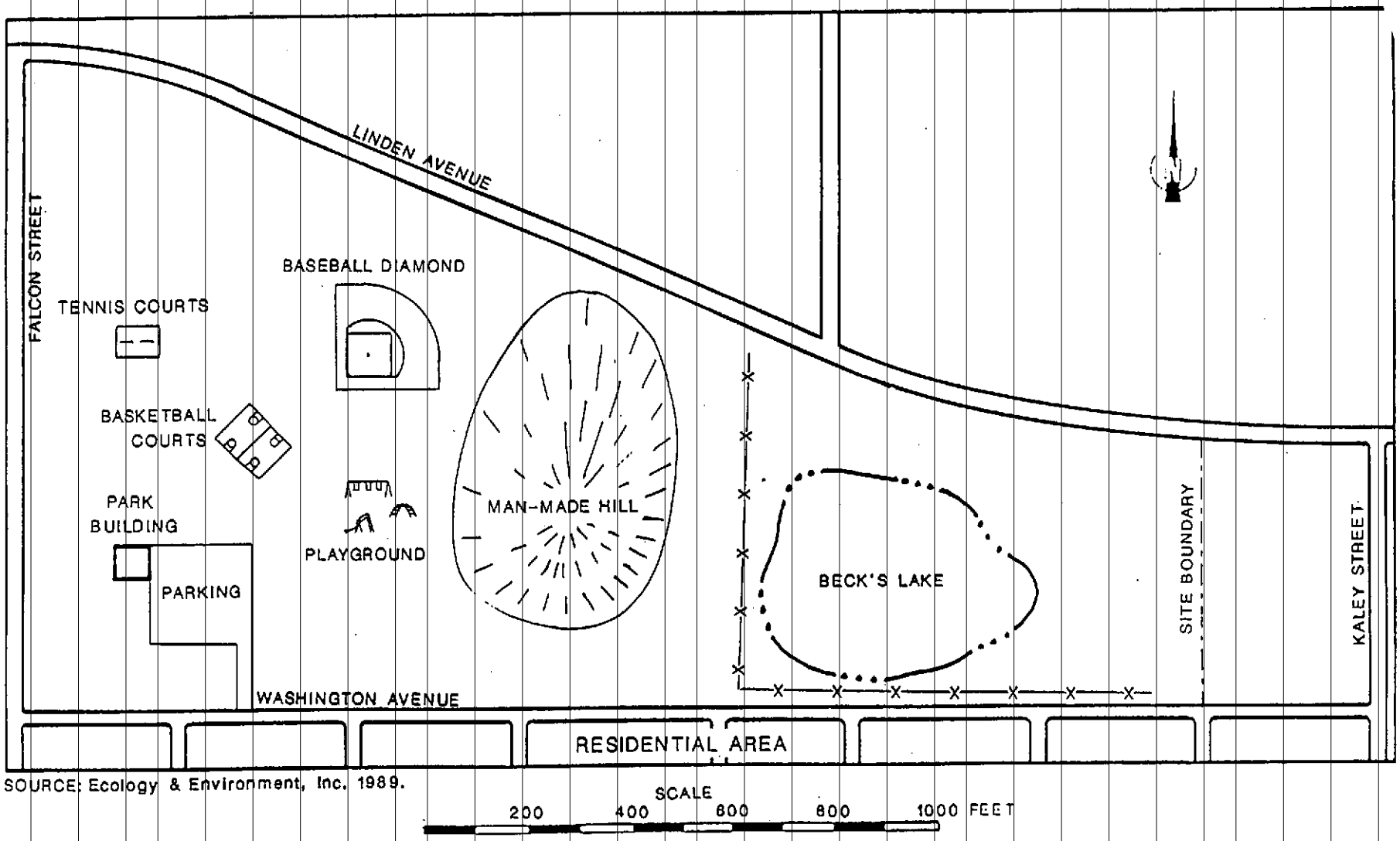
3.3 RECONNAISSANCE INSPECTION

FIT conducted a reconnaissance inspection of the Beck's Lake site and surrounding area in accordance with E & E health and safety guidelines. The reconnaissance inspection began at 6:45 a.m. on April 20, 1988. FIT representatives present were: Steve Anderson, Gordon Ferguson, Tim Mayers, Joe Corns, and Zelma Zieman. Stevens accompanied FIT during the reconnaissance inspection and sampling activities. The reconnaissance inspection included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities, to select sampling locations, and to make observations to aid in characterizing the site.

Reconnaissance Inspection Observations. The Beck's Lake site is located on the western boundary of South Bend. Land use immediately west, south, and east of the site is residential (see Figure 3-1). Benjamin Harrison High School is located 1/2 mile south of the site. Located 1/8 mile north of the site are Conrail railroad tracks; an industrial complex is located 1/4 mile north; and residential areas are located 1/2 mile north. Land use approximately 2 miles north, west, and south of the site is agricultural. The St. Joseph River flows north through South Bend approximately 2 miles east of the site. The surface topography of the surrounding 3-mile radius of the site consists of flat terrain with an average elevation of approximately 720 feet above mean sea level (USGS 1969).

La Salle Park was vegetated with trees and grasses and appeared to be well maintained by the Park Department. No stained soil or leachate seeps were observed, nor did FIT observe any engineered liners or leachate collection systems at the site. Because the site is a city park, no fence or barriers were present to prevent site access.

The western half of La Salle Park contains a park district building, picnic areas, jungle gyms, tennis courts, a baseball diamond, and basketball courts. The large man-made hill and Beck's Lake were observed on the eastern half of La Salle Park. The hill slopes at an approximate 25% gradient from a height of approximately 25 feet above the terrain of the park. The hill was formed as the result of disposal of concrete debris found on-site during the park construction and is used for sledding (South Bend City Park Department 1988).



SOURCE: Ecology & Environment, Inc. 1989.

FIGURE 3-1 SITE FEATURES

Beck's Lake is fenced on its western and southern borders and signs stating "NO SWIMMING OR ICE SKATING" are posted around the lake. Beck's Lake has been fished from in the past, but Stevens indicated that severe winters and heavy summer vegetation growth throughout the past several years has eliminated most of the fish population, and fishing activity has decreased (South Bend City Park Department 1988). Photographs of the Beck's Lake site are provided in Appendix D.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations chosen during the reconnaissance inspection to determine levels of U.S. EPA Target Compound List (TCL) compounds and Target Analyte List (TAL) analytes present at the site. The TCL and TAL are provided in Appendix E.

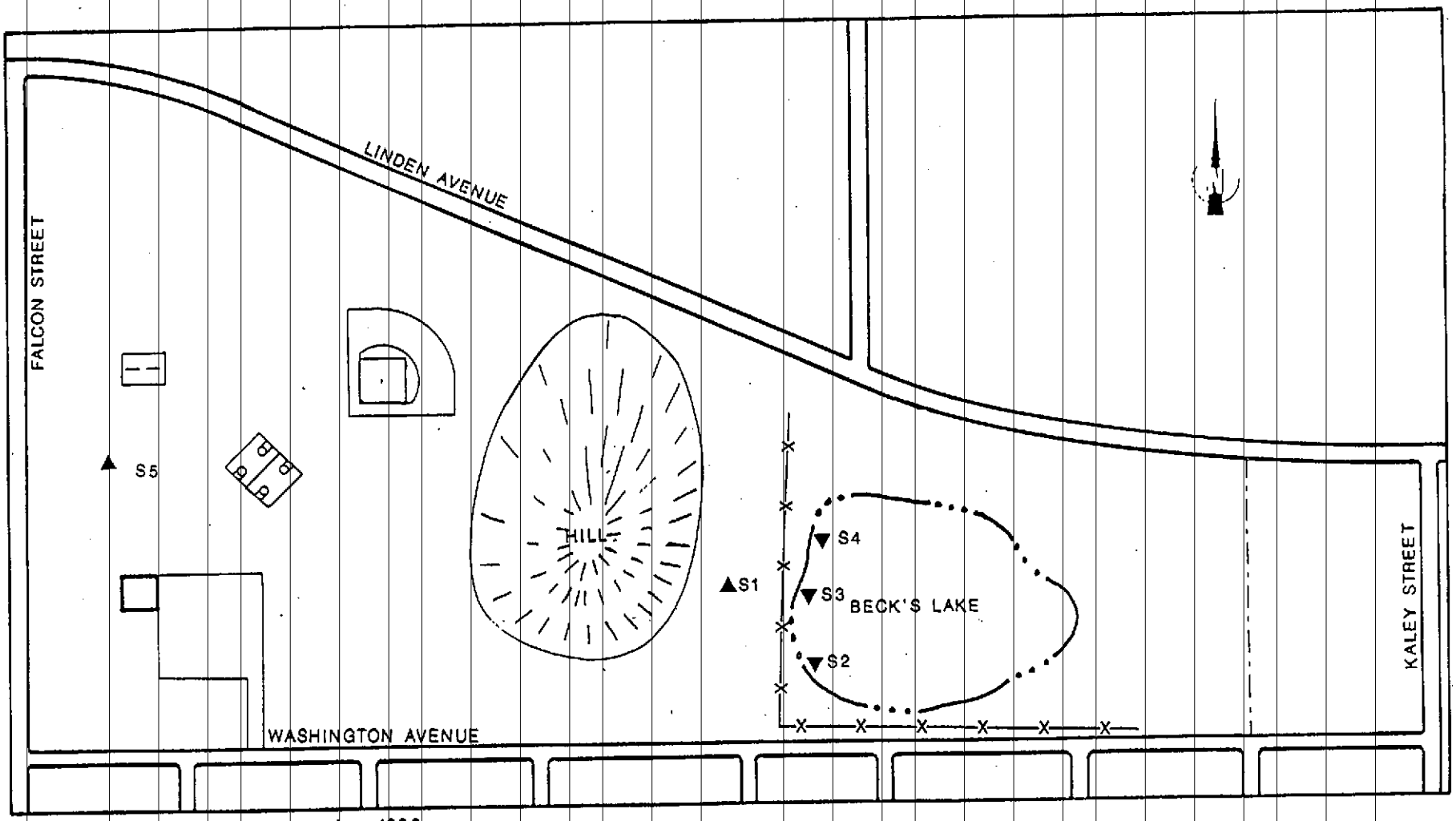
On April 20, 1988, FIT collected two soil samples, two sediment samples, and one potential background soil sample.

Soil and Sediment Sampling Procedures. Subsurface soil sample S1 was of a black, clayey, silty sand collected at a 1 1/2-foot depth from the eastern base of the man-made hill (see Figure 3-2). Subsurface soil sample S1 was collected to determine whether TCL compounds or TAL analytes had migrated vertically downward from the hill.

Sediment sample S2 was of a wet, black, silty sand collected from an 8-inch depth at the southwestern edge of Beck's Lake. Sediment samples S3 and S4 were of a black, silty, loam soil type, collected approximately 10 feet from the western edge of Beck's Lake. Sediment samples from Beck's Lake were collected because the 103(c) notification indicated that potentially hazardous waste had been disposed of in and around the lake (Bendix Corporation 1984). In addition, surface water runoff may have carried TCL compounds and TAL analytes to Beck's Lake.

Surface soil sample S5 was of a black, silty loam collected from the western half of La Salle Park between the tennis courts and the park building. Sample S5 was collected outside of the disposal area described in the 103(c) notification (Bendix Corporation 1984). Sample S5 was collected as a potential background sample to determine concentrations of indigenous soil constituents.

All five soil and sediment samples were grab samples. The sampling depth for sample S1 was achieved using a power auger. A posthole digger



SOURCE: Ecology & Environment, Inc. 1989.

SCALE

0 200 400 600 800 1000 FEET

LEGEND

▲ SOIL SAMPLE
▼ SEDIMENT SAMPLE

FIGURE 3-2 SOIL AND SEDIMENT SAMPLING LOCATIONS

was then used to collect sample material from the hole. Samples S2, S3, and S4 were collected with a posthole digger. A row boat was used to collect samples S3 and S4 from offshore Beck's Lake. Sample S5 was collected with a hand trowel.

Sample material collected using the posthole digger (S1, S2, S3, and S4) and the hand trowel (S5) was placed in a stainless steel bowl. A spoon or hand trowel was then used to transfer sample material to sample bottles.

Standard E & E decontamination procedures were followed during the collection of all soil samples. Decontamination procedures included the scrubbing of all equipment (i.e., auger blades, posthole digger, trowels, bowls, and spoons) with a detergent (Alconox) and distilled water solution and triple-rinsing the equipment with distilled water before the collection of each sample (E & E 1987).

All soil samples were packaged and shipped in accordance with U.S. EPA-required procedures. All soil samples were analyzed for TCL compounds by Cenref Labs, Brighton, Colorado, and for TAL analytes by Post Buckley Schuh & Jernigan of Orlando, Florida.

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section presents results of the chemical analysis of FIT-collected soil samples for TCL compounds and TAL analytes.

4.2 RESULTS OF CHEMICAL ANALYSIS OF FIT-COLLECTED SAMPLES

Analysis of FIT-collected soil samples revealed substances from the following groups of TCL compounds and TAL analytes: polyaromatic hydrocarbons (PAHs), aromatics, pesticides, heavy metals, metals, common laboratory artifacts, and common soil constituents (see Table 4-1 for complete chemical analysis results of FIT-collected soil samples).

Laboratory analytical data and U.S. EPA Contract Laboratory Program quantitation/detection limits of soil sample analysis are provided in Appendix E.

After an evaluation of the CLP analytical data, FIT determined that sample S5, the potential background sample, contained concentrations of TCL compounds and TAL analytes in excess of what would be expected to be indigenous to the site area. Therefore, sample S2 was determined to be a more representative background sample and has been chosen as the background sample for comparison purposes in this report.

The presence of TCL compounds and TAL analytes detected in sample S5 may be due to contaminant migration, an error in the disposal boundary description, or the spread of the contaminated zone during the La Salle Park construction. In addition, the ability of a loam-textured

soil, such as the material of sample S5, to retain TCL compounds and TAL analytes is greater than that of a sand-textured soil, such as the material of sample S2.

Table 4-1
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL SAMPLES

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5
Date	4/20/88	4/20/88	4/20/88	4/20/88	4/20/88
Time	0820	0900	0950	1000	1022
Organic Traffic Report Number	EW942	EW943	EW944	EW945	EW946
Inorganic Traffic Report Number	MEX162	MEX163	MEX164	MEX165	MEX166
Compound Detected (values in µg/kg)					
Volatile Organics					
acetone	--	310B	630JB	500JB	--
2-butanone (MEK)	38	23	180JB	210JB	10J
toluene	8	--	--	--	29
Semivolatile Organics					
naphthalene	100J	--	260J	610J	--
2-methylnaphthalene	64J	--	390J	--	--
acenaphthene	98J	--	600J	1,700J	--
dibenzofuran	61J	--	290J	760J	--
fluorene	99J	--	590J	1,700J	--
phenanthrene	1,200	150J	5,400	18,000	1,100
anthracene	310J	--	1,400	4,700	240J
di-n-butylphthalate	200J	--	--	--	--
fluoranthene	2,100	220J	10,000	26,000	1,600
pyrene	1,600	220J	7,200	21,000	1,300
benzo[a]anthracene	880	120J	3,100	9,500	710
chrysene	1,100	220J	4,900	14,000	930
benzo[b]fluoranthene	540	--	3,100	7,000	500
benzo[k]fluoranthene	900	--	3,600	11,000	720
benzo[a]pyrene	800	--	3,100	8,200	760
indeno[1,2,3-cd]pyrene	440	--	2,100	5,700	530
benzo[g,h,i]perylene	360J	--	1,900	4,600	600

Table 4-1 (Cont.)

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5
Pesticides/PCBs					
4,4'-DDE	--	--	--	--	44
4,4'-DDD	--	--	--	230J	--
4,4'-DDT	--	--	--	--	78
Analyte Detected (values in mg/kg)					
aluminum	3,560	1,010	8,780	7,010	4,410
arsenic	8.5	3.7	17	20	9
barium	185	[18]	225	213	96
cadmium	4.4	[1]	6	6.6	2.2
calcium	29,600	27,100	126,000	59,500	11,000
chromium	12*	4*	22*	34*	14*
cobalt	[6.1]	--	--	[6.7]	[4.3]
copper	79	19	55	80	37
iron	19,300	4,920	36,300	29,700	10,400
lead	267*	36*	321*	634*	82*
magnesium	4,460	13,700	9,580	9,120	1,300
manganese	466	120	957	714	360
mercury	0.12	--	0.40	0.90	0.12
nickel	12	--	[18]	[22]	12
potassium	[340]	[162]	[567]	[719]	[449]
selenium	2.7B+	--	3.9B+	--	1.9
vanadium	13	--	[26]	[26]	13
zinc	324*	79*	290*	523*	101*

-- Not detected.

Table 4-1 (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
s	Analysis by Method of Standard Additions.	Value may be quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be semiquantitative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.

Source: Ecology and Environment, Inc. 1989.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section discusses data and information that apply to potential migration pathways and targets of TCL compounds and TAL analytes that are possibly attributable to the Beck's Lake site.

The five migration pathways of concern discussed are: groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

The oldest known consolidated materials underlying St. Joseph County are dolomite, dolomitic limestone, and shale of the Ordovician and Silurian ages. These Ordovician and Silurian units underlie dolomite, dolomitic limestone, and blue-black bituminous shale of the Devonian and Mississippian ages. The bedrock is not used as a source of water because of its depth and high mineral content (Indiana Department of Conservation 1962).

The bedrock is overlain by unconsolidated material of the Quaternary age, which is the principal source of groundwater in St. Joseph County. The unconsolidated material forms a single but complex hydrological system named the St. Joseph Aquifer system and is designated as a sole source aquifer in the South Bend area by the U.S. EPA (53 FR 23682, June 23, 1988). This aquifer system forms the aquifer of concern (AOC) in the area of the site. The aquifer system has been described by dividing the system into lower, middle, and upper units (Indiana Department of Natural Resources [IDNR] 1969).

The lower unit consists of clay till containing discontinuous zones of sand and gravel that are small in areal extent and are never exposed at the ground surface. The lower unit is a source of water for industrial, municipal, and occasionally domestic and farming uses. The sand and gravel within the lower unit form the principal aquifer in the South Bend/Mishawaka area (41% of county groundwater use), even though larger groundwater yields are possible in the middle unit. The thickness of the lower unit ranges from 0 to 300 feet, but averages 80 feet. The depth to the lower unit in the vicinity of the site is approximately 90 feet. However, the middle unit is hydraulically connected to the lower unit near the site and the depth to water was recorded in 1956 to be 10 to 20 feet (IDNR 1969).

The middle unit consists of sand and gravel that locally contains thick zones of clay and is the principal aquifer for St. Joseph County. The thickness of the middle unit ranges from 10 to 250 feet, but averages 120 feet and crops out in the South Bend area. Recharge of the middle unit is chiefly derived from precipitation. Some infiltration of groundwater to the middle unit is induced from the St. Joseph River during periods of heavy pumping of wells screened in the middle unit (IDNR 1969).

The upper unit consists of silty, sandy, somewhat clayey till, containing lenses of sand and gravel of limited areal extent. The upper unit forms dissected ground and terminal moraines and creates artesian conditions in the middle unit. The thickness of the upper unit ranges from 0 to 140 feet and averages 50 feet. Although the upper unit is not present in the South Bend area, it is present within a 4-mile radius of the site (IDNR 1969).

Overlying the unconsolidated material are thin layers of alluvium, eolian sand, and organically rich sand, silt, and clay of the Holocene age (Indiana Department of Conservation 1962).

A piezometric study of St. Joseph County indicated that the direction of groundwater flow in the site vicinity is toward the northeast (IDNR 1969).

A review of well logs within a 4-mile radius of the site indicates a layer of topsoil ranging from 2 to 20 feet in thickness, a depth to groundwater ranging from 4 to 20 feet, and a depth to bedrock ranging

from 130 to 210 feet. Well logs of the area of the site are provided in Appendix F.

In accordance with the U.S. EPA-approved work plan, no monitoring well samples or residential well samples were collected.

A potential does exist for TCL compounds and TAL analytes to migrate from the site to groundwater. This potential is based on the following information.

- TCL compounds and TAL analytes have been detected in on-site soil samples above background levels, including: 26,000 µg/kg of fluoranthene, 21,000 µg/kg of pyrene, 14,000 µg/kg of chrysene, 34 mg/kg of chromium, 634 mg/kg of lead, and 957 mg/kg of manganese.

- The site does not have a liner or leachate collection system (St. Joseph County Health Department 1988).

- The unsaturated zone in the vicinity of the site is primarily composed of sand and gravel deposits. The AOC is 4 to 20 feet below the ground surface (IDNR 1969).

The South Bend Water Works provides municipal water for 127,000 South Bend-area residents from 35 wells, 25 of which are located within a 4-mile radius of the site. The water from the wells is blended before distribution. The municipal wells are finished at depths ranging from 90 to 240 feet (ISBH 1984; South Bend Water Works 1987).

The University of Notre Dame operates a private water system that serves 6,500 persons. The wells of the system are located on the university campus, approximately 3 to 4 miles northwest of the site. The wells are finished at depths ranging from 108 to 200 feet (ISBH 1984; University of Notre Dame 1987).

St. Joseph County 1980 Census information indicates that 2.68 persons-per-household reside in the area of the site. A house count within a 3-mile radius of the site indicates approximately 400 houses outside of the municipal water system, or 1,072 persons who obtain water from private wells (USGS 1969; U.S. Bureau of the Census 1982).

The total potential target population of groundwater contamination within a 3-mile radius of the site is 128,072 persons, which includes private well users and individuals receiving municipal service.

5.3 SURFACE WATER

Two surface water bodies are located within a 3-mile radius of the site: Beck's Lake and the St. Joseph River. Beck's Lake is affected by TCL compounds and TAL analytes detected at the site, but the St. Joseph River does not appear to be affected.

Beck's Lake is located on-site. Sediment samples collected near the western edge of the lake revealed the presence of TCL compounds and TAL analytes (see Table 4-1). The lake is not used as a drinking water source, or for swimming or boating. The lake is fished from, but this activity has decreased during the past several years because of heavy vegetation growth and a reduced fish population (South Bend City Park Department 1988).

The St. Joseph River is located approximately 2 miles northeast of the site (USGS 1969). The site does not lie within the floodplain (U.S. Department of Housing and Urban Development 1978) of the river and no surface water migration pathways are present from the site to the St. Joseph River (USGS 1969).

5.4 AIR

A release of potential contaminants to the air was not documented during the SSI of the Beck's Lake site. During the reconnaissance inspection, FIT site-entry instruments (OVA 128, radiation monitor, and colorimetric monitoring tubes for cyanide) did not detect levels above background concentrations at the site. In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential does exist for eolian forces to carry particulates from the site. Potential targets of air contamination include all persons residing within a 4-mile radius of the site. St. Joseph County 1980 Census information indicates 2.68 persons-per-household reside in the site area. A house count within a 4-mile radius of the site indicates approximately 1,250 houses outside of the South Bend City limits, or 3,350 persons (USGS 1969, U.S. Bureau of the Census 1982). Planimeter

calculations indicate approximately 88.37% of South Bend residents, or 96,967 persons, live within a 4-mile radius of the site. The total target population potentially affected by a release of TCL compounds or TAL analytes is 100,317 persons.

5.5 FIRE AND EXPLOSION

According to site representatives and local, state, and federal file information reviewed by FIT, no documentation exists of an incident of fire or explosion at the Beck's Lake site. FIT observations indicated that no apparent potential for fire or explosion existed at the site at the time of the SSI.

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, no documentation exists of an incident of direct contact with TCL compounds or TAL analytes at the Beck's Lake site.

A potential does exist for the public to come into direct contact with TCL compounds and TAL analytes detected at the site. The potential for direct contact is based on the following information.

- TCL compounds and TAL analytes were detected in on-site surface soil samples.

- The site is a city park; access to the site is not restricted.

Based on planimeter calculations of South Bend, approximately 14.30% of South Bend residents (15,689 persons) live within a 1-mile radius of the site and are potential targets of direct contact with TCL compounds and TAL analytes detected at the site.

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U.S. Department of Housing and Urban Development, February 1, 1978, Flood Hazard Boundary Map H-01-07, city of South Bend, Indiana.

U.S. EPA, February 12, 1988, Office of Solid Waste and Emergency Response, Pre-Remedial Strategy for Implementing SARA, Directive number 9345.2-01, Washington, D.C.

USGS, 1969, South Bend West Quadrangle, Indiana, 7.5 Minute Series: 1:24,000, photorevised, 1986.

2091:1

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	0980904379

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Beck's Lake Site	Falcon Street, Linden Ave., Kaley St., Washington Ave.

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
South Bend	IN	46619	St. Joseph	141	03

09 COORDINATES LATITUDE	LONGITUDE
41° 40' 05" N	086° 17' 30" W

10 TYPE OF OWNERSHIP (Check one): ☐ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ■ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
4/20/88	☐ ACTIVE ■ INACTIVE	/ X UNKNOWN believed 1950's

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ☒ B. EPA CONTRACTOR Ecology & Environment Inc. (E & E) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm) ☐ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Steve Anderson	Geologist	E & E	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Tim Mayers	Geographer	E & E	(312) 663-9415
Gordon Ferguson	Bacteriologist	E & E	(312) 663-9415
Joe Corns	Civil Engineer	E & E	(312) 663-9415
Zelma Zieman	Chemist	E & E	(312) 663-9415
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Karl Stevens	Superintendent	South Bend City Park Dept.	(219) 284-9401
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	beginning 0645	partly cloudy, ~60°F, variable winds @ ~15mph

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Harry Atkinson	IDEM	(317) 232-8927

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Zelma Zieman	USEPA	E & E / FIT	(312) 663-9415	12/27/88

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
~~SITE INSPECTION REPORT~~
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	D980904379

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ■ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ■ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be additive)

TONS unknown

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ■ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ■ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ■ K. REACTIVE
- ■ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown	unknown	Detected in on-site soil and sediment samples collected by FIT on 4/20/88.
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown	unknown	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
			detected in on-site soil and sediment samples collected by FIT on 4/20/88		
OCC	naphthalene	91-20-3		610 J	ug/kg
OCC	2-methylnaphthalene	91-57-6		390 J	
OCC	acenaphthene	83-32-9		1700 J	
OCC	dibenzofuran	132-64-9		760 J	
OCC	fluorene	86-73-7		1700 J	
OCC	phenanthrene *	85-01-8		18000	
OCC	anthracene	120-12-7		4700	
OCC	di-n-butylphthalate	84-74-2		200 J	
OCC	fluoranthene *	206-44-0		26000	
OCC	pyrene *	129-00-0		21000	
OCC	benzo[a]anthracene *	56-55-3		9500	
OCC	chrysene *	218-01-9		14000	
OCC	benzo[b]fluoranthene	205-99-2		7000	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	none known		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

FIT site inspection performed on 4/20/88.
FIT files, Region V

EPA FORM 2070-13 (7-81)

* Continued from Part II, Section IV.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	benzo[k]fluoranthene	207-08-9	detected in on-site soil and	11000	ug/kg
OCC	benzo[a]pyrene	50-32-8	sediment samples	2200	
OCC	indeno[1,2,3-cd]pyrene	193-39-5	collected by FET on	5700	
OCC	benzo[g,h,i]perylene	191-24-2	4/20/88	4600	
PSD	4,4'-DDE	72-55-9		44	
PSD	4,4'-DDD	72-54-8		230 J	
PSD	4,4'-DDT	50-29-3		78	
MES	arsenic *	7440-38-2		20	mg/kg
MES	cadmium *	7440-43-9		6.6	
MES	chromium *	7440-47-3		34 *	
MES	cobalt	7440-48-4		6.7 B	
MES	copper *	7440-50-8		80	
MES	lead *	7439-92-1		634 *	
MES	manganese *	7439-96-5		957	
MES	mercury	7439-97-6		0.90	
MES	nickel	7440-02-0		22 B	
MES	selenium	7782-49-2		3.9 S+	
MES	vanadium	7440-62-2		26 B	
ME	zinc *	7440-66-6		523 *	

* Denotes contaminant was detected in background sample S2.

All values listed represent the highest concentration of each contaminant.

Concentration Symbols (J, B, S, +, *) indicate QA/QC comments from CRDL laboratories. See Table 4-1 of SSI Report for thorough explaination.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	0980904379

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: ____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 128,072
04 NARRATIVE DESCRIPTION

Municipal drinking water for South Bend and private wells in area obtain water from the St. Joseph Aquifer System which is designated as a sole source aquifer. The aquifer system consists of unconsolidated sand and gravel. Well logs indicate an aquifer thickness ranging 2 to 210 feet and a depth to groundwater from 4 to 20 feet. TCL compounds and TAL analytes detected in on-site soil/sed. samples

01 ■ B. SURFACE WATER CONTAMINATION — 02 ■ OBSERVED (DATE: 4/20/88) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION

Site does not lie within floodplain of potential drinking water source. No surface water migration pathways are present to the St. Joseph River.
Pathway exists for surface water used for recreational purposes. TCL compounds and TAL analytes detected in sediment samples from Beck's Lake collected by FIT on 4/20/88.

01 ■ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: ____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 96,967
04 NARRATIVE DESCRIPTION

Potential exists for eolian forces to carry TCL compounds and TAL analytes from site since detected areas of contamination are unconfined.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: ____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION

Site history and site observations indicate no apparent potential for fire and/or explosion.

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: ____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,689
04 NARRATIVE DESCRIPTION

Potential exists for La Salle Park users to come in contact with TAL analytes and TCL compounds identified in on-site soil/sed. samples.

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: 4/20/88) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 40 (Acres)
04 NARRATIVE DESCRIPTION

TCL compounds and TAL analytes including PAHs, metals, heavy metals, and pesticides were detected in soil and sediment samples collected on-site. See table 4-1 and section 4.1 of the SSI Report for complete soil sample analysis

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: ____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 128,072
04 NARRATIVE DESCRIPTION

Drinking water contamination potential exists due to shallow groundwater depth (4 to 20 feet), aquifer consists of highly permeable sand and gravel, no containment system exists on site, and TCL compounds and TAL analytes were detected on-site. See A above.

01 ■ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: ____) — ■ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

City of South Bend employs several workers to maintain the La Salle Park property. TCL compounds and TAL analytes were detected in surface soil samples at La Salle Park.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: ____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 128,072
04 NARRATIVE DESCRIPTION

The greatest potential for population exposure exists through groundwater contamination. See A, C, E above.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No damage to flora observed during SSI. TCL compounds and TAL analytes were detected in Beck's Lake sediment samples. Damage and/or bioaccumulation of contaminants in aquatic flora may occur.

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include numbers of species)
Potential does exist for TCL compounds and TAL analytes to bioaccumulate and/or damage aquatic life in Beck's Lake.

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Bioaccumulation may occur in fish found in Beck's Lake. Fishing activities have been observed at Beck's Lake.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 128,072 — 04 NARRATIVE DESCRIPTION
No observed indigenous or engineered containment systems were observed by FIT. Population who depend on groundwater for drinking water may be affected.

01 ■ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No off-site property damage allegations were identified by FIT.
A potential exists for off-site damage via air or groundwater migration. See A, B, C, D and E.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None observed or identified by FIT.

01 ■ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ■ ALLEGED
04 NARRATIVE DESCRIPTION
The Bendix Company submitted a 103(c) notification identifying site as potential disposal area for organics, inorganics, solvents, heavy metals, acids, bases, and asbestos.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
None.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 128,072

IV. COMMENTS
Principal routes of concern are groundwater, air and direct contact. Surrounding population most likely to come in contact with TCL compounds and TAL analytes through the groundwater route.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
FIT site inspection performed on 4/20/88
FIT files, Region V

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
■ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
☐ A. SURFACE IMPOUNDMENT			N/A	
☐ B. PILES			☐ A. INCENERATION	■ A. BUILDINGS ON SITE
☐ C. DRUMS, ABOVE GROUND			☐ B. UNDERGROUND INJECTION	
☐ D. TANK, ABOVE GROUND			☐ C. CHEMICAL/PHYSICAL	one
☐ E. TANK, BELOW GROUND			☐ D. BIOLOGICAL	
☐ F. LANDFILL			☐ E. WASTE OIL PROCESSING	06 AREA OF SITE
☐ G. LANDFARM			☐ F. SOLVENT RECOVERY	~40 (Acres)
■ H. OPEN DUMP	unknown	unknown	☐ G. OTHER RECYCLING/RECOVERY	
☐ I. OTHER (Specify)			☐ H. OTHER (Specify)	

07 COMMENTS

Site is believed to have been used as an unrestricted open dump during the 1950s. In the 1960s, site became a city park named La Salle Park.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ■ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

No known liners, barriers, or leachate collection system were installed at the Beck's Lake Site.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ■ YES ☐ NO

02 COMMENTS

Since site is a city park, unrestricted access to the area and Beck's Lake is possible. TCL compounds and TAL analytes were detected in on-site soil and sediment samples.

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

FIT site inspection performed on 4/20/88.

FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: IN
02 SITE NUMBER: D980904379

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check all applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ■	A. ☐	B. ☐	C. ■	A. 1 (mi)
NON-COMMUNITY	C. ☐	D. ■	D. ■	E. ☐	F. ☐	B. 1 1/2 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

■ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Other sources available) ☐ D. NOT USED, UNUSABLE

COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

02 POPULATION SERVED BY GROUNDWATER: 128,072

03 DISTANCE TO NEAREST DRINKING WATER WELL: 1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
4 - 20 (ft)	NE	4-20 (ft)	unknown (gpm)	■ YES ☐ NO

09 DESCRIPTION OF WELLS (Including usage, depth, and location relative to population and pumpage)

A review of well logs within a 4-mile radius of the Beck's Lake site indicates a topsoil layer ranging from 2 to 20 feet, a depth to groundwater ranging from 4 to 20 feet, and a depth to bedrock ranging from 130 to 210 feet.

10 RECHARGE AREA		11 DISCHARGE AREA	
■ YES ☐ NO	COMMENTS: Area is a recharge area for the St. Joseph River. Recharge of aquifer is primarily through precipitation	☐ YES ■ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

■ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Beck's Lake	■	on site (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN: ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE	02 DISTANCE TO NEAREST POPULATION
A. 15,689 (NO. OF PERSONS)	B. 48,082 (NO. OF PERSONS)	C. 76,064 (NO. OF PERSONS)	on-site < 50 ft. (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
unknown - city of South Bend	< 50 ft (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)

Population within the Beck's Lake site includes the city of South Bend and rural area residents.

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ■ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ 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) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
130 - 210 (ft)	unknown (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
40 (in)	2.3 (in)	0 %	N/A	0 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

10 N/A ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. N/A (mi)	B. 2 1/2 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

> 3 (mi)

ENDANGERED SPECIES none known

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AGRICULTURAL LANDS AG LAND
A. < 1/4 (mi)	B. < 1/4 (mi)	C. N/A (mi)	D. 2 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Refer to 4-mile radius map in Appendix A.

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

FIT site inspection performed on 4/20/88.
FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	0980904379

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	TCL: Cancer Lab, Brighton, CO TAL: Post Buckley Schuh and Jernigan, Orlando FL	6/28/88 6/13/88
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA - 128	Concentrations above background levels were not detected.
Radiation monitor	No readings above background (below 0.1 mR)
HCN monitor	No readings above background (< 1 ppm)

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ☐ AERIAL

02 IN CUSTODY OF Ecology and Environment, Inc. (Name of organization or individual)

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS File room of E & E, Inc., Chicago, IL

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Photographs were taken during the site inspection.

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

FIT site inspection performed on 4/20/88.
FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	04 SIC CODE
City of South Bend		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE
City Hall, 227 E. Jefferson	South Bend	IN	46601

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	11 SIC CODE
none		

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER	11 SIC CODE

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER	11 SIC CODE

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER	11 SIC CODE

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	04 SIC CODE
unknown		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	04 SIC CODE
none		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

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

FIT site inspection performed on 4/20/88.
FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME: City of South Bend	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): City Hall, 227 E. Jefferson	04 SIC CODE:
05 CITY: South Bend	06 STATE: IN
07 ZIP CODE: 46601	
08 YEARS OF OPERATION: ~ 25 yrs	09 NAME OF OWNER: Department of Parks and Recreation

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME:	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	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: unknown	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:
05 CITY:	06 STATE:
07 ZIP CODE:	
08 YEARS OF OPERATION:	09 NAME OF OWNER DURING THIS PERIOD:

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME: unknown	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME:	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	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 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME:	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	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 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME:	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	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 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

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

FIT site inspection performed on 4/20/88.
FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
none known	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
The Bendix Corporation			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
401 Bendix Drive (P.O. Box 4001)			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
South Bend	IN	46620			

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
none known			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

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

FIT site inspection performed on 4/20/88.
FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	0980904379

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ H. ON SITE BURIAL — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ L. ENCAPSULATION — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ N. CUTOFF WALLS — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE ____ 03 AGENCY ____
04 DESCRIPTION
N/A

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: IN | 02 SITE NUMBER: D980964379

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

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

FIT site inspection performed on 4/20/88.
FIT files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D980904379

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

None

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

FIT site inspection performed on 4/20/88.
FIT files, Region V

EPA FORM 2070-13 (7-81)

Immediate Removal Action Check Sheet

	High	Moderate	Low
Fire and Explosion Hazard			
Flammable Materials			X
Explosives			X
Incompatable Chemicals			X
Direct Contact with Acutely Toxic Chemicals			
Site Security (1)	X		
Leaking Drums or Tanks N/A			
Open Lagoons or Pits N/A			
Materials on Surface (2)		X	
Proximity of Population (1)	X		
Evidence of Casual Site Use (1)	X		
Contaminated Water Supply			
Exceeds 10 Day Snarl N/A			
Gross Taste or Odors N/A			
Alternate Water Available (3)			X
Potential Contamination (3)		X	
Is the site abandoned, active, or inactive? city park is active but disposal activities are inactive			

Comments:

(1) The BL site is currently a South Bend city park named La Salle Park. Access to the site and to detected areas of TCL compound and TAL analyte contaminated is not restricted.

(2) TCL compounds and TAL analytes were detected in on site surface soil samples

(3) Sole source, shallow, sand and gravel aquifer lies below the BL site.

ATSDR ToxFaqs (Fact Sheets) for Arsenic, Benzo(a)pyrene (Polycyclic Aromatic Hydrocarbons), and Lead

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ARSENIC
CAS # 7440-38-2

Division of Toxicology ToxFAQs™ July 2001

This fact sheet answers the most frequently asked health questions (FAQs) about arsenic. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to higher than average levels of arsenic occurs mostly in the workplace, near hazardous waste sites, or in areas with high natural levels. At high levels, inorganic arsenic can cause death. Exposure to lower levels for a long time can cause a discoloration of the skin and the appearance of small corns or warts. Arsenic has been found at 1,014 of the 1,598 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is arsenic?

Arsenic is a naturally occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds.

Inorganic arsenic compounds are mainly used to preserve wood. Organic arsenic compounds are used as pesticides, primarily on cotton plants.

What happens to arsenic when it enters the environment?

- ❑ Arsenic cannot be destroyed in the environment. It can only change its form.
- ❑ Arsenic in air will settle to the ground or is washed out of the air by rain.
- ❑ Many arsenic compounds can dissolve in water.
- ❑ Fish and shellfish can accumulate arsenic, but the arsenic in fish is mostly in a form that is not harmful.

How might I be exposed to arsenic?

- ❑ Eating food, drinking water, or breathing air containing arsenic.
- ❑ Breathing contaminated workplace air.
- ❑ Breathing sawdust or burning smoke from wood treated with arsenic.
- ❑ Living near uncontrolled hazardous waste sites containing arsenic.
- ❑ Living in areas with unusually high natural levels of arsenic in rock.

How can arsenic affect my health?

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs. Ingesting high levels of inorganic arsenic can result in death. Lower levels of arsenic can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet.

Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the

appearance of small "corns" or "warts" on the palms, soles, and torso.

Skin contact with inorganic arsenic may cause redness and swelling.

Organic arsenic compounds are less toxic than inorganic arsenic compounds. Exposure to high levels of some organic arsenic compounds may cause similar effects as inorganic arsenic.

How likely is arsenic to cause cancer?

Several studies have shown that inorganic arsenic can increase the risk of lung cancer, skin cancer, bladder cancer, liver cancer, kidney cancer, and prostate cancer. The World Health Organization (WHO), the Department of Health and Human Services (DHHS), and the EPA have determined that inorganic arsenic is a human carcinogen.

How can arsenic affect children?

We do not know if exposure to arsenic will result in birth defects or other developmental effects in people. Birth defects have been observed in animals exposed to inorganic arsenic.

It is likely that health effects seen in children exposed to high amounts of arsenic will be similar to the effects seen in adults.

How can families reduce the risk of exposure to arsenic?

- ❑ If you use arsenic-treated wood in home projects, you should wear dust masks, gloves, and protective clothing to decrease exposure to sawdust.
- ❑ If you live in an area with high levels of arsenic in water or soil, you should use cleaner sources of water and limit contact with soil.

Is there a medical test to show whether I've been exposed to arsenic?

There are tests to measure the level of arsenic in blood, urine, hair, or fingernails. The urine test is the most reliable test for arsenic exposure within the last few days. Tests on hair and fingernails can measure exposure to high levels or arsenic over the past 6-12 months. These tests can determine if you have been exposed to above-average levels of arsenic. They cannot predict how the arsenic levels in your body will affect your health.

Has the federal government made recommendations to protect human health?

EPA has set limits on the amount of arsenic that industrial sources can release to the environment and has restricted or canceled many uses of arsenic in pesticides. EPA has set a limit of 0.05 parts per million (ppm) for arsenic in drinking water. The EPA arsenic drinking water standard of 0.01 ppm (10 ppb) reported in the ATSDR February 2001 Arsenic ToxFAQs was based on the EPA final rule for arsenic in drinking water, published on January 22, 2001, in the *Federal Register*. However, the EPA is currently reviewing the science and cost estimate supporting this rule, and, in the interim, has reverted to the previous standard for arsenic. Thus, the current EPA arsenic drinking water standard remains at 0.05 ppm (50 ppb).

The Occupational Safety and Health Administration has set limits of 10 μg arsenic per cubic meter of workplace air (10 μg/m³) for 8 hour shifts and 40 hour work weeks.

Source of Information

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological Profile for Arsenic. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 404-639-6359. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

(Benzo (a) Pyrene)

ATSDR POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

Agency for Toxic Substances and Disease Registry ToxFAQs September 1996

This fact sheet answers the most frequently asked health questions (FAQs) about polycyclic aromatic hydrocarbons (PAHs). For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to polycyclic aromatic hydrocarbons usually occurs by breathing air contaminated by wild fires or coal tar, or by eating foods that have been grilled. PAHs have been found in at least 600 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are polycyclic aromatic hydrocarbons?

(Pronounced pŏl′ĭ-sī′klĭk ăr′ə-măt′ĭk hī′drə-kär′bənz)

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot.

Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.

What happens to PAHs when they enter the environment?

- PAHs enter the air mostly as releases from volcanoes, forest fires, burning coal, and automobile exhaust.
- PAHs can occur in air attached to dust particles.
- Some PAH particles can readily evaporate into the air from soil or surface waters.
- PAHs can break down by reacting with sunlight and other chemicals in the air, over a period of days to weeks.
- PAHs enter water through discharges from industrial and wastewater treatment plants.
- Most PAHs do not dissolve easily in water. They stick to solid particles and settle to the bottoms of lakes or rivers.
- Microorganisms can break down PAHs in soil or water after a period of weeks to months.
- In soils, PAHs are most likely to stick tightly to particles; certain PAHs move through soil to contaminate underground water.
- PAH contents of plants and animals may be much higher than PAH contents of soil or water in which they live.

How might I be exposed to PAHs?

- Breathing air containing PAHs in the workplace of coking, coal-tar, and asphalt production plants; smokehouses; and municipal trash incineration facilities.
- Breathing air containing PAHs from cigarette smoke, wood smoke, vehicle exhausts, asphalt roads, or agricultural burn smoke.
- Coming in contact with air, water, or soil near hazardous waste sites.
- Eating grilled or charred meats; contaminated cereals, flour, bread, vegetables, fruits, meats; and processed or pickled foods.
- Drinking contaminated water or cow's milk.

- Nursing infants of mothers living near hazardous waste sites may be exposed to PAHs through their mother's milk.

How can PAHs affect my health?

Mice that were fed high levels of one PAH during pregnancy had difficulty reproducing and so did their offspring. These offspring also had higher rates of birth defects and lower body weights. It is not known whether these effects occur in people.

Animal studies have also shown that PAHs can cause harmful effects on the skin, body fluids, and ability to fight disease after both short- and long-term exposure. But these effects have not been seen in people.

How likely are PAHs to cause cancer?

The Department of Health and Human Services (DHHS) has determined that some PAHs may reasonably be expected to be carcinogens.

Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer).

Is there a medical test to show whether I've been exposed to PAHs?

In the body, PAHs are changed into chemicals that can attach to substances within the body. There are special tests that can detect PAHs attached to these substances in body tissues or blood. However, these tests cannot tell whether any health effects will occur or find out the extent or source of your exposure to the PAHs. The tests aren't usually available in your doctor's office because special equipment is needed to conduct them.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.2 milligrams of PAHs per cubic meter of air (0.2 mg/m^3). The OSHA Permissible Exposure Limit (PEL) for mineral oil mist that contains PAHs is 5 mg/m^3 averaged over an 8-hour exposure period.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workplace air levels for coal tar products not exceed 0.1 mg/m^3 for a 10-hour workday, within a 40-hour workweek. There are other limits for workplace exposure for things that contain PAHs, such as coal, coal tar, and mineral oil.

Glossary

Carcinogen: A substance that can cause cancer.

Ingest: Take food or drink into your body.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for polycyclic aromatic hydrocarbons. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 404-639-6359. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

LEAD

CAS # 7439-92-1

Agency for Toxic Substances and Disease Registry ToxFAQs June 1999

This fact sheet answers the most frequently asked health questions (FAQs) about lead. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. Lead has been found in at least 1,026 of 1,467 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is lead?

(Pronounced lĕd)

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays.

Because of health concerns, lead from gasoline, paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years.

What happens to lead when it enters the environment?

- Lead itself does not break down, but lead compounds are changed by sunlight, air, and water.
- When lead is released to the air, it may travel long distances before settling to the ground.
- Once lead falls onto soil, it usually sticks to soil particles.
- Movement of lead from soil into groundwater will depend on the type of lead compound and the characteristics of the soil.
- Much of the lead in inner-city soils comes from old houses painted with lead-based paint.

How might I be exposed to lead?

- Eating food or drinking water that contains lead.
- Spending time in areas where lead-based paints have been used and are deteriorating.
- Working in a job where lead is used.
- Using health-care products or folk remedies that contain lead.
- Engaging in certain hobbies in which lead is used (for example, stained glass).

How can lead affect my health?

Lead can affect almost every organ and system in your body. The most sensitive is the central nervous system, particularly in children. Lead also damages kidneys and the reproductive system. The effects are the same whether it is breathed or swallowed.

At high levels, lead may decrease reaction time, cause weakness in fingers, wrists, or ankles, and possibly affect the memory. Lead may cause anemia, a disorder of the blood. It can also damage the male reproductive system. The connection between these effects and exposure to low levels of lead is uncertain.

How likely is lead to cause cancer?

The Department of Health and Human Services has determined that lead acetate and lead phosphate may reasonably

be anticipated to be carcinogens based on studies in animals. There is inadequate evidence to clearly determine lead's carcinogenicity in people.

How can lead affect children?

Small children can be exposed by eating lead-based paint chips, chewing on objects painted with lead-based paint, or swallowing house dust or soil that contains lead.

Children are more vulnerable to lead poisoning than adults. A child who swallows large amounts of lead may develop blood anemia, severe stomachache, muscle weakness, and brain damage. A large amount of lead might get into a child's body if the child ate small pieces of old paint that contained large amounts of lead. If a child swallows smaller amounts of lead, much less severe effects on blood and brain function may occur. Even at much lower levels of exposure, lead can affect a child's mental and physical growth.

Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. These effects are more common if the mother or baby was exposed to high levels of lead.

How can families reduce the risk of exposure to lead?

Avoid exposure to sources of lead. Do not allow children to chew or mouth painted surfaces that may have been painted with lead-based paint (homes built before 1978). Run your water for 15 to 30 seconds before drinking or cooking with it. This will get rid of lead that may have leached out of pipes. Some types of paints and pigments that are used as make-up or hair coloring contain lead. Keep these kinds of products away from children. Wash children's hands and faces often to remove lead dusts and soil, and regularly clean the house of dust and tracked in soil.

Is there a medical test to show whether I've been exposed to lead?

A blood test is available to measure the amount of lead in your blood and to estimate the amount of your exposure to lead. Blood tests are commonly used to screen children for lead poisoning. Lead in teeth and bones can be measured with X-rays, but this test is not as readily available. Medical treatment may be necessary in children if the lead concentration in blood is higher than 45 micrograms per deciliter (45 μg/dL).

Has the federal government made recommendations to protect human health?

The Centers for Disease Control and Prevention (CDC) recommends that children ages 1 and 2 be screened for lead poisoning. Children who are 3 to 6 years old should be tested for lead if they have never been tested for lead before and if they receive services from public assistance programs; if they live in or regularly visit a building built before 1950; if they live in or visit a home built before 1978 that is being remodeled; or if they have a brother, sister, or playmate who has had lead poisoning. CDC considers children to have an elevated level of lead if the amount in the blood is 10 μg/dL.

The EPA requires lead in air not to exceed 1.5 micrograms per cubic meter (1.5 $\mu g/m^3$) averaged over 3 months. EPA limits lead in drinking water to 15 μg per liter.

The Occupational Health and Safety Administration (OSHA) develops regulations for workers exposed to lead. The Clean Air Act Amendments of 1990 banned the sale of leaded gasoline. The Federal Hazardous Substance Act bans children's products that contain hazardous amounts of lead.

Source of Information

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. Toxicological profile for lead. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 404-639-6359. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

APPENDIX D

SAMPLING INFORMATION

- Environmental Protection Agency (EPA) Laboratory Analytical Results
- Sample Field Sheets

Environmental Protection Agency (EPA)
Laboratory Analytical Results

Soil/Sediment
VOCs, SVOCs, and PCB/Pesticides

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: **Electronic (Level 2) Review of Data**

Received for Review on 11/08/01

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

TO: Data User: IDEM

The following data has been electronically reviewed by CADRE. No review of the raw data, laboratory narrative, laboratory forms or chain-of-custody forms was performed.

We have reviewed the data for the following case:

SITE NAME: Becks Lake (IN)

CASE NUMBER: 29867 SDG NUMBER: E06U8

Number and Type of Samples: 15 (soil)

Sample Numbers: E06U8-9, E06W2, E06X8-9, E06Y0-9

Laboratory: ENVIROSYSTEMS Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Fifteen (15) soil samples, numbered E06U8, E06U9, E06W2, E06X8, E06X9 and E06Y0 through E06Y9, were collected on October 16, 2001 The lab received the samples on October 18, 2001 in good condition. All samples were analyzed for the full list of organic analytes. All were analyzed according to CLP SOW OLM04.2 5/99.

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

1. HOLDING TIME

No problems found for this qualification.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

The complete primary criteria for BFB are as follows:
Bromofluorobenzene (BFB)

m/z	ION ABUNDANCE CRITERIA (Volatile)
50	8.0 - 40.0% of m/z 95
75	30.0 - 66.0% of m/z 95
95	base peak, 100.0% relative abundance
96	5.0 - 9.0% of m/z 95
173	less than 2.0% of m/z 174
174	50.0 - 120.0% of m/z 95
175	4.0 - 9.0% of m/z 174
176	93.0 - 101.0% of m/z 174
177	5.0 - 9.0% of m/z 176

DC-12: The following volatile samples are not associated with any instrument performance check. Manual review of the data is required.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9, VBLKFO
VBLKFP, VBLKFT, VHBLKFP

3. CALIBRATION

CALIBRATION CRITERIA

Volatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	30
Maximum %D (continuing calibration)	25	25
Calibration time period	12	

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Semivolatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	30
Maximum %D (continuing calibration)	25	25
Calibration time period	12	

DC-14: The following volatile samples were not associated with any calibration because no associated instrument performance check could be found. Manual review of the data is required.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9, VBLKFO
VBLKFP, VBLKFT, VHBLKFP

DC-94: The following semivolatile samples are associated with an initial calibration with relative response factors (RRFs) outside primary criteria.
Hits are flagged "J" and non-detects are qualified "R".

2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol
E06X8, E06Y0, E06Y8, SBLK46, SBLK52

DC-97: The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has relative response factors (RRFs) outside primary criteria.
Hits are flagged "J" and non-detects are qualified "R".

2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

DC-99: The following semivolatile samples are associated with a continuing calibration relative response factor (RRF50) outside primary criteria.
Hits are flagged "J" and non-detects are qualified "R".

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

2,4-Dinitrophenol
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

4,6-Dinitro-2-methylphenol
E06U8, E06X9, E06Y1, E06Y1MS, E06Y1MSD, E06Y2
E06Y3, E06Y4, E06Y5, E06Y6, E06Y7, E06Y9

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

3-Nitroaniline
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

4-Nitroaniline, Carbazole, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene
E06U9, E06W2

3,3'-Dichlorobenzidine
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

4. BLANKS

LABORATORY BLANKS CRITERIA

Volatile

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Other compounds	5.00	5.00

Semivolatile

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

DC-26: No method blanks were found for the following volatile samples due to lack of an instrument performance check. Hits and non-detects are not flagged.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9

DC-72: The blank associated with the following sample was qualified "R" during a previous qualification. Hits and non-detects are not flagged.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0, E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6, E06Y7, E06Y8, E06Y9
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol

DC-206: The following semivolatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Di-n-butylphthalate
E06U9, E06W2, E06X8, E06X9, E06Y0, E06Y1
E06Y1MS, E06Y1MSD, E06Y2, E06Y4, E06Y5, E06Y6
E06Y7, E06Y8, E06Y9

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

No problems found for this qualification.

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No problems found for this qualification.

7. FIELD BLANK AND FIELD DUPLICATE

There was no designated field blank or field duplicate in this data set. Results are not qualified based upon the results of the field blank or field duplicates.

8. INTERNAL STANDARDS

INTERNAL STANDARD CRITERIA

Volatile

Retention Time & Area Count Limits

	-- Primary --		- Expanded --	
	Lower	Upper	Lower	Upper
Retention time	- 0.5	+ 0.5	- 0.5	+ 0.5
Area count	/ 2	* 2	/ 5	* 2

DC-40: The following volatile samples have no associated internal standard. Manual review of the data is required.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9, VBLKFO
VBLKFP, VBLKFT, VHBLKFP

9. COMPOUND IDENTIFICATION

N/A

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

CONTRACT REQUIRED SAMPLE QUANTITY

Low Med

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

	Water	Soil	Soil
VOA	5.0 (ML)	5.0 (G)	4.0 (G)
BNA	1000.0 (ML)	30.0 (G)	1.0 (G)
PES	1000.0 (ML)	30.0 (G)	

DC-45: The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U8
Acetone , Methylene Chloride

E06U9
Carbon Disulfide, Methylene Chloride

E06W2
Methylene Chloride

E06X8
Methylene Chloride

E06X9
Methylene Chloride

E06Y0
1,1-Dichloroethene , Methylene Chloride

E06Y1
Methylene Chloride

E06Y1MS
Methyl Acetate, Methylene Chloride , Bromodichloromethane

E06Y1MSD
Methylene Chloride , Styrene

E06Y2
1,1-Dichloroethene , Methylene Chloride

E06Y3

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

1,1-Dichloroethene , Methylene Chloride

E06Y4
1,1-Dichloroethene , Methylene Chloride

E06Y5
Methylene Chloride

E06Y6
1,1-Dichloroethene , Methylene Chloride

E06Y7
Methylene Chloride

E06Y8
Methylene Chloride

E06Y9
Methylene Chloride

VBLKFO
Methylene Chloride

VBLKFP
Methylene Chloride

VBLKFT
Methylene Chloride

VHBLKFP
Methylene Chloride

DC-110: The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U8
Fluoranthene, Pyrene, Chrysene, bis(2-Ethylhexyl)phthalate
Benzo(b)fluoranthene, Benzo(k)fluoranthene

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

E06U9
Diethylphthalate, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd) pyrene,
Benzo(g,h,i)perylene

E06W2
Benzaldehyde, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Benzo(g,h,i)perylene

E06X8
bis(2-Ethylhexyl)phthalate

E06X9
Phenanthrene, Fluoranthene, Benzo(a)anthracene
Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Benzo(g,h,i)perylene

E06Y0
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

E06Y1
Phenanthrene, Anthracene, Benzo(a)anthracene
Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y1MS
Phenanthrene, Fluoranthene, Benzo(a)anthracene
Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y1MSD
Diethylphthalate, Phenanthrene, Fluoranthene
Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

E06Y2
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene

E06Y3
Fluoranthene, Pyrene, bis(2-Ethylhexyl)phthalate

E06Y4
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

E06Y5
Diethylphthalate, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene

E06Y6
Diethylphthalate, Fluorene, Anthracene, Carbazole
bis(2-Ethylhexyl)phthalate, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

E06Y7
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y8
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y9
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

SBLK46

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Di-n-butylphthalate

SBLK52
Di-n-butylphthalate

DC-422: The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria.
Professional judgement should be used to qualify the data.

E06W2
4,4'-DDT, Endrin aldehyde

E06X9
Heptachlor epoxide, 4,4'-DDE, Endrin ketone, alpha-Chlordane

E06X9DL
alpha-Chlordane

E06Y5
4,4'-DDE, 4,4'-DDD, alpha-Chlordane

E06Y7
4,4'-DDT

E06Y8
4,4'-DDT

11. SYSTEM PERFORMANCE

N/A.

12. ADDITIONAL INFORMATION

On pesticide raw data lab reported "Patter resembles AROCLOR, but does not match Monsanto variety" and " Negative AR1260 Monsanto. Possible European or Japanese variety"

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)
H	Sample result is estimated and biased high.
L	Sample result is estimated and biased low.

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

TICS

Volatile Analysis Data - VBLKFO
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
91-20-3	NAPHTHALENE	32.20	15.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 1

Volatile Analysis Data - E06Y1
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
91-20-3	NAPHTHALENE	32.19	13.000	NJB

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 2

Volatile Analysis Data - E06W2
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
275-51-4	AZULENE	32.19	43.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 3

Volatile Analysis Data - E06X9
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
91-20-3	NAPHTHALENE	32.20	7.000	NJB

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 4

Semivolatile Analysis Data - SBLK46
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.37	200.000	J

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

UNKNOWN	8.11	82.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 5

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Semivolatile Analysis Data - E06X8
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	110.000	J
	UNKNOWN	7.37	360.000	JB
	UNKNOWN	8.12	840.000	JB
	UNKNOWN	8.48	180.000	J
	UNKNOWN	9.06	330.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.67	110.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 6

Semivolatile Analysis Data - E06Y8
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	130.000	J
80-56-8	.ALPHA.-PINENE	7.14	150.000	NJ
	UNKNOWN	7.38	1400.000	JB
	UNKNOWN	8.12	1300.000	JB
	UNKNOWN	8.49	120.000	J
5989-27-5	D-LIMONENE	8.76	580.000	NJ
	UNKNOWN	8.90	130.000	J
	UNKNOWN	9.06	360.000	J
	UNKNOWN	16.71	120.000	J
57-10-3	N-HEXADECANOIC ACID	20.53	160.000	NJ
	UNKNOWN	27.74	260.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 7

Semivolatile Analysis Data - E06Y0
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	190.000	J
	UNKNOWN	7.37	730.000	JB
	UNKNOWN	8.11	830.000	JB
	UNKNOWN	8.49	140.000	J
	UNKNOWN	8.90	140.000	J
	UNKNOWN	9.06	350.000	J
110-27-0	ISOPROPYL MYRISTATE	19.15	170.000	NJ
57-10-3	N-HEXADECANOIC ACID	20.52	100.000	NJ
111-06-8	HEXADECANOIC ACID, BUTYL ESTER	22.63	470.000	NJ
123-95-5	OCTADECANOIC ACID, BUTYL ESTER	24.34	970.000	NJ
75207-54-4	2-PENTACOSANONE	26.88	100.000	NJ
	UNKNOWN	27.73	160.000	J
	UNKNOWN	29.66	140.000	J

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

	UNKNOWN	31.03	120.000	J
83-48-7	STIGMASTEROL	31.13	220.000	NJ
	UNKNOWN	31.27	180.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.68	260.000	NJ
	UNKNOWN	31.82	140.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 8

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Semivolatile Analysis Data - E06X9
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	250.000	J
	UNKNOWN	7.37	580.000	JB
	UNKNOWN	8.13	1500.000	JB
	UNKNOWN	8.49	150.000	J
	UNKNOWN	8.91	110.000	J
	UNKNOWN	9.07	550.000	J
	UNKNOWN	19.13	100.000	J
57-10-3	N-HEXADECANOIC ACID	20.52	120.000	NJ
	UNKNOWN	22.32	110.000	J
	UNKNOWN	22.75	110.000	J
33543-31-6	FLUORANTHENE, 2-METHYL-	23.14	180.000	NJ
	UNKNOWN	23.74	5500.000	J
103-23-1	HEXANEDIOIC ACID, BIS(2-ETHYLHEXYL) ESTE	24.11	3500.000	NJ
103-23-1	HEXANEDIOIC ACID, BIS(2-ETHYLHEXYL) ESTE	24.48	4700.000	NJ
	UNKNOWN	24.70	100.000	J
	UNKNOWN	27.74	450.000	J
	UNKNOWN	31.28	520.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.68	450.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 9

Semivolatile Analysis Data - E06Y5
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	440.000	J
111-77-3	ETHANOL, 2-(2-METHOXYETHOXY)-	7.14	130.000	NJ
	UNKNOWN	7.37	490.000	JB
	UNKNOWN	8.12	1100.000	JB
	UNKNOWN	8.49	170.000	J
	UNKNOWN	9.08	700.000	J
	UNKNOWN	27.74	78.000	J
	UNKNOWN	31.03	85.000	J
	UNKNOWN	31.27	100.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 10

Semivolatile Analysis Data - E06Y3
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	450.000	J
	UNKNOWN	7.37	870.000	JB
	UNKNOWN	8.12	1700.000	JB

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

	UNKNOWN	8.49	320.000	J
	UNKNOWN	9.07	640.000	J
57-10-3	N-HEXADECANOIC ACID	20.52	160.000	NJ
13360-61-7	1-PENTADECENE	26.74	330.000	NJ
	UNKNOWN	27.55	190.000	J
	UNKNOWN	27.74	520.000	J
67860-04-2	OXIRANE, HEPTADECYL-	29.12	180.000	NJ
57-88-5	CHOLESTEROL	29.95	150.000	NJ
83-47-6	.GAMMA.-SITOSTEROL	31.69	910.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 11

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Semivolatile Analysis Data - E06Y4
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	180.000	J
	UNKNOWN	7.37	1300.000	JB
	UNKNOWN	8.12	700.000	JB
	UNKNOWN	8.91	370.000	J
	UNKNOWN	9.07	240.000	J
103-82-2	BENZENEACETIC ACID	12.11	120.000	NJ
57-10-3	N-HEXADECANOIC ACID	20.52	150.000	NJ
	UNKNOWN	20.98	420.000	J
50-29-3	CHLOROPHENOTHANE	24.27	140.000	NJ
629-66-3	2-NONADECANONE	25.35	140.000	NJ
75207-54-4	2-PENTACOSANONE	26.88	530.000	NJ
	UNKNOWN	27.74	290.000	J
	UNKNOWN	28.90	380.000	J
	UNKNOWN	29.57	1300.000	J
17600-99-6	2-NONACOSANONE	29.68	470.000	NJ
	UNKNOWN	31.05	6300.000	J
	UNKNOWN	31.29	1500.000	J
100021-42-0	STIGMASTEROL, 22,23-DIHYDRO-	31.69	730.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 12

Semivolatile Analysis Data - E06Y7
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	310.000	J
	UNKNOWN	7.38	600.000	JB
	UNKNOWN	8.12	1000.000	JB
	UNKNOWN	8.49	130.000	J
	UNKNOWN	8.91	87.000	J
	UNKNOWN	9.08	560.000	J
111-02-4	2,6,10,14,18,22-TETRACOSAHEXAENE, 2,6,10	27.73	640.000	NJ
57-88-5	CHOLESTEROL	29.96	320.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 13

Semivolatile Analysis Data - E06Y2
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	20.86	110.000	J
103-23-1	HEXANEDIOIC ACID, BIS(2 ETHYLHEXYL) ESTE	24.46	110.000	NJ
	UNKNOWN	27.35	220.000	J
7683-64-9	SQUALENE	27.73	300.000	NJ

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

34303-81-6	3-HEXADECENE, (Z)-	29.55	180.000	NJ
100021-03-8	17-(1,5-DIMETHYLHEXYL)-10,13-DIMETHYL-2,	29.95	290.000	NJ
474-62-4	CAMPESTEROL	30.84	110.000	NJ
	UNKNOWN	31.06	280.000	J
83-48-7	STIGMASTEROL	31.13	260.000	NJ
83-47-6	.GAMMA.-SITOSTEROL	31.68	390.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 14

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Semivolatile Analysis Data - E06Y6
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	260.000	J
	UNKNOWN	7.38	800.000	JB
	UNKNOWN	8.12	1200.000	JB
	UNKNOWN	8.49	100.000	J
	UNKNOWN	8.93	180.000	J
	UNKNOWN	9.09	650.000	J
610-48-0	ANTHRACENE, 1-METHYL-	20.12	110.000	NJ
613-12-7	ANTHRACENE, 2-METHYL-	20.17	130.000	NJ
	UNKNOWN	20.37	140.000	J
84-65-1	9,10-ANTHRACENEDIONE	20.87	100.000	NJ
	UNKNOWN	20.99	150.000	J
238-84-6	11H-BENZO[A]FLUORENE	23.15	150.000	NJ
	UNKNOWN	24.71	140.000	J
638-66-4	OCTADECANAL	27.75	540.000	NJ
	UNKNOWN	29.56	590.000	J
	UNKNOWN	31.29	770.000	J
100021-42-0	STIGMASTEROL, 22,23-DIHYDRO-	31.69	350.000	NJ

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Semivolatile Analysis Data - E06U8
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	2400.000	J
	UNKNOWN	7.38	5500.000	JB
	UNKNOWN	8.12	8600.000	JB
	UNKNOWN	8.49	790.000	J
	UNKNOWN	9.08	4800.000	J
57-10-3	N-HEXADECANOIC ACID	20.52	730.000	NJ
	UNKNOWN	21.54	1100.000	J
7683-64-9	SQUALENE	27.73	3900.000	NJ
	UNKNOWN	30.23	1700.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.70	2000.000	NJ

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Semivolatile Analysis Data - E06Y1
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	410.000	J
	UNKNOWN	7.38	890.000	JB
	UNKNOWN	8.13	1200.000	JB

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

	UNKNOWN	8.50	160.000	J
	UNKNOWN	8.92	100.000	J
	UNKNOWN	9.08	740.000	J
106-23-0	6-OCTENAL, 3,7-DIMETHYL-	10.73	150.000	NJ
	UNKNOWN	20.87	100.000	J
	UNKNOWN	27.74	340.000	J
629-96-9	1-EICOSANOL	29.55	230.000	NJ

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Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

Semivolatile Analysis Data - E06Y9
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	190.000	J
	UNKNOWN	7.38	810.000	JB
	UNKNOWN	8.12	930.000	JB
	UNKNOWN	9.07	280.000	J
75207-54-4	2-PENTACOSANONE	26.88	130.000	NJ
	UNKNOWN	27.03	130.000	J
	UNKNOWN	27.75	510.000	J
112-92-5	1-OCTADECANOL	28.17	1900.000	NJ
56554-78-0	7-HEPTADECENE, 1-CHLORO-	29.56	250.000	NJ
7796-19-2	2-HEPTACOSANONE	29.68	290.000	NJ
	UNKNOWN	31.29	230.000	J
100021-42-0	STIGMASTEROL, 22,23-DIHYDRO-	31.69	240.000	NJ

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Semivolatile Analysis Data - E06U9
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	1900.000	J
	UNKNOWN	7.38	7200.000	JB
	UNKNOWN	8.13	6700.000	JB
	UNKNOWN	8.50	620.000	J
	UNKNOWN	9.09	3900.000	J
110-27-0	ISOPROPYL MYRISTATE	19.17	1200.000	NJ
	UNKNOWN	19.77	530.000	J
57-10-3	N-HEXADECANOIC ACID	20.54	700.000	NJ
	UNKNOWN	20.87	1100.000	J
	UNKNOWN	21.16	1200.000	J
	UNKNOWN	21.55	1300.000	J
	UNKNOWN	21.64	580.000	J
	UNKNOWN	21.70	770.000	J
	UNKNOWN	26.65	1000.000	J
	UNKNOWN	30.25	2900.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 19

Semivolatile Analysis Data - E06W2
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.39	5900.000	JB
4436-75-3	3-HEXENE-2,5-DIONE	7.55	710.000	NJ
	UNKNOWN	8.12	3700.000	JB

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 **SDG Number: E06U8**
Site Name: Becks Lake (IN) **Laboratory: Envirosystems**

	UNKNOWN	9.09	1300.000	J
	UNKNOWN	14.99	730.000	J
	UNKNOWN	18.29	380.000	J
544-63-8	TETRADECANOIC ACID	18.47	380.000	NJ
56554-34-8	2-HEXADECENE, 2,6,10,14-TETRAMETHYL-	19.26	380.000	NJ
	UNKNOWN	19.33	370.000	J
14237-73-1	2-HEXADECENE, 3,7,11,15-TETRAMETHYL-, [R	19.39	370.000	NJ
	UNKNOWN	19.77	380.000	J
57-10-3	N-HEXADECANOIC ACID	20.56	2000.000	NJ
	UNKNOWN	20.87	960.000	J
1686-66-4	PHENANTHRENE, 7-ETHENYL-1,2,3,4,4A,4B,5,	21.16	1100.000	NJ
	UNKNOWN	21.56	1800.000	J
	UNKNOWN	21.70	860.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 20

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Soil / Sed
VOCs, SVOCs, Pest

DATE: November 29, 2001

Indiana Dept of Environmental Management
Office of Environmental/Site Investigation Section
P.O. Box 6015
100 N. Senate Avenue
Indianapolis, IN 46206-6015

Attn: Mark Jaworski

SITE NAME: Becks Lake

CASE NO	LAB	NO # OF SAMPLES	SDG	MATRIX
29867	Envirosystems	15	E06U8	Soil

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Date:_____

Signature:_____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

RECEIVED
DEC 03 2001
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

NOV 2 9 2001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: Electronic (Level 2) Review of Data

Received for Review on 11/08/01

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

TO: Data User: IDEM

The following data has been electronically reviewed by CADRE. A review of the raw data, laboratory narrative, laboratory forms o chain-of-custody forms was performed.

We have reviewed the data for the following case:

SITE NAME: Becks Lake (IN)

CASE NUMBER: 29867 SDG NUMBER: E06U8

Number and Type of Samples: 15 (soil)

Sample Numbers: E06U8-9, E06W2, E06X8-9, E06Y0-9

Laboratory: ENVIROSYSTEMS Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Fifteen (15) soil samples, numbered E06U8, E06U9, E06W2, E06X8, E06X9 and E06Y0 through E06Y9, were collected on October 16, 2001 The lab received the samples on October 18, 2001 in good condition. All samples were analyzed for the full list of organic analytes. All were analyzed according to CLP SOW OLM04.2 5/99.

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

1. HOLDING TIME

No problems found for this qualification.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

The complete primary criteria for BFB are as follows:
Bromofluorobenzene (BFB)

m/z	ION ABUNDANCE CRITERIA (Volatile)
50	8.0 - 40.0% of m/z 95
75	30.0 - 66.0% of m/z 95
95	base peak, 100.0% relative abundance
96	5.0 - 9.0% of m/z 95
173	less than 2.0% of m/z 174
174	50.0 - 120.0% of m/z 95
175	4.0 - 9.0% of m/z 174
176	93.0 - 101.0% of m/z 174
177	5.0 - 9.0% of m/z 176

DC-12: The following volatile samples are not associated with any instrument performance check. Manual review of the data is required.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9, VBLKFO
VBLKFP, VBLKFT, VHBLKFP

3. CALIBRATION

CALIBRATION CRITERIA

Volatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	30
Maximum %D (continuing calibration)	25	25
Calibration time period	12	12

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

Semivolatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	30
Maximum %D (continuing calibration)	25	25
Calibration time period	12	

DC-14: The following volatile samples were not associated with any calibration because no associated instrument performance check could be found. Manual review of the data is required.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9, VBLKFO
VBLKFP, VBLKFT, VHBLKFP

DC-94: The following semivolatile samples are associated with an initia calibration with relative response factors (RRFs) outside primar criteria.
Hits are flagged "J" and non-detects are qualified "R".

2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol
E06X8, E06Y0, E06Y8, SBLK46, SBLK52

DC-97: The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has relative response factors (RRFs) outside primary criteria.
Hits are flagged "J" and non-detects are qualified "R".

2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

DC-99: The following semivolatile samples are associated with a continuing calibration relative response factor (RRF50) outside primary criteria.
Hits are flagged "J" and non-detects are qualified "R".

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

2,4-Dinitrophenol
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

4,6-Dinitro-2-methylphenol
E06U8, E06X9, E06Y1, E06Y1MS, E06Y1MSD, E06Y2
E06Y3, E06Y4, E06Y5, E06Y6, E06Y7, E06Y9

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

3-Nitroaniline
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

4-Nitroaniline, Carbazole, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene
E06U9, E06W2

3,3'-Dichlorobenzidine
E06U8, E06U9, E06W2, E06X9, E06Y1, E06Y1MS
E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6
E06Y7, E06Y9

4. BLANKS

LABORATORY BLANKS CRITERIA

Volatile

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

Semivolatile

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

DC-26: No method blanks were found for the following volatile samples due to lack of an instrument performance check. Hits and non-detects are not flagged.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9

DC-72: The blank associated with the following sample was qualified "R" during a previous qualification. Hits and non-detects are not flagged.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0, E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4, E06Y5, E06Y6, E06Y7, E06Y8, E06Y9
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol

DC-206: The following semivolatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL.
Hits are qualified "U" and non-detects are not flagged.

Di-n-butylphthalate
E06U9, E06W2, E06X8, E06X9, E06Y0, E06Y1
E06Y1MS, E06Y1MSD, E06Y2, E06Y4, E06Y5, E06Y6
E06Y7, E06Y8, E06Y9

5. **SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY**

No problems found for this qualification.

6. **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Assembled By: T. SEDLACEK LITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

No problems found for this qualification.

7. FIELD BLANK AND FIELD DUPLICATE

There was no designated field blank or field duplicate in this data set. Results are not qualified based upon the results of the field blank or field duplicates.

8. INTERNAL STANDARDS

INTERNAL STANDARD CRITERIA

Volatile

Retention Time & Area Count Limits

	-- Primary --		- Expanded --	
	Lower	Upper	Lower	Upper
Retention time	- 0.5	+ 0.5	- 0.5	+ 0.5
Area count	/ 2	* 2	/ 5	* 2

DC-40: The following volatile samples have no associated internal standard. Manual review of the data is required.

E06U8, E06U9, E06W2, E06X8, E06X9, E06Y0
E06Y1, E06Y1MS, E06Y1MSD, E06Y2, E06Y3, E06Y4
E06Y5, E06Y6, E06Y7, E06Y8, E06Y9, VBLKFO
VBLKFP, VBLKFT, VHBLKFP

9. COMPOUND IDENTIFICATION

N/A

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

CONTRACT REQUIRED SAMPLE QUANTITY

Water	Low Soil	Med Soil

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

VOA	5.0 (ML)	5.0 (G)	4.0 (G)
BNA	1000.0 (ML)	30.0 (G)	1.0 (G)
PES	1000.0 (ML)	30.0 (G)	

DC-45: The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U8
Acetone , Methylene Chloride

E06U9
Carbon Disulfide, Methylene Chloride

E06W2
Methylene Chloride

E06X8
Methylene Chloride

E06X9
Methylene Chloride

E06Y0
1,1-Dichloroethene , Methylene Chloride

E06Y1
Methylene Chloride

E06Y1MS
Methyl Acetate, Methylene Chloride , Bromodichloromethane

E06Y1MSD
Methylene Chloride , Styrene

E06Y2
1,1-Dichloroethene , Methylene Chloride

E06Y3
1,1-Dichloroethene , Methylene Chloride

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

E06Y4
1,1-Dichloroethene , Methylene Chloride

E06Y5
Methylene Chloride

E06Y6
1,1-Dichloroethene , Methylene Chloride

E06Y7
Methylene Chloride

E06Y8
Methylene Chloride

E06Y9
Methylene Chloride

VBLKFO
Methylene Chloride

VBLKFP
Methylene Chloride

VBLKFT
Methylene Chloride

VHBLKFP
Methylene Chloride

DC-110: The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U8
Fluoranthene, Pyrene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene

E06U9
Diethylphthalate, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U8
Laboratory: Envirosystems

pyrene, Benzo(g,h,i)perylene

E06W2
Benzaldehyde, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06X8
bis(2-Ethylhexyl)phthalate

E06X9
Phenanthrene, Fluoranthene, Benzo(a)anthracene
Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y0
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

E06Y1
Phenanthrene, Anthracene, Benzo(a)anthracene
Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylen

E06Y1MS
Phenanthrene, Fluoranthene, Benzo(a)anthracene
Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylen

E06Y1MSD
Diethylphthalate, Phenanthrene, Fluoranthene
Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrer

E06Y2
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

Case Number : 29867 SDG Number: E06U8
Site Name: Becks Lake (IN) Laboratory: Envirosystems

E06Y3
Fluoranthene, Pyrene, bis(2-Ethylhexyl)phthalate

E06Y4
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

E06Y5
Diethylphthalate, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene

E06Y6
Diethylphthalate, Fluorene, Anthracene, Carbazole
bis(2-Ethylhexyl)phthalate, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

E06Y7
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y8
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

E06Y9
Phenanthrene, Fluoranthene, Pyrene
Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

SBLK46
Di-n-butylphthalate

SBLK52
Di-n-butylphthalate

DC-422: The following pesticide samples have analytes for which the

Case Number : 29867 SDG Number: E06U8
Site Name: Becks Lake (IN) Laboratory: Envirosystems

percent difference between column results exceeds primary criteria.
Professional judgement should be used to qualify the data.

E06W2
4,4'-DDT, Endrin aldehyde

E06X9
Heptachlor epoxide, 4,4'-DDE, Endrin ketone, alpha-Chlordan

E06X9DL
alpha-Chlordane

E06Y5
4,4'-DDE, 4,4'-DDD, alpha-Chlordane

E06Y7
4,4'-DDT

E06Y8
4,4'-DDT

11. SYSTEM PERFORMANCE

N/A.

12. ADDITIONAL INFORMATION

On pesticide raw data lab reported "Patter resembles AROCLOR, but do not match Monsanto variety" and " Negative AR1260 Monsanto. Possible European or Japanese variety"

Assembled By: T. SEDLACEK IITRI/ESAT
Date: November 27, 2001

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitatic limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentati identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentati identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)
H	Sample result is estimated and biased high.
L	Sample result is estimated and biased low.

Volatile Analysis Data - VBLKFO
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
91-20-3	NAPHTHALENE	32.20	15.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 1

Volatile Analysis Data - E06Y1
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
91-20-3	NAPHTHALENE	32.19	13.000	NJB

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 2

Volatile Analysis Data - E06W2
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
275-51-4	AZULENE	32.19	43.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 3

Volatile Analysis Data - E06X9
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
91-20-3	NAPHTHALENE	32.20	7.000	NJB

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 4

Semivolatile Analysis Data - SBLK46
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.37	200.000	J
	UNKNOWN	8.11	82.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 5

Semivolatile Analysis Data - E06X8
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8

LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	110.000	J
	UNKNOWN	7.37	360.000	JB
	UNKNOWN	8.12	840.000	JB
	UNKNOWN	8.48	180.000	J
	UNKNOWN	9.06	330.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.67	110.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 6

Semivolatile Analysis Data - E06Y8
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8

LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	130.000	J
80-56-8	.ALPHA.-PINENE	7.14	150.000	NJ
	UNKNOWN	7.38	1400.000	JB
	UNKNOWN	8.12	1300.000	JB
	UNKNOWN	8.49	120.000	J
5989-27-5	D-LIMONENE	8.76	580.000	NJ
	UNKNOWN	8.90	130.000	J
	UNKNOWN	9.06	360.000	J
	UNKNOWN	16.71	120.000	J
57-10-3	N-HEXADECANOIC ACID	20.53	160.000	NJ
	UNKNOWN	27.74	260.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 7

Semivolatile Analysis Data - E06Y0
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8

LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	190.000	J
	UNKNOWN	7.37	730.000	JB
	UNKNOWN	8.11	830.000	JB
	UNKNOWN	8.49	140.000	J
	UNKNOWN	8.90	140.000	J
	UNKNOWN	9.06	350.000	J
110-27-0	ISOPROPYL MYRISTATE	19.15	170.000	NJ
57-10-3	N-HEXADECANOIC ACID	20.52	100.000	NJ
111-06-8	HEXADECANOIC ACID, BUTYL ESTER	22.63	470.000	NJ
123-95-5	OCTADECANOIC ACID, BUTYL ESTER	24.34	970.000	NJ
75207-54-4	2-PENTACOSANONE	26.08	100.000	NJ
	UNKNOWN	27.73	160.000	J
	UNKNOWN	29.66	140.000	J
	UNKNOWN	31.03	120.000	J
83-48-7	STIGMASTEROL	31.13	220.000	NJ
	UNKNOWN	31.27	180.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.68	260.000	NJ
	UNKNOWN	31.82	140.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 8

Semivolatile Analysis Data - E06X9
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	250.000	J
	UNKNOWN	7.37	580.000	JB
	UNKNOWN	8.13	1500.000	JB
	UNKNOWN	8.49	150.000	J
	UNKNOWN	8.91	110.000	J
	UNKNOWN	9.07	550.000	J
	UNKNOWN	19.13	100.000	J
57-10-3	N-HEXADECANOIC ACID	20.52	120.000	NJ
	UNKNOWN	22.32	110.000	J
	UNKNOWN	22.75	110.000	J
33543-31-6	FLUORANTHENE, 2-METHYL-	23.14	180.000	NJ
	UNKNOWN	23.74	5500.000	J
103-23-1	HEXANEDIOIC ACID, BIS(2-ETHYLHEXYL) ESTE	24.11	3500.000	NJ
103-23-1	HEXANEDIOIC ACID, BIS(2-ETHYLHEXYL) ESTE	24.48	4700.000	NJ
	UNKNOWN	24.70	100.000	J
	UNKNOWN	27.74	450.000	J
	UNKNOWN	31.28	520.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.68	450.000	NJ

Semivolatile Analysis Data - E06Y5
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	440.000	J
111-77-3	ETHANOL, 2-(2-METHOXYETHOXY)-	7.14	130.000	NJ
	UNKNOWN	7.37	490.000	JB
	UNKNOWN	8.12	1100.000	JB
	UNKNOWN	8.49	170.000	J
	UNKNOWN	9.08	700.000	J
	UNKNOWN	27.74	78.000	J
	UNKNOWN	31.03	85.000	J
	UNKNOWN	31.27	100.000	J

Semivolatile Analysis Data - E06Y3
Tentatively Identified Compounds

CASE NO: 29867 LABORATORY: ENVIROSYSTEMS, INC.
SDG NO: E06U8

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	450.000	J
	UNKNOWN	7.37	870.000	JB
	UNKNOWN	8.12	1700.000	JB
	UNKNOWN	8.49	320.000	J
	UNKNOWN	9.07	640.000	J
57-10-3	N-HEXADECANOIC ACID	20.52	160.000	NJ
13360-61-7	1-PENTADECENE	26.74	330.000	NJ
	UNKNOWN	27.55	190.000	J
	UNKNOWN	27.74	520.000	J
67860-04-2	OXIRANE, HEPTADECYL-	29.12	180.000	NJ
57-88-5	CHOLESTEROL	29.35	150.000	NJ
83-47-6	.GAMMA.-SITOSTEROL	31.68	910.000	NJ

Semivolatile Analysis Data - E06Y4
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E0608
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.05	180.000	J
	UNKNOWN	7.37	1300.000	JB
	UNKNOWN	8.12	700.000	JB
	UNKNOWN	8.91	370.000	J
	UNKNOWN	9.07	240.000	J
103-82-2	BENZENEACETIC ACID	12.11	120.000	NJ
57-10-3	N-HEXADECANOIC ACID	20.52	150.000	NJ
	UNKNOWN	20.98	420.000	J
50-29-3	CHLOROPHENOTHANE	24.27	140.000	NJ
629-66-3	2-NONADECANONE	25.35	140.000	NJ
75207-54-4	2-PENTACOSANONE	26.88	530.000	NJ
	UNKNOWN	27.74	290.000	J
	UNKNOWN	28.90	380.000	J
	UNKNOWN	29.57	1300.000	J
17600-99-6	2-NONACOSANONE	29.68	470.000	NJ
	UNKNOWN	31.05	6300.000	J
	UNKNOWN	31.29	1500.000	J
100021-42-0	STIGMASTEROL, 22,23-DIHYDRO-	31.69	730.000	NJ

FILE NAME: E0608.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 12

Semivolatile Analysis Data - E06Y7
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E0608
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	310.000	J
	UNKNOWN	7.38	600.000	JB
	UNKNOWN	8.12	1000.000	JB
	UNKNOWN	8.49	130.000	J
	UNKNOWN	8.91	87.000	J
	UNKNOWN	9.08	560.000	J
111-02-4	2,6,10,14,18,22-TETRACOSAHEXAENE, 2,6,10	27.73	640.000	NJ
57-88-5	CHOLESTEROL	29.96	320.000	NJ

FILE NAME: E0608.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 13

Semivolatile Analysis Data - E06Y2
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E0608
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	20.86	110.000	J
103-23-1	HEXANEDIOIC ACID, BIS(2-ETHYLHEXYL) ESTE	24.46	110.000	NJ
	UNKNOWN	27.35	220.000	J
7683-64-9	SQUALENE	27.73	300.000	NJ
34303-81-6	3-HEXADECENE, (Z)-	29.55	180.000	NJ
100021-03-8	17-(1,5-DIMETHYLHEXYL)-10,13-DIMETHYL-2,	29.95	290.000	NJ
474-62-4	CAMPESTEROL	30.84	110.000	NJ
	UNKNOWN	31.06	280.000	J
83-48-7	STIGMASTEROL	31.13	260.000	NJ
83-47-6	.GAMMA.-SITOSTEROL	31.68	390.000	NJ

FILE NAME: E0608.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 14

Semivolatile Analysis Data - E06Y6
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	260.000	J
	UNKNOWN	7.38	800.000	JB
	UNKNOWN	8.12	1200.000	JB
	UNKNOWN	8.49	100.000	J
	UNKNOWN	8.93	180.000	J
	UNKNOWN	9.09	650.000	J
610-48-0	ANTHRACENE, 1-METHYL-	20.12	110.000	NJ
613-12-7	ANTHRACENE, 2-METHYL-	20.17	130.000	NJ
	UNKNOWN	20.37	140.000	J
84-65-1	9,10-ANTHRACENEDIONE	20.87	100.000	NJ
	UNKNOWN	20.99	150.000	J
238-84-6	11H-BENZO(A)FLUORENE	23.15	150.000	NJ
	UNKNOWN	24.71	140.000	J
638-66-4	OCTADECANAL	27.75	540.000	NJ
	UNKNOWN	29.56	590.000	J
	UNKNOWN	31.29	770.000	J
100021-42-0	STIGMASTEROL, 22,23-DIHYDRO-	31.69	350.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 15

Semivolatile Analysis Data - E06U8
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	2400.000	J
	UNKNOWN	7.38	5500.000	JB
	UNKNOWN	8.12	8600.000	JB
	UNKNOWN	8.49	790.000	J
	UNKNOWN	9.08	4800.000	J
57-10-3	N-HEXADECANOIC ACID	20.52	730.000	NJ
	UNKNOWN	21.54	1100.000	J
7683-64-9	SQUALENE	27.73	3900.000	NJ
	UNKNOWN	30.23	1700.000	J
83-47-6	.GAMMA.-SITOSTEROL	31.70	2000.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 16

Semivolatile Analysis Data - E06Y1
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	410.000	J
	UNKNOWN	7.38	890.000	JB
	UNKNOWN	8.13	1200.000	JB
	UNKNOWN	8.50	160.000	J
	UNKNOWN	8.9[illegible]	100.000	J
	UNKNOWN	9.[illegible]6	340.000	J
106-23-0	6-OCTENAL, 3,7-DIMETHYL-	10.73	150.000	NJ
	UNKNOWN	20.87	100.000	J
	UNKNOWN	27.74	340.000	J
629-96-9	1-EICOSANOL	29.55	230.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 17

Semivolatile Analysis Data - E06Y9
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	190.000	J
	UNKNOWN	7.38	810.000	JB
	UNKNOWN	8.12	930.000	JB
	UNKNOWN	9.07	280.000	J
75207-54-4	2-PENTACOSANONE	26.88	130.000	NJ
	UNKNOWN	27.03	130.000	J
	UNKNOWN	27.75	510.000	J
112-92-5	1-OCTADECANOL	28.17	1900.000	NJ
56554-78-0	7-HEPTADECENE, 1-CHLORO-	29.56	250.000	NJ
7796-19-2	2-HEPTACOSANONE	29.68	290.000	NJ
	UNKNOWN	31.29	230.000	J
100021-42-0	STIGMASTEROL, 22,23-DIHYDRO-	31.69	240.000	NJ

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 18

Semivolatile Analysis Data - E06U9
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.06	1900.000	J
	UNKNOWN	7.38	7200.000	JB
	UNKNOWN	8.12	6700.000	JB
	UNKNOWN	8.50	620.000	J
	UNKNOWN	9.09	3900.000	J
110-27-0	ISOPROPYL MYRISTATE	19.17	1200.000	NJ
	UNKNOWN	19.77	530.000	J
57-10-3	N-HEXADECANOIC ACID	20.54	700.000	NJ
	UNKNOWN	20.87	1100.000	J
	UNKNOWN	21.16	1200.000	J
	UNKNOWN	21.55	1300.000	J
	UNKNOWN	21.64	580.000	J
	UNKNOWN	21.70	770.000	J
	UNKNOWN	26.65	1000.000	J
	UNKNOWN	30.25	2900.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: 19

Semivolatile Analysis Data - E06W2
Tentatively Identified Compounds

CASE NO: 29867
SDG NO: E06U8
LABORATORY: ENVIROSYSTEMS, INC.

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
	UNKNOWN	7.39	5900.000	JB
14436-75-3	3-HEXENE-2,5-DIONE	7.55	710.000	NJ
	UNKNOWN	8.12	3700.000	JB
	UNKNOWN	9.09	1300.000	J
	UNKNOWN	14.99	730.000	J
	UNKNOWN	16.29	360.000	J
544-63-8	TETRADECANOIC ACID	16.47	360.000	NJ
56554-34-6	2-HEXADECENE, 2,6,10,14-TETRAMETHYL-	19.26	380.000	NJ
	UNKNOWN	19.33	370.000	J
14237-73-1	2-HEXADECENE, 3,7,11,15-TETRAMETHYL-, (R	19.39	370.000	NJ
	UNKNOWN	19.77	380.000	J
57-10-3	N-HEXADECANOIC ACID	20.54	2900.000	NJ
	UNKNOWN	20.87	900.000	J
[illegible]	PHENANTHRENE, 7-ETHENYL-1,2,3,4,4A,4B,5,	21.16	1100.000	NJ
	UNKNOWN	21.55	1800.000	J
	UNKNOWN	21.70	940.000	J

FILE NAME: E06U8.SDG DATE: 11/09/2001 TIME: 08:13 CADRE99 PAGE: [illegible]

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 11/9/01

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

We have reviewed the data for the following case:

SITE NAME: Becks Lake (IN)

CASE NUMBER: 29867 SDG NUMBER: E0608

Number and Type of Samples: 15

Sample Numbers: E0608-9, E0602, E0688-9, E0640-9

Laboratory: Envirosystems Hrs for Review:

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

EPA

DAS No:
SDG No: E06018

Date Shipped:	10/17/01
Carrier Name:	FedEx
Airbill:	830661906668
Shipped to:	Envirosystems, Inc. 9200 Rumsey Rd. Suite B102 Columbia MD 21045 (410) 964-0330

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	10/17/01 3:30PM	[illegible]	10/18/01 11:00
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No: 68D99023
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME			INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E06W2	Sediment/ Dan Chesterson	L/G	BNA (21), VOA (21)	5039204 (Ice Only), 539205 (HCL) (2)	SD1	S: 10/16/01	2:30		ME06W2	
E06X8	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039214 (Ice Only), 5039215 (Ice Only), 5039216 (Ice Only) (3)	SS1	S: 10/16/01	4:04		ME06X8	
E06X9	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039218, 5039219, 5039220 (3)	SS2	S: 10/16/01	3:30		ME06X9	
E06Y5	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039246 (Ice Only), 5039247 (Ice Only), 5039248 (Ice Only) (3)	SS8	S: 10/16/01	1:20		ME06Y5	
E06Y6	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039250 (Ice Only), 5039251 (Ice Only), 5039252 (Ice Only) (3)	SS9	S: 10/16/01	12:50		ME06Y6	
E06Y7	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039254 (Ice Only), 5039255 (Ice Only), 5039256 (Ice Only) (3)	SS10	S: 10/16/01	1:00		ME06Y7	
E06Y8	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039258 (Ice Only), 5039259 (Ice Only), 5039260 (Ice Only) (3)	SS11	S: 10/16/01	12:05		ME06Y8	
E06Y9	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039262 (Ice Only), 5039263 (Ice Only), 5039264 (Ice Only) (3)	SS12	S: 10/16/01	12:30		ME06Y9	
EO6U8	Sediment/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039207 (Ice Only), 5039208 (Ice Only), 5039209 (Ice Only) (3)	SD2	S: 10/16/01	2:50		EO6U8	
EO6U9	Sediment/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039211 (Ice Only), 5039212 (Ice Only), 5039213 (Ice Only) (3)	SD3	S: 10/16/01	3:20		EO6U9	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3°C	Chain of Custody Seal Number: 20406, 29405
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ✓ Shipment Iced? ✓

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles

TR Number: 5-514185590-101701-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

F2V5.0.66 Page 1 of 1

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

DAS No:
SDG No: E06-108

L

Date Shipped: 10/17/01
Carrier Name: FedEx
Airbill: 830661906680
Shipped to: Envirosystems, Inc.
9200 Rumsey Rd.
Suite B102
Columbia MD 21045
(410) 964-0330

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	David P. Chester	10/17/01 3:30PM	[illegible]	10/18/01 11:0
2				
3				
4				

For Lab Use Only

Lab Contract No: 68[illegible]
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E06Y0	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	503922 (Ice Only), 503923 (Ice Only), 503924 (Ice Only) (3)	SS3	S: 10/16/01 2:45	ME06Y0	
E06Y1	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039226 (Ice Only), 5039227 (Ice Only), 5039228 (Ice Only), 5039229 (Ice Only), 5039230 (Ice Only), 5039231 (Ice Only) (6)	SS4	S: 10/16/01 2:45	ME06Y1	
E06Y2	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039234 (Ice Only), 5039235 (Ice Only), 5039236 (Ice Only) (3)	SS5	S: 10/16/01 3:00	ME06Y2	
E06Y3	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039238 (Ice Only), 5039239 (Ice Only), 539240 (Ice Only) (3)	SS6	S: 10/16/01 3:40	ME06Y3	
E06Y4	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039242 (Ice Only), 5039243 (Ice Only), 5039244 (Ice Only) (3)	SS7	S: 10/16/01 2:10	ME06Y4	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E06Y1	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2°C	Chain of Custody Seal Number: 20401, 20402
				Custody Seal Intact? ✓ Shipment Iced? ✓

Analysis Key: Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G
BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles

TR Number: 5-514185590-101701-0005

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

F2V5.0.66 Page 1 of 1

EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

DAS No:
SDG No: E06U18

L

Date Shipped:	10/17/01
Carrier Name:	FedEx
Airbill:	830661906679
Shipped to:	Envirosystems, Inc. 9200 Rumsey Rd. Suite B102 Columbia MD 21045 (410) 964-0330

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	10/17/01 3:30 PM	[illegible]	10/18/01 11:00
2			
3			
4			

Sampler Signature:

For Lab Use Only

Lab Contract No: [illegible]
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME			INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E06W2	Sediment/ Dan Chesterson	L/G	PEST (21)	5039203 (Ice Only) (1)	SD1	S: 10/16/01	2:30		ME06W2	
E06Y0	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	503922 (Ice Only), 503923 (Ice Only), 503924 (Ice Only) (3)	SS3	S: 10/16/01	2:45		ME06Y0	
E06Y1	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039226 (Ice Only), 5039227 (Ice Only), 5039228 (Ice Only), 5039229 (Ice Only), 5039230 (Ice Only), 5039231 (Ice Only) (6)	SS4	S: 10/16/01	2:45		ME06Y1	
E06Y2	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039234 (Ice Only), 5039235 (Ice Only), 5039236 (Ice Only) (3)	SS5	S: 10/16/01	3:00		ME06Y2	
E06Y3	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039238 (Ice Only), 5039239 (Ice Only), 539240 (Ice Only) (3)	SS6	S: 10/16/01	3:40		ME06Y3	
E06Y4	Surface Soil (0"-12")/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039242 (Ice Only), 5039243 (Ice Only), 5039244 (Ice Only) (3)	SS7	S: 10/16/01	2:10		ME06Y4	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E06Y1	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 20403, 20404
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ✓ Shipment Iced? ✓

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles

TR Number: 5-514185590-101701-0005

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

LABORA

F2V5.0.66 Page 1 of 1

NOV 0 8 2001

SDG NARRATIVE

LABORATORY NAME: ENVIROSYSTEMS, INC.

CASE #: 29867 SDG #: E06U8 REGION: V

CONTRACT: 68-W9-9023

DATE SAMPLES RECEIVED AT LABORATORY: 18 OCTOBER 2001

SAMPLE ANALYSES INCLUDED IN THIS REPORT:

EPA SAMPLE #	LAB ID #	ANALYSIS	MATRIX
E06W2	01102463	VOA, BNA, PEST	SOIL
E06X8	01102464	VOA, BNA, PEST	SOIL
E06X9	01102465	VOA, BNA, PEST	SOIL
E06X9DL	01102465	PEST	SOIL
E06Y5	01102466	VOA, BNA, PEST	SOIL
E06Y5DL	01102466	PEST	SOIL
E06Y6	01102467	VOA, BNA, PEST	SOIL
E06Y7	01102468	VOA, BNA, PEST	SOIL
E06Y8	01102469	VOA, BNA, PEST	SOIL
E06Y9	01102470	VOA, BNA, PEST	SOIL
E06U8	01102471	VOA, BNA, PEST	SOIL
E06U9	01102472	VOA, BNA, PEST	SOIL
E06Y0	01102473	VOA, BNA, PEST	SOIL
E06Y1	01102474	VOA, BNA, PEST	SOIL
E06Y2	01102475	VOA, BNA, PEST	SOIL
E06Y3	01102476	VOA, BNA, PEST	SOIL
E06Y4	01102477	VOA, BNA, PEST	SOIL
E06Y4DL	01102477	PEST	SOIL

Matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample E06Y1.

Samples for this contract are analyzed by EPA SOW OLM04.2 for multi-media multi-concentration organics.

Cooler temperature blanks were measured to be within tha acceptable range.

All instances where GC/MS manual integration was necessary are initialled and dated by the analyst.

VOLATILES SECTION:

The volatile analysis was performed using a Hewlett Packard HP-VOC 60 meter column with an inner diameter of 0.20 mm and a 1.1 micron film thickness. The trap used with the autosampler is a 30 cm OI #10 analytical trap packed with Tenax/silica gel/cms.

Sample E06Y4 required reanalysis due to noncompliant QC. The initial reanalysis could not be reported due to a

software problem. The reported analysis was performed outside of the contract required holding time and after the reported holding blank.

All other QC criteria were met for all samples in this SDG.

Each of the ten MS/MSD recoveries and each of the five MS/MSD RPD values were within the EPA advisory QC limits.

Manual integrations were performed on the following samples and/or standards due to poor peak shape and/or low response: E06Y6, E06Y8, VBLKFP, VSTD010FZ, VSTD020FZ, VSTD200FZ, and VSTD050FS.

SEMIVOLATILES SECTION:

The semi-volatile analysis was performed on a Hewlett Packard 5973 MSD using an HP-5MS 30 meter column with an inner diameter of 0.25 mm and a 0.5 micron film thickness.

Sample E06Y2 required reextraction due to loss during GPC cleanup. Tre reextraction was performed outside of the contract required holding time with satisfactory results.

All other QC criteria were met for all samples in this SDG.

Each of the eigtheen MS/MSD recoveries and each of the nine MS/MSD RPD values were within the EPA advisory QC limits.

Manual integrations were performed on the following samples and/or standards due to poor peak shape, coelution and/or low response: SSTD160GV, SSTD050GZ, E06U8, E06U9, E06W2, E06X9, E06Y0, E06Y1, E06Y2, E06Y4, E06Y6, E06Y7, E06Y8 and E06Y9.

PESTICIDE/AROCLOR SECTION:

The primary analytical column was a Restek RTXCLP, 0.53mm ID, 0.50 micron film thickness. Confirmation analysis was performed using a Restek RTXCLP2, 0.53 mm ID, 0.42 micron film thickness GC column.

Several samples required dilution due to high concentrations of target compounds.

All other QC criteria were met for all samples in this SDG.

Each of the twelve MS/MSD recoveries and each of the six MS/MSD RPD values were within the EPA advisory QC limits.

Manual integrations were performed on the following samples and/or due to split peaks or baseline corrections: E06W2, E06X8, E06Y8, E06Y9, E06U8, E06U9, E06Y0, E06Y3, E06Y4DL and PBLK52.

I CERTIFY THAT THIS DATA PACKAGE IS IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT, BOTH TECHNICALLY AND FOR COMPLETENESS, FOR OTHER THAN THE CONDITIONS DETAILED ABOVE. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE AND IN THE COMPUTER-READABLE DATA SUBMITTED ON DISKETTE HAS BEEN AUTHORIZED BY THE LABORATORY MANAGER OR HIS/HER DESIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURE:

DATE: 11/7/01

William Brewington
Organics Section Manager

7 November 2001

ALKANE NARRATIVE REPORT
Report date : 11/05/2001
SDG: E06U8

Client Sample ID: E06X8 Lab Sample ID: 01102464 File ID: H73GG353

Compound	RT	Est. Conc.	Q
Unknown Alkane	26.74	90	J
Unknown Alkane	28.15	260	J

Client Sample ID: E06Y8 Lab Sample ID: 01102469 File ID: H73GG354

Compound	RT	Est. Conc.	Q
Unknown Alkane	23.60	99	J
Unknown Alkane	26.74	140	J
Unknown Alkane	28.15	610	J
Unknown Alkane	29.49	780	J

Client Sample ID: E06Y0 Lab Sample ID: 01102473 File ID: H73GG355

Compound	RT	Est. Conc.	Q
Unknown Alkane	23.60	150	J
Unknown Alkane	26.74	360	J
Unknown Alkane	28.15	920	J
Unknown Alkane	29.49	450	J

Client Sample ID: E06X9 Lab Sample ID: 01102465 File ID: H73GG362

Compound	RT	Est. Conc.	Q
Unknown Alkane	17.87	95	J
Unknown Alkane	26.74	210	J
Unknown Alkane	29.49	1000	J

Client Sample ID: E06Y5 Lab Sample ID: 01102466 File ID: H73GG363

Compound	RT	Est. Conc.	Q
Unknown Alkane	29.49	220	J

Client Sample ID: E06Y3 Lab Sample ID: 01102476 File ID: H73GG364

Compound	RT	Est. Conc.	Q
Unknown Alkane	27.46	120	J
Unknown Alkane	28.15	1900	J
Unknown Alkane	28.82	150	J
Unknown Alkane	29.50	2800	J
Unknown Alkane	30.23	130	J
Unknown Alkane	31.07	560	J

Client Sample ID: E06Y4 Lab Sample ID: 01102477 File ID: H73GG365

Compound	RT	Est. Conc.	Q
Unknown Alkane	22.74	130	

Unknown Alkane	23.60	280	J
Unknown Alkane	24.43	170	J
Unknown Alkane	26.00	200	J
Unknown Alkane	26.75	710	J
Unknown Alkane	27.46	410	J
Unknown Alkane	28.16	2100	J
Unknown Alkane	29.50	2100	J

Client Sample ID: E06Y7 Lab Sample ID: 01102468 File ID: H73GG366

Compound	RT	Est. Conc.	Q
Unknown Alkane	17.87	150	J
Unknown Alkane	22.74	84	J
Unknown Alkane	23.60	160	J
Unknown Alkane	24.44	140	J
Unknown Alkane	26.00	100	J
Unknown Alkane	26.74	270	J
Unknown Alkane	28.15	900	J
Unknown Alkane	29.49	570	J

Client Sample ID: E06Y2 Lab Sample ID: 01102475 File ID: H73GG367

Compound	RT	Est. Conc.	Q
Unknown Alkane	23.60	87	J
Unknown Alkane	26.74	290	J
Unknown Alkane	27.46	140	J
Unknown Alkane	28.15	1100	J
Unknown Alkane	29.49	610	J

Client Sample ID: E06Y6 Lab Sample ID: 01102467 File ID: H73GG370

Compound	RT	Est. Conc.	Q
Unknown Alkane	17.87	89	J
Unknown Alkane	23.60	150	J
Unknown Alkane	26.74	350	J
Unknown Alkane	27.46	230	J
Unknown Alkane	28.16	1700	J
Unknown Alkane	29.49	2200	J

Client Sample ID: E06U8 Lab Sample ID: 01102471 File ID: H73GG371

Compound	RT	Est. Conc.	Q
Unknown Alkane	17.80	3600	J
Unknown Alkane	18.99	750	J
Unknown Alkane	19.92	820	J
Unknown Alkane	23.07	640	J
Unknown Alkane	23.61	790	J

Client Sample ID: E06Y1 Lab Sample ID: 01102474 File ID: H73GG372

Compound	RT	Est. Conc.	Q
Unknown Alkane	23.61	110	J
Unknown Alkane	26.75	350	J
Unknown Alkane	28.16	1500	J
Unknown Alkane	29.49	740	J

Client Sample ID: E06Y9 Lab Sample ID: 01102470 File ID: H73GG373

Compound	RT	Est. Conc.	Q
Unknown Alkane	23.61	140	J
Unknown Alkane	26.74	380	J
Unknown Alkane	27.46	230	J
Unknown Alkane	29.49	1500	J
Unknown Alkane	31.06	460	J

Client Sample ID: E06U9 Lab Sample ID: 01102472 File ID: H73GG384

Compound	RT	Est. Conc.	Q
Unknown Alkane	17.81	1500	J
Unknown Alkane	17.88	840	J
Unknown Alkane	19.00	1700	J

Client Sample ID: E06W2 Lab Sample ID: 01102463 File ID: H73GG385

Compound	RT	Est. Conc.	Q
Unknown Alkane	17.81	1800	J
Unknown Alkane	17.88	940	J
Unknown Alkane	19.01	1500	J
Unknown Alkane	19.85	380	J
Unknown Alkane	19.93	470	J
Unknown Alkane	21.86	520	J
Unknown Alkane	23.09	630	J
Unknown Alkane	23.63	890	J
Unknown Alkane	23.79	690	J
Unknown Alkane	26.78	1800	J
Unknown Alkane	28.17	1300	J

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKFO	102	98	96		
02	E06Y1	116	82	93		
03	E06Y1MS	107	82	96		
04	E06Y1MSD	106	81	92		
05	E06W2	111	82	89		
06	E06X8	102	93	91		
07	E06X9	118	75	91		
08	E06Y5	100	96	94		
09	E06Y6	117	79	92		
10	E06Y7	108	88	94		
11	E06Y8	105	85	93		
12	E06Y9	112	80	95		
13	E06U8	114	80	94		
14	VBLKFP	100	100	96		
15	E06U9	121	69	92		
16	E06Y0	121	70	93		
17	E06Y2	116	74	95		
18	E06Y3	106	81	96		
19	VHBLKFP	100	98	96		
20	VBLKFT	102	100	100		
21	E06Y4	112	87	102		
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix Spike - EPA Sample No.: E06Y1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	68	0.0	40	59	59-172
Trichloroethene	68	0.0	56	82	62-137
Benzene	68	0.0	59	87	66-142
Toluene	68	0.0	62	91	59-139
Chlorobenzene	68	0.0	55	81	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	63	37	59	0	22	59-172
Trichloroethene	63	53	84	2	24	62-137
Benzene	63	57	90	3	21	66-142
Toluene	63	60	95	4	21	59-139
Chlorobenzene	63	52	83	2	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLKFO

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Lab File ID: H73FG362 Lab Sample ID: VBLK1025

Date Analyzed: 10/25/01 Time Analyzed: 1244

GC Column: HP-VOC ID: 0.2 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP73F

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E06Y1	01102474	H73FG363	1328
02	E06Y1MS	01102474MS	H73FG364	1413
03	E06Y1MSD	01102474MSD	H73FG365	1456
04	E06W2	01102463	H73FG366	1541
05	E06X8	01102464	H73FG367	1624
06	E06X9	01102465	H73FG368	1708
07	E06Y5	01102466	H73FG369	1751
08	E06Y6	01102467	H73FG370	1840
09	E06Y7	01102468	H73FG371	1925
10	E06Y8	01102469	H73FG372	2023
11	E06Y9	01102470	H73FG373	2123
12	E06U8	01102471	H73FG374	2223
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COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Lab File ID: H73FG382 Lab Sample ID: VBLKK1026

Date Analyzed: 10/26/01 Time Analyzed: 1223

GC Column: HP-VOC ID: 0.2 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP73F

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E06U9	01102472	H73FG383	1311
02	E06Y0	01102473	H73FG384	1359
03	E06Y2	01102475	H73FG385	1445
04	E06Y3	01102476	H73FG386	1533
05	VHBLKFP	VHBLK1017	H73FG388	1704
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COMMENTS:

page 1 of 1

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLKFT

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Lab File ID: H73FG452 Lab Sample ID: VBLK1030

Date Analyzed: 10/30/01 Time Analyzed: 1136

GC Column: HP-VOC ID: 0.2 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP73F

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E06Y4	01102477	H73FG456	1444
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COMMENTS:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 4.8(g/mL) G Lab File ID: H73FG374

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 89 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	98	U
74-87-3	Chloromethane	98	U
75-01-4	Vinyl Chloride	98	U
74-83-9	Bromomethane	98	U
75-00-3	Chloroethane	98	U
75-69-4	Trichlorofluoromethane	98	U
75-35-4	1,1-Dichloroethene	98	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	98	U
67-64-1	Acetone	69	J
75-15-0	Carbon Disulfide	98	U
79-20-9	Methyl Acetate	98	U
75-09-2	Methylene Chloride	19	JB
156-60-5	trans-1,2-Dichloroethene	98	U
1634-04-4	tert-Butyl Methyl Ether	98	U
75-34-3	1,1-Dichloroethane	98	U
156-59-2	cis-1,2-Dichloroethene	98	U
78-93-3	2-Butanone	98	U
67-66-3	Chloroform	98	U
71-55-6	1,1,1-Trichloroethane	98	U
110-82-7	Cyclohexane	98	U
56-23-5	Carbon Tetrachloride	98	U
71-43-2	Benzene	98	U
107-06-2	1,2-Dichloroethane	98	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 4.8(g/mL) G Lab File ID: H73FG374

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 89 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	98	U
108-87-2	Methylcyclohexane	98	U
78-87-5	1,2-Dichloropropane	98	U
75-27-4	Bromodichloromethane	98	U
10061-01-5	cis-1,3-Dichloropropene	98	U
108-10-1	4-Methyl-2-Pentanone	98	U
108-88-3	Toluene	98	U
10061-02-6	trans-1,3-Dichloropropene	98	U
79-00-5	1,1,2-Trichloroethane	98	U
127-18-4	Tetrachloroethene	98	U
591-78-6	2-Hexanone	98	U
124-48-1	Dibromochloromethane	98	U
106-93-4	1,2-Dibromoethane	98	U
108-90-7	Chlorobenzene	98	U
100-41-4	Ethylbenzene	98	U
1330-20-7	Xylene (Total)	98	U
100-42-5	Styrene	98	U
75-25-2	Bromoform	98	U
98-82-8	Isopropylbenzene	98	U
79-34-5	1,1,2,2-Tetrachloroethane	98	U
541-73-1	1,3-Dichlorobenzene	98	U
106-46-7	1,4-Dichlorobenzene	98	U
95-50-1	1,2-Dichlorobenzene	98	U
96-12-8	1,2-Dibromo-3-chloropropane	98	U
120-82-1	1,2,4-Trichlorobenzene	98	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06U8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 4.8 (g/mL) G Lab File ID: H73FG374

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 89 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG383

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 87 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	78	U
74-87-3	Chloromethane	78	U
75-01-4	Vinyl Chloride	78	U
74-83-9	Bromomethane	78	U
75-00-3	Chloroethane	78	U
75-69-4	Trichlorofluoromethane	78	U
75-35-4	1,1-Dichloroethene	78	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	78	U
67-64-1	Acetone	420	
75-15-0	Carbon Disulfide	16	J
79-20-9	Methyl Acetate	78	U
75-09-2	Methylene Chloride	22	JB
156-60-5	trans-1,2-Dichloroethene	78	U
1634-04-4	tert-Butyl Methyl Ether	78	U
75-34-3	1,1-Dichloroethane	78	U
156-59-2	cis-1,2-Dichloroethene	78	U
78-93-3	2-Butanone	170	
67-66-3	Chloroform	78	U
71-55-6	1,1,1-Trichloroethane	78	U
110-82-7	Cyclohexane	78	U
56-23-5	Carbon Tetrachloride	78	U
71-43-2	Benzene	78	U
107-06-2	1,2-Dichloroethane	78	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG383

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 87 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	78	U
108-87-2	Methylcyclohexane	78	U
78-87-5	1,2-Dichloropropane	78	U
75-27-4	Bromodichloromethane	78	U
10061-01-5	cis-1,3-Dichloropropene	78	U
108-10-1	4-Methyl-2-Pentanone	78	U
108-88-3	Toluene	78	U
10061-02-6	trans-1,3-Dichloropropene	78	U
79-00-5	1,1,2-Trichloroethane	78	U
127-18-4	Tetrachloroethene	78	U
591-78-6	2-Hexanone	78	U
124-48-1	Dibromochloromethane	78	U
106-93-4	1,2-Dibromoethane	78	U
108-90-7	Chlorobenzene	78	U
100-41-4	Ethylbenzene	78	U
1330-20-7	Xylene (Total)	78	U
100-42-5	Styrene	78	U
75-25-2	Bromoform	78	U
98-82-8	Isopropylbenzene	78	U
79-34-5	1,1,2,2-Tetrachloroethane	78	U
541-73-1	1,3-Dichlorobenzene	78	U
106-46-7	1,4-Dichlorobenzene	78	U
95-50-1	1,2-Dichlorobenzene	78	U
96-12-8	1,2-Dibromo-3-chloropropane	78	U
120-82-1	1,2,4-Trichlorobenzene	78	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 5.0 (g/mL) G Lab File ID: H73FG383

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 87 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06W2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 4.6(g/mL) G Lab File ID: H73FG366

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 80 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	55	U
74-87-3	Chloromethane	55	U
75-01-4	Vinyl Chloride	55	U
74-83-9	Bromomethane	55	U
75-00-3	Chloroethane	55	U
75-69-4	Trichlorofluoromethane	55	U
75-35-4	1,1-Dichloroethene	55	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	55	U
67-64-1	Acetone	220	
75-15-0	Carbon Disulfide	55	U
79-20-9	Methyl Acetate	55	U
75-09-2	Methylene Chloride	13	JB
156-60-5	trans-1,2-Dichloroethene	55	U
1634-04-4	tert-Butyl Methyl Ether	55	U
75-34-3	1,1-Dichloroethane	55	U
156-59-2	cis-1,2-Dichloroethene	55	U
78-93-3	2-Butanone	72	
67-66-3	Chloroform	55	U
71-55-6	1,1,1-Trichloroethane	55	U
110-82-7	Cyclohexane	55	U
56-23-5	Carbon Tetrachloride	55	U
71-43-2	Benzene	55	U
107-06-2	1,2-Dichloroethane	55	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06W2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 4.6(g/mL) G Lab File ID: H73FG366

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 80 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	55	U
108-87-2	Methylcyclohexane	55	U
78-87-5	1,2-Dichloropropane	55	U
75-27-4	Bromodichloromethane	55	U
10061-01-5	cis-1,3-Dichloropropene	55	U
108-10-1	4-Methyl-2-Pentanone	55	U
108-88-3	Toluene	55	U
10061-02-6	trans-1,3-Dichloropropene	55	U
79-00-5	1,1,2-Trichloroethane	55	U
127-18-4	Tetrachloroethene	55	U
591-78-6	2-Hexanone	55	U
124-48-1	Dibromochloromethane	55	U
106-93-4	1,2-Dibromoethane	55	U
108-90-7	Chlorobenzene	55	U
100-41-4	Ethylbenzene	55	U
1330-20-7	Xylene (Total)	55	U
100-42-5	Styrene	55	U
75-25-2	Bromoform	55	U
98-82-8	Isopropylbenzene	55	U
79-34-5	1,1,2,2-Tetrachloroethane	55	U
541-73-1	1,3-Dichlorobenzene	55	U
106-46-7	1,4-Dichlorobenzene	55	U
95-50-1	1,2-Dichlorobenzene	55	U
96-12-8	1,2-Dibromo-3-chloropropane	55	U
120-82-1	1,2,4-Trichlorobenzene	55	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06W2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 4.6 (g/mL) G Lab File ID: H73FG366

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 80 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 275-51-4	AZULENE	32.19	43	NJ
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

E06X8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 4.9(g/mL) G Lab File ID: H73FG367

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 8 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	tert-Butyl Methyl Ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 4.9(g/mL) G Lab File ID: H73FG367

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 8 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06X8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 4.9 (g/mL) G Lab File ID: H73FG367

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 8 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465

Sample wt/vol: 5.2(g/mL) G Lab File ID: H73FG368

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 26 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	13	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	tert-Butyl Methyl Ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	13	U
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465

Sample wt/vol: 5.2(g/mL) G Lab File ID: H73FG368

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 26 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06X9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465

Sample wt/vol: 5.2 (g/mL) G Lab File ID: H73FG368

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 26 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 91-20-3	NAPHTHALENE	32.20	7	NJ
2.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y0

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 5.1(g/mL) G Lab File ID: H73FG384

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 31 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	2	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	14	U
75-09-2	Methylene Chloride	3	JB
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	tert-Butyl Methyl Ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y0

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 5.1(g/mL) G Lab File ID: H73FG384

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 31 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y0

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 5.1 (g/mL) G Lab File ID: H73FG384

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 31 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474

Sample wt/vol: 5.7(g/mL) G Lab File ID: H73FG363

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	2	JB
1634-04-4	tert-Butyl Methyl Ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474

Sample wt/vol: 5.7(g/mL) G Lab File ID: H73FG363

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y1

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474

Sample wt/vol: 5.7 (g/mL) G Lab File ID: H73FG363

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 91-20-3	NAPHTHALENE	32.19	13	NJ
2.				
3.				
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y1MS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MS

Sample wt/vol: 4.7(g/mL) G Lab File ID: H73FG364

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	2	J
75-09-2	Methylene Chloride	3	JB
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	tert-Butyl Methyl Ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	59	
107-06-2	1,2-Dichloroethane	14	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MS

Sample wt/vol: 4.7(g/mL) G Lab File ID: H73FG364

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	56	
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	0.4	J
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	62	
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	55	
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MSD

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MSD

Sample wt/vol: 5.1(g/mL) G Lab File ID: H73FG365

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
75-35-4	1,1-Dichloroethene	37	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	13	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	tert-Butyl Methyl Ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	13	U
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	57	
107-06-2	1,2-Dichloroethane	13	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MSD

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MSD

Sample wt/vol: 5.1(g/mL) G Lab File ID: H73FG365

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 22 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	53	
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	60	
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	52	
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	0.08	J
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 5.7(g/mL) G Lab File ID: H73FG385

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 23 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	2	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	3	JB
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	tert-Butyl Methyl Ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 5.7(g/mL) G Lab File ID: H73FG385

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 23 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 5.7 (g/mL) G Lab File ID: H73FG385

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 23 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y3

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG386

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 36 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	16	U
74-87-3	Chloromethane	16	U
75-01-4	Vinyl Chloride	16	U
74-83-9	Bromomethane	16	U
75-00-3	Chloroethane	16	U
75-69-4	Trichlorofluoromethane	16	U
75-35-4	1,1-Dichloroethene	3	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	16	U
67-64-1	Acetone	16	U
75-15-0	Carbon Disulfide	16	U
79-20-9	Methyl Acetate	16	U
75-09-2	Methylene Chloride	4	JB
156-60-5	trans-1,2-Dichloroethene	16	U
1634-04-4	tert-Butyl Methyl Ether	16	U
75-34-3	1,1-Dichloroethane	16	U
156-59-2	cis-1,2-Dichloroethene	16	U
78-93-3	2-Butanone	16	U
67-66-3	Chloroform	16	U
71-55-6	1,1,1-Trichloroethane	16	U
110-82-7	Cyclohexane	16	U
56-23-5	Carbon Tetrachloride	16	U
71-43-2	Benzene	16	U
107-06-2	1,2-Dichloroethane	16	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y3

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG386

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 36 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	16	U
108-87-2	Methylcyclohexane	16	U
78-87-5	1,2-Dichloropropane	16	U
75-27-4	Bromodichloromethane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
108-10-1	4-Methyl-2-Pentanone	16	U
108-88-3	Toluene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
79-00-5	1,1,2-Trichloroethane	16	U
127-18-4	Tetrachloroethene	16	U
591-78-6	2-Hexanone	16	U
124-48-1	Dibromochloromethane	16	U
106-93-4	1,2-Dibromoethane	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
1330-20-7	Xylene (Total)	16	U
100-42-5	Styrene	16	U
75-25-2	Bromoform	16	U
98-82-8	Isopropylbenzene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
95-50-1	1,2-Dichlorobenzene	16	U
96-12-8	1,2-Dibromo-3-chloropropane	16	U
120-82-1	1,2,4-Trichlorobenzene	16	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y3

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 5.0 (g/mL) G Lab File ID: H73FG386

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 36 Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y4

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 4.4(g/mL) G Lab File ID: H73FG456

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 42 Date Analyzed: 10/30/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl Chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	2	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
79-20-9	Methyl Acetate	20	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	tert-Butyl Methyl Ether	20	U
75-34-3	1,1-Dichloroethane	20	U
156-59-2	cis-1,2-Dichloroethene	20	U
78-93-3	2-Butanone	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	20	U
110-82-7	Cyclohexane	20	U
56-23-5	Carbon Tetrachloride	20	U
71-43-2	Benzene	20	U
107-06-2	1,2-Dichloroethane	20	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y4

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 4.4(g/mL) G Lab File ID: H73FG456

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 42 Date Analyzed: 10/30/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	20	U
108-87-2	Methylcyclohexane	20	U
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
127-18-4	Tetrachloroethene	20	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y4

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 4.4 (g/mL) G Lab File ID: H73FG456

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 42 Date Analyzed: 10/30/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y5

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 5.9(g/mL) G Lab File ID: H73FG369

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 11 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	tert-Butyl Methyl Ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y5

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 5.9(g/mL) G Lab File ID: H73FG369

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 11 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	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
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y5

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 5.9 (g/mL) G Lab File ID: H73FG369

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 11 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y6

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 4.6(g/mL) G Lab File ID: H73FG370

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 24 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	2	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	14	U
75-09-2	Methylene Chloride	3	JB
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	tert-Butyl Methyl Ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y6

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 4.6(g/mL) G Lab File ID: H73FG370

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 24 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y6

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 4.6 (g/mL) G Lab File ID: H73FG370

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 24 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y7

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102468

Sample wt/vol: 4.6(g/mL) G Lab File ID: H73FG371

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 16 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	13	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	tert-Butyl Methyl Ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	13	U
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U

1B

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y7

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102468

Sample wt/vol: 4.6(g/mL) G Lab File ID: H73FG371

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 16 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y7

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102468

Sample wt/vol: 4.6 (g/mL) G Lab File ID: H73FG371

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 16 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 4.9(g/mL) G Lab File ID: H73FG372

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 30 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	15	U
74-87-3	Chloromethane	15	U
75-01-4	Vinyl Chloride	15	U
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	15	U
75-69-4	Trichlorofluoromethane	15	U
75-35-4	1,1-Dichloroethene	15	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	15	U
67-64-1	Acetone	15	U
75-15-0	Carbon Disulfide	15	U
79-20-9	Methyl Acetate	15	U
75-09-2	Methylene Chloride	3	JB
156-60-5	trans-1,2-Dichloroethene	15	U
1634-04-4	tert-Butyl Methyl Ether	15	U
75-34-3	1,1-Dichloroethane	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	15	U
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	15	U
110-82-7	Cyclohexane	15	U
56-23-5	Carbon Tetrachloride	15	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 4.9(g/mL) G Lab File ID: H73FG372

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 30 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	15	U
108-87-2	Methylcyclohexane	15	U
78-87-5	1,2-Dichloropropane	15	U
75-27-4	Bromodichloromethane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
108-88-3	Toluene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
79-00-5	1,1,2-Trichloroethane	15	U
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
1330-20-7	Xylene (Total)	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
95-50-1	1,2-Dichlorobenzene	15	U
96-12-8	1,2-Dibromo-3-chloropropane	15	U
120-82-1	1,2,4-Trichlorobenzene	15	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 4.9 (g/mL) G Lab File ID: H73FG372

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 30 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 4.8(g/mL) G Lab File ID: H73FG373

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 37 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	16	U
74-87-3	Chloromethane	16	U
75-01-4	Vinyl Chloride	16	U
74-83-9	Bromomethane	16	U
75-00-3	Chloroethane	16	U
75-69-4	Trichlorofluoromethane	16	U
75-35-4	1,1-Dichloroethene	16	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	16	U
67-64-1	Acetone	16	U
75-15-0	Carbon Disulfide	16	U
79-20-9	Methyl Acetate	16	U
75-09-2	Methylene Chloride	3	JB
156-60-5	trans-1,2-Dichloroethene	16	U
1634-04-4	tert-Butyl Methyl Ether	16	U
75-34-3	1,1-Dichloroethane	16	U
156-59-2	cis-1,2-Dichloroethene	16	U
78-93-3	2-Butanone	16	U
67-66-3	Chloroform	16	U
71-55-6	1,1,1-Trichloroethane	16	U
110-82-7	Cyclohexane	16	U
56-23-5	Carbon Tetrachloride	16	U
71-43-2	Benzene	16	U
107-06-2	1,2-Dichloroethane	16	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 4.8(g/mL) G Lab File ID: H73FG373

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 37 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	16	U
108-87-2	Methylcyclohexane	16	U
78-87-5	1,2-Dichloropropane	16	U
75-27-4	Bromodichloromethane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
108-10-1	4-Methyl-2-Pentanone	16	U
108-88-3	Toluene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
79-00-5	1,1,2-Trichloroethane	16	U
127-18-4	Tetrachloroethene	16	U
591-78-6	2-Hexanone	16	U
124-48-1	Dibromochloromethane	16	U
106-93-4	1,2-Dibromoethane	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
1330-20-7	Xylene (Total)	16	U
100-42-5	Styrene	16	U
75-25-2	Bromoform	16	U
98-82-8	Isopropylbenzene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
95-50-1	1,2-Dichlorobenzene	16	U
96-12-8	1,2-Dibromo-3-chloropropane	16	U
120-82-1	1,2,4-Trichlorobenzene	16	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 4.8 (g/mL) G Lab File ID: H73FG373

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: not dec. 37 Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VHBLK1017

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG388

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____ Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	2	JB
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	tert-Butyl Methyl Ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VHBLK1017

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG388

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____ Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(ul

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	C
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	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
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VHBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VHBLK1017

Sample wt/vol: 5.0 (g/mL) G Lab File ID: H73FG388

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____ Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKFO

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1025

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG362

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	tert-Butyl Methyl Ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLKFO

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1025

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG362

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	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
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKFO

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1025

Sample wt/vol: 5.0 (g/mL) G Lab File ID: H73FG362

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/25/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 91-20-3	NAPHTHALENE	32.20	15	NJ
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1026

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG382

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____ Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	tert-Butyl Methyl Ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1026

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG382

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____ Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	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
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKFP

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1026

Sample wt/vol: 5.0 (g/mL) G Lab File ID: H73FG382

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____ Date Analyzed: 10/26/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKFT

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1030

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG452

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/30/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	tert-Butyl Methyl Ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKFT

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1030

Sample wt/vol: 5.0(g/mL) G Lab File ID: H73FG452

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/30/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	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
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKFT

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: VBLK1030

Sample wt/vol: 5.0 (g/mL) G Lab File ID: H73FG452

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/30/01

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK46	65	65	88	64	68	76	68	65	0
02	SBLK52	59	65	82	48	56	76	52	65	0
03	E06X8	61	61	78	59	59	74	59	61	0
04	E06Y8	54	58	83	53	53	72	56	50	0
05	E06Y0	50	50	79	50	47	72	47	46	0
06	E06X9	65	65	100	59	59	79	62	61	0
07	E06Y5	58	63	89	57	57	79	57	58	0
08	E06Y3	58	62	85	56	54	77	56	54	0
09	E06Y4	59	59	93	58	56	77	58	55	0
10	E06Y7	50	55	90	50	47	77	50	48	0
11	E06Y2	68	73	95	69	63	91	63	64	0
12	E06Y1MS	62	62	95	56	53	78	56	57	0
13	E06Y1MSD	62	62	95	53	56	75	56	57	0
14	E06Y6	55	59	91	55	52	79	55	50	0
15	E06U8	59	63	94	58	54	79	58	54	0
16	E06Y1	62	62	100	56	56	78	56	52	0
17	E06Y9	54	54	85	49	46	67	49	46	0
18	E06U9	58	63	92	63	58	84	58	52	0
19	E06W2	64	67	95	64	59	85	60	56	0
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix Spike - EPA Sample No.: E06Y1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	3200	0.0	1700	53	26- 90
2-Chlorophenol	3200	0.0	1700	53	25-102
N-Nitroso-di-n-prop.(1)	2100	0.0	1000	48	41-126
4-Chloro-3-methylphenol	3200	0.0	2000	63	26-103
Acenaphthene	2100	0.0	1200	57	31-137
4-Nitrophenol	3200	0.0	2300	72	11-114
2,4-Dinitrotoluene	2100	0.0	1300	62	28- 89
Pentachlorophenol	3200	0.0	1400	44	17-109
Pyrene	2100	510	2000	71	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	3200	1800	56	6	35	26- 90
2-Chlorophenol	3200	1800	56	6	50	25-102
N-Nitroso-di-n-prop.(1)	2100	1100	52	8	38	41-126
4-Chloro-3-methylphenol	3200	2100	66	5	33	26-103
Acenaphthene	2100	1300	62	8	19	31-137
4-Nitrophenol	3200	2200	69	4	50	11-114
2,4-Dinitrotoluene	2100	1400	67	8	47	28- 89
Pentachlorophenol	3200	1400	44	0	47	17-109
Pyrene	2100	2100	76	7	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 9 outside limits
Spike Recovery: 0 out of 18 outside limits

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK46

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Lab File ID: H73GG351 Lab Sample ID: 1024SSB1

Instrument ID: HP73G Date Extracted: 10/24/01

Matrix: (soil/water) SOIL Date Analyzed: 11/01/01

Level: (low/med) LOW Time Analyzed: 2128

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	E06X8	01102464	H73GG353	11/01/01
02	E06Y8	01102469	H73GG354	11/01/01
03	E06Y0	01102473	H73GG355	11/02/01
04	E06X9	01102465	H73GG362	11/02/01
05	E06Y5	01102466	H73GG363	11/02/01
06	E06Y3	01102476	H73GG364	11/02/01
07	E06Y4	01102477	H73GG365	11/02/01
08	E06Y7	01102468	H73GG366	11/02/01
09	E06Y1MS	01102474MS	H73GG368	11/02/01
10	E06Y1MSD	01102474MSD	H73GG369	11/02/01
11	E06Y6	01102467	H73GG370	11/02/01
12	E06U8	01102471	H73GG371	11/02/01
13	E06Y1	01102474	H73GG372	11/02/01
14	E06Y9	01102470	H73GG373	11/02/01
15	E06U9	01102472	H73GG384	11/05/01
16	E06W2	01102463	H73GG385	11/05/01
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COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK52

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Lab File ID: H73GG352 Lab Sample ID: 1030SSB1

Instrument ID: HP73G Date Extracted: 10/30/01

Matrix: (soil/water) SOIL Date Analyzed: 11/01/01

Level: (low/med) LOW Time Analyzed: 2214

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	E06Y2	01102475	H73GG367	11/02/01
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
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COMMENTS:

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06U8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG371

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 89 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	3100	U
108-95-2	Phenol	3100	U
111-44-4	bis(2-Chloroethyl)Ether	3100	U
95-57-8	2-Chlorophenol	3100	U
95-48-7	2-Methylphenol	3100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3100	U
98-86-2	Acetophenone	3100	U
106-44-5	4-Methylphenol	3100	U
621-64-7	N-Nitroso-di-n-propylamine	3100	U
67-72-1	Hexachloroethane	3100	U
98-95-3	Nitrobenzene	3100	U
78-59-1	Isophorone	3100	U
88-75-5	2-Nitrophenol	3100	U
105-67-9	2,4-Dimethylphenol	3100	U
111-91-1	bis(2-Chloroethoxy)methane	3100	U
120-83-2	2,4-Dichlorophenol	3100	U
91-20-3	Naphthalene	3100	U
106-47-8	4-Chloroaniline	3100	U
87-68-3	Hexachlorobutadiene	3100	U
105-60-2	Caprolactam	3100	U
59-50-7	4-Chloro-3-methylphenol	3100	U
91-57-6	2-Methylnaphthalene	3100	U
77-47-4	Hexachlorocyclopentadiene	3100	U
88-06-2	2,4,6-Trichlorophenol	3100	U
95-95-4	2,4,5-Trichlorophenol	7900	U
92-52-4	1,1'-Biphenyl	3100	U
91-58-7	2-Chloronaphthalene	3100	U
88-74-4	2-Nitroaniline	7900	U
131-11-3	Dimethylphthalate	3100	U
606-20-2	2,6-Dinitrotoluene	3100	U
208-96-8	Acenaphthylene	3100	U
99-09-2	3-Nitroaniline	7900	U
83-32-9	Acenaphthene	3100	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG371

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 89 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	7900	U
100-02-7	4-Nitrophenol	7900	U
132-64-9	Dibenzofuran	3100	U
121-14-2	2,4-Dinitrotoluene	3100	U
84-66-2	Diethylphthalate	3100	U
86-73-7	Fluorene	3100	U
7005-72-3	4-Chlorophenyl-phenylether	3100	U
100-01-6	4-Nitroaniline	7900	U
534-52-1	4,6-Dinitro-2-methylphenol	7900	U
86-30-6	N-Nitrosodiphenylamine (1)	3100	U
101-55-3	4-Bromophenyl-phenylether	3100	U
118-74-1	Hexachlorobenzene	3100	U
1912-24-9	Atrazine	3100	U
87-86-5	Pentachlorophenol	7900	U
85-01-8	Phenanthrene	3100	U
120-12-7	Anthracene	3100	U
86-74-8	Carbazole	3100	U
84-74-2	Di-n-butylphthalate	3100	U
206-44-0	Fluoranthene	800	J
129-00-0	Pyrene	860	J
85-68-7	Butylbenzylphthalate	3100	U
91-94-1	3,3'-Dichlorobenzidine	3100	U
56-55-3	Benzo(a)anthracene	3100	U
218-01-9	Chrysene	530	J
117-81-7	bis(2-Ethylhexyl)phthalate	1800	J
117-84-0	Di-n-octylphthalate	3100	U
205-99-2	Benzo(b)fluoranthene	500	J
207-08-9	Benzo(k)fluoranthene	360	J
50-32-8	Benzo(a)pyrene	3100	U
193-39-5	Indeno(1,2,3-cd)pyrene	3100	U
53-70-3	Dibenzo(a,h)anthracene	3100	U
191-24-2	Benzo(g,h,i)perylene	3100	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

E06U8

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG371

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 89 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Extraction: (Type) SONC

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.06	2400	J
2.		UNKNOWN	7.38	5500	JB
3.		UNKNOWN	8.12	8600	JB
4.		UNKNOWN	8.49	790	J
5.		UNKNOWN	9.08	4800	J
6.	57-10-3	N-HEXADECANOIC ACID	20.52	730	NJ
7.		UNKNOWN	21.54	1100	J
8.	7683-64-9	SQUALENE	27.73	3900	NJ
9.		UNKNOWN	30.23	1700	J
10.	83-47-6	.GAMMA.-SITOSTEROL	31.70	2000	NJ
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG384

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 87 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	2600	U
108-95-2	Phenol	2600	U
111-44-4	bis(2-Chloroethyl)Ether	2600	U
95-57-8	2-Chlorophenol	2600	U
95-48-7	2-Methylphenol	2600	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2600	U
98-86-2	Acetophenone	2600	U
106-44-5	4-Methylphenol	2600	U
621-64-7	N-Nitroso-di-n-propylamine	2600	U
67-72-1	Hexachloroethane	2600	U
98-95-3	Nitrobenzene	2600	U
78-59-1	Isophorone	2600	U
88-75-5	2-Nitrophenol	2600	U
105-67-9	2,4-Dimethylphenol	2600	U
111-91-1	bis(2-Chloroethoxy)methane	2600	U
120-83-2	2,4-Dichlorophenol	2600	U
91-20-3	Naphthalene	2600	U
106-47-8	4-Chloroaniline	2600	U
87-68-3	Hexachlorobutadiene	2600	U
105-60-2	Caprolactam	2600	U
59-50-7	4-Chloro-3-methylphenol	2600	U
91-57-6	2-Methylnaphthalene	2600	U
77-47-4	Hexachlorocyclopentadiene	2600	U
88-06-2	2,4,6-Trichlorophenol	2600	U
95-95-4	2,4,5-Trichlorophenol	6400	U
92-52-4	1,1'-Biphenyl	2600	U
91-58-7	2-Chloronaphthalene	2600	U
88-74-4	2-Nitroaniline	6400	U
131-11-3	Dimethylphthalate	2600	U
606-20-2	2,6-Dinitrotoluene	2600	U
208-96-8	Acenaphthylene	2600	U
99-09-2	3-Nitroaniline	6400	U
83-32-9	Acenaphthene	2600	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06U9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG384

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 87 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	6400	U
100-02-7	4-Nitrophenol	6400	U
132-64-9	Dibenzofuran	2600	U
121-14-2	2,4-Dinitrotoluene	2600	U
84-66-2	Diethylphthalate	830	J
86-73-7	Fluorene	2600	U
7005-72-3	4-Chlorophenyl-phenylether	2600	U
100-01-6	4-Nitroaniline	6400	U
534-52-1	4,6-Dinitro-2-methylphenol	6400	U
86-30-6	N-Nitrosodiphenylamine (1)	2600	U
101-55-3	4-Bromophenyl-phenylether	2600	U
118-74-1	Hexachlorobenzene	2600	U
1912-24-9	Atrazine	2600	U
87-86-5	Pentachlorophenol	6400	U
85-01-8	Phenanthrene	880	J
120-12-7	Anthracene	2600	U
86-74-8	Carbazole	2600	U
84-74-2	Di-n-butylphthalate	2600 ~~330~~	~~JB~~ U
206-44-0	Fluoranthene	1700	J
129-00-0	Pyrene	2000	J
85-68-7	Butylbenzylphthalate	2600	U
91-94-1	3,3'-Dichlorobenzidine	2600	U
56-55-3	Benzo(a)anthracene	830	J
218-01-9	Chrysene	1100	J
117-81-7	bis(2-Ethylhexyl)phthalate	3200	
117-84-0	Di-n-octylphthalate	2600	U
205-99-2	Benzo(b)fluoranthene	1100	J
207-08-9	Benzo(k)fluoranthene	760	J
50-32-8	Benzo(a)pyrene	800	J
193-39-5	Indeno(1,2,3-cd)pyrene	660	J
53-70-3	Dibenzo(a,h)anthracene	2600	U
191-24-2	Benzo(g,h,i)perylene	590	J

(1) - Cannot be separated from Diphenylamine

000346

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG384

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 87 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

Number TICs found: 15

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.06	1900	J
2.	UNKNOWN	7.38	7200	JB
3.	UNKNOWN	8.13	6700	JB
4.	UNKNOWN	8.50	620	J
5.	UNKNOWN	9.09	3900	J
6. 110-27-0	ISOPROPYL MYRISTATE	19.17	1200	NJ
7.	UNKNOWN	19.77	530	J
8. 57-10-3	N-HEXADECANOIC ACID	20.54	700	NJ
9.	UNKNOWN	20.87	1100	J
10.	UNKNOWN	21.16	1200	J
11.	UNKNOWN	21.55	1300	J
12.	UNKNOWN	21.64	580	J
13.	UNKNOWN	21.70	770	J
14.	UNKNOWN	26.65	1000	J
15.	UNKNOWN	30.25	2900	J
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FORM I SV-TIC

OLM04.2

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06W2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG385

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 80 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	1100	J
108-95-2	Phenol	1700	U
111-44-4	bis(2-Chloroethyl)Ether	1700	U
95-57-8	2-Chlorophenol	1700	U
95-48-7	2-Methylphenol	1700	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1700	U
98-86-2	Acetophenone	1700	U
106-44-5	4-Methylphenol	1700	U
621-64-7	N-Nitroso-di-n-propylamine	1700	U
67-72-1	Hexachloroethane	1700	U
98-95-3	Nitrobenzene	1700	U
78-59-1	Isophorone	1700	U
88-75-5	2-Nitrophenol	1700	U
105-67-9	2,4-Dimethylphenol	1700	U
111-91-1	bis(2-Chloroethoxy)methane	1700	U
120-83-2	2,4-Dichlorophenol	1700	U
91-20-3	Naphthalene	1700	U
106-47-8	4-Chloroaniline	1700	U
87-68-3	Hexachlorobutadiene	1700	U
105-60-2	Caprolactam	1700	U
59-50-7	4-Chloro-3-methylphenol	1700	U
91-57-6	2-Methylnaphthalene	1700	U
77-47-4	Hexachlorocyclopentadiene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	4200	U
92-52-4	1,1'-Biphenyl	1700	U
91-58-7	2-Chloronaphthalene	1700	U
88-74-4	2-Nitroaniline	4200	U
131-11-3	Dimethylphthalate	1700	U
606-20-2	2,6-Dinitrotoluene	1700	U
208-96-8	Acenaphthylene	1700	U
99-09-2	3-Nitroaniline	4200	U
83-32-9	Acenaphthene	1700	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06W2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG385

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 80 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4200	U
100-02-7	4-Nitrophenol	4200	U
132-64-9	Dibenzofuran	1700	U
121-14-2	2,4-Dinitrotoluene	1700	U
84-66-2	Diethylphthalate	1700	U
86-73-7	Fluorene	1700	U
7005-72-3	4-Chlorophenyl-phenylether	1700	U
100-01-6	4-Nitroaniline	4200	U
534-52-1	4,6-Dinitro-2-methylphenol	4200	U
86-30-6	N-Nitrosodiphenylamine (1)	1700	U
101-55-3	4-Bromophenyl-phenylether	1700	U
118-74-1	Hexachlorobenzene	1700	U
1912-24-9	Atrazine	1700	U
87-86-5	Pentachlorophenol	4200	U
85-01-8	Phenanthrene	640	J
120-12-7	Anthracene	1700	U
86-74-8	Carbazole	1700	U
84-74-2	Di-n-butylphthalate	1700 ~~230~~	~~JB~~ U
206-44-0	Fluoranthene	1300	J
129-00-0	Pyrene	1600	J
85-68-7	Butylbenzylphthalate	1700	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)anthracene	590	J
218-01-9	Chrysene	910	J
117-81-7	bis(2-Ethylhexyl)phthalate	3000	
117-84-0	Di-n-octylphthalate	1700	U
205-99-2	Benzo(b)fluoranthene	910	J
207-08-9	Benzo(k)fluoranthene	780	J
50-32-8	Benzo(a)pyrene	710	J
193-39-5	Indeno(1,2,3-cd)pyrene	670	J
53-70-3	Dibenzo(a,h)anthracene	1700	U
191-24-2	Benzo(g,h,i)perylene	680	J

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06W2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG385

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 80 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Extraction: (Type) SONC

Number TICs found: 16

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.39	5900	JB
2.	4436-75-3	3-HEXENE-2,5-DIONE	7.55	710	NJ
3.		UNKNOWN	8.12	3700	JB
4.		UNKNOWN	9.09	1300	J
5.		UNKNOWN	14.99	730	J
6.		UNKNOWN	18.29	380	J
7.	544-63-8	TETRADECANOIC ACID	18.47	380	NJ
8.	56554-34-8	2-HEXADECENE, 2,6,10,14-TETR	19.26	380	NJ
9.		UNKNOWN	19.33	370	J
10.	14237-73-1	2-HEXADECENE, 3,7,11,15-TETR	19.39	370	NJ
11.		UNKNOWN	19.77	380	J
12.	57-10-3	N-HEXADECANOIC ACID	20.56	2000	NJ
13.		UNKNOWN	20.87	960	J
14.	1686-66-4	PHENANTHRENE, 7-ETHENYL-1,2,	21.16	1100	NJ
15.		UNKNOWN	21.56	1800	J
16.		UNKNOWN	21.70	860	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG353

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 8 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
92-52-4	1,1'-Biphenyl	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06X8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG353

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 8 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360 ~~82~~	~~JB~~ U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	190	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06X8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG353

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 8 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.05	110	J
2.		UNKNOWN	7.37	360	JB
3.		UNKNOWN	8.12	840	JB
4.		UNKNOWN	8.48	180	J
5.		UNKNOWN	9.06	330	J
6.	83-47-6	.GAMMA.-SITOSTEROL	31.67	110	NJ
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FORM I SV-TIC OLM04.2

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG362

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 26 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	450	U
108-95-2	Phenol	450	U
111-44-4	bis(2-Chloroethyl)Ether	450	U
95-57-8	2-Chlorophenol	450	U
95-48-7	2-Methylphenol	450	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450	U
98-86-2	Acetophenone	450	U
106-44-5	4-Methylphenol	450	U
621-64-7	N-Nitroso-di-n-propylamine	450	U
67-72-1	Hexachloroethane	450	U
98-95-3	Nitrobenzene	450	U
78-59-1	Isophorone	450	U
88-75-5	2-Nitrophenol	450	U
105-67-9	2,4-Dimethylphenol	450	U
111-91-1	bis(2-Chloroethoxy)methane	450	U
120-83-2	2,4-Dichlorophenol	450	U
91-20-3	Naphthalene	450	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	450	U
105-60-2	Caprolactam	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-57-6	2-Methylnaphthalene	450	U
77-47-4	Hexachlorocyclopentadiene	450	U
88-06-2	2,4,6-Trichlorophenol	450	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	450	U
91-58-7	2-Chloronaphthalene	450	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	450	U
606-20-2	2,6-Dinitrotoluene	450	U
208-96-8	Acenaphthylene	450	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	450	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG362

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 26 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	450	U
121-14-2	2,4-Dinitrotoluene	450	U
84-66-2	Diethylphthalate	450	U
86-73-7	Fluorene	450	U
7005-72-3	4-Chlorophenyl-phenylether	450	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	450	U
101-55-3	4-Bromophenyl-phenylether	450	U
118-74-1	Hexachlorobenzene	450	U
1912-24-9	Atrazine	450	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	140	J
120-12-7	Anthracene	450	U
86-74-8	Carbazole	450	U
84-74-2	Di-n-butylphthalate	450 ~~140~~	~~JB~~ U
206-44-0	Fluoranthene	430	J
129-00-0	Pyrene	560	
85-68-7	Butylbenzylphthalate	450	U
91-94-1	3,3'-Dichlorobenzidine	450	U
56-55-3	Benzo(a)anthracene	250	J
218-01-9	Chrysene	310	J
117-81-7	bis(2-Ethylhexyl)phthalate	360	J
117-84-0	Di-n-octylphthalate	450	U
205-99-2	Benzo(b)fluoranthene	300	J
207-08-9	Benzo(k)fluoranthene	260	J
50-32-8	Benzo(a)pyrene	280	J
193-39-5	Indeno(1,2,3-cd)pyrene	170	J
53-70-3	Dibenzo(a,h)anthracene	450	U
191-24-2	Benzo(g,h,i)perylene	150	J

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06X9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG362

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 26 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

Number TICs found: 18 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.05	250	J
2.		UNKNOWN	7.37	580	JB
3.		UNKNOWN	8.13	1500	JB
4.		UNKNOWN	8.49	150	J
5.		UNKNOWN	8.91	110	J
6.		UNKNOWN	9.07	550	J
7.		UNKNOWN	19.13	100	J
8.	57-10-3	N-HEXADECANOIC ACID	20.52	120	NJ
9.		UNKNOWN	22.32	110	J
10.		UNKNOWN	22.75	110	J
11.	33543-31-6	FLUORANTHENE, 2-METHYL-	23.14	180	NJ
12.		UNKNOWN	23.74	5500	J
13.	103-23-1	HEXANEDIOIC ACID, BIS(2-ETHY	24.11	3500	NJ
14.	103-23-1	HEXANEDIOIC ACID, BIS(2-ETHY	24.48	4700	NJ
15.		UNKNOWN	24.70	100	J
16.		UNKNOWN	27.74	450	J
17.		UNKNOWN	31.28	520	J
18.	83-47-6	.GAMMA.-SITOSTEROL	31.68	450	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y0

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG355

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 31 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	480	U
108-95-2	Phenol	480	U
111-44-4	bis(2-Chloroethyl)Ether	480	U
95-57-8	2-Chlorophenol	480	U
95-48-7	2-Methylphenol	480	U
108-60-1	2,2'-oxybis(1-Chloropropane)	480	U
98-86-2	Acetophenone	480	U
106-44-5	4-Methylphenol	480	U
621-64-7	N-Nitroso-di-n-propylamine	480	U
67-72-1	Hexachloroethane	480	U
98-95-3	Nitrobenzene	480	U
78-59-1	Isophorone	480	U
88-75-5	2-Nitrophenol	480	U
105-67-9	2,4-Dimethylphenol	480	U
111-91-1	bis(2-Chloroethoxy)methane	480	U
120-83-2	2,4-Dichlorophenol	480	U
91-20-3	Naphthalene	480	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	480	U
105-60-2	Caprolactam	480	U
59-50-7	4-Chloro-3-methylphenol	480	U
91-57-6	2-Methylnaphthalene	480	U
77-47-4	Hexachlorocyclopentadiene	480	U
88-06-2	2,4,6-Trichlorophenol	480	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	480	U
91-58-7	2-Chloronaphthalene	480	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	480	U
606-20-2	2,6-Dinitrotoluene	480	U
208-96-8	Acenaphthylene	480	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	480	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y0

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG355

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 31 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	480	U
121-14-2	2,4-Dinitrotoluene	480	U
84-66-2	Diethylphthalate	480	U
86-73-7	Fluorene	480	U
7005-72-3	4-Chlorophenyl-phenylether	480	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	480	U
101-55-3	4-Bromophenyl-phenylether	480	U
118-74-1	Hexachlorobenzene	480	U
1912-24-9	Atrazine	480	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	97	J
120-12-7	Anthracene	480	U
86-74-8	Carbazole	480	U
84-74-2	Di-n-butylphthalate	480 ~~65~~	~~JB~~ CR
206-44-0	Fluoranthene	160	J
129-00-0	Pyrene	170	J
85-68-7	Butylbenzylphthalate	480	U
91-94-1	3,3'-Dichlorobenzidine	480	U
56-55-3	Benzo(a)anthracene	86	J
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)phthalate	120	J
117-84-0	Di-n-octylphthalate	480	U
205-99-2	Benzo(b)fluoranthene	110	J
207-08-9	Benzo(k)fluoranthene	88	J
50-32-8	Benzo(a)pyrene	95	J
193-39-5	Indeno(1,2,3-cd)pyrene	480	U
53-70-3	Dibenzo(a,h)anthracene	480	U
191-24-2	Benzo(g,h,i)perylene	480	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM04.

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y0

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG355

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 31 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

Number TICs found: 18

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.05	190	J
2.		UNKNOWN	7.37	730	JB
3.		UNKNOWN	8.11	830	JB
4.		UNKNOWN	8.49	140	J
5.		UNKNOWN	8.90	140	J
6.		UNKNOWN	9.06	350	J
7.	110-27-0	ISOPROPYL MYRISTATE	19.15	170	NJ
8.	57-10-3	N-HEXADECANOIC ACID	20.52	100	NJ
9.	111-06-8	HEXADECANOIC ACID, BUTYL EST	22.63	470	NJ
10.	123-95-5	OCTADECANOIC ACID, BUTYL EST	24.34	970	NJ
11.	75207-54-4	2-PENTACOSANONE	26.88	100	NJ
12.		UNKNOWN	27.73	160	J
13.		UNKNOWN	29.66	140	J
14.		UNKNOWN	31.03	120	J
15.	83-48-7	STIGMASTEROL	31.13	220	NJ
16.		UNKNOWN	31.27	180	J
17.	83-47-6	.GAMMA.-SITOSTEROL	31.68	260	NJ
18.		UNKNOWN	31.82	140	J
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG372

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)Ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y1

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG372

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	250	J
120-12-7	Anthracene	77	J
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420 ~~130~~	~~JB~~ U
206-44-0	Fluoranthene	480	
129-00-0	Pyrene	510	
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	260	J
218-01-9	Chrysene	280	J
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	250	J
207-08-9	Benzo(k)fluoranthene	210	J
50-32-8	Benzo(a)pyrene	210	J
193-39-5	Indeno(1,2,3-cd)pyrene	100	J
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	73	J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06Y1

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG372

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.06	410	J
2.		UNKNOWN	7.38	890	JB
3.		UNKNOWN	8.13	1200	JB
4.		UNKNOWN	8.50	160	J
5.		UNKNOWN	8.92	100	J
6.		UNKNOWN	9.08	740	J
7.	106-23-0	6-OCTENAL, 3,7-DIMETHYL-	10.73	150	NJ
8.		UNKNOWN	20.87	100	J
9.		UNKNOWN	27.74	340	J
10.	629-96-9	1-EICOSANOL	29.55	230	NJ
11.					
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MS

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG368

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	1700	
111-44-4	bis(2-Chloroethyl)Ether	420	U
95-57-8	2-Chlorophenol	1700	
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	1000	
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	2000	
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	1200	

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MS

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG368

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	2300	
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	1300	
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U
87-86-5	Pentachlorophenol	1400	
85-01-8	Phenanthrene	100	J
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	100	JB
206-44-0	Fluoranthene	170	J
129-00-0	Pyrene	2000	
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	97	J
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	98	J
207-08-9	Benzo(k)fluoranthene	90	J
50-32-8	Benzo(a)pyrene	100	J
193-39-5	Indeno(1,2,3-cd)pyrene	52	J
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	47	J

(1) - Cannot be separated from Diphenylamine

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MSD

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MSD

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG369

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	1800	
111-44-4	bis(2-Chloroethyl)Ether	420	U
95-57-8	2-Chlorophenol	1800	
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	1100	
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	2100	
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	1300	

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MSD

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MSD

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG369

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 22 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	2200	
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	1400	
84-66-2	Diethylphthalate	180	J
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U
87-86-5	Pentachlorophenol	1400	
85-01-8	Phenanthrene	190	J
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	110	JB
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	2100	
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	110	J
218-01-9	Chrysene	120	J
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	110	J
207-08-9	Benzo(k)fluoranthene	100	J
50-32-8	Benzo(a)pyrene	100	J
193-39-5	Indeno(1,2,3-cd)pyrene	53	J
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG367

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 23 Decanted: (Y/N)N Date Extracted: 10/30/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	430	U
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)Ether	430	U
95-57-8	2-Chlorophenol	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
98-86-2	Acetophenone	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
105-60-2	Caprolactam	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	430	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	430	U
606-20-2	2,6-Dinitrotoluene	430	U
208-96-8	Acenaphthylene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG367

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 23 Decanted: (Y/N)N Date Extracted: 10/30/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
86-73-7	Fluorene	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
1912-24-9	Atrazine	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	150	J
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-butylphthalate	130 ~~170~~	~~JB~~
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	230	J
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	110	J
218-01-9	Chrysene	120	J
117-81-7	bis(2-Ethylhexyl)phthalate	53	J
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	110	J
207-08-9	Benzo(k)fluoranthene	110	J
50-32-8	Benzo(a)pyrene	100	J
193-39-5	Indeno(1,2,3-cd)pyrene	60	J
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y2

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG367

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 23 Decanted: (Y/N) N Date Extracted:10/30/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Extraction: (Type) SONC

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.86	110	J
2. 103-23-1	HEXANEDIOIC ACID, BIS(2-ETHY	24.46	110	NJ
3.	UNKNOWN	27.35	220	J
4. 7683-64-9	SQUALENE	27.73	300	NJ
5. 34303-81-6	3-HEXADECENE, (Z)-	29.55	180	NJ
6. 1000210-38-4	17-(1,5-DIMETHYLHEXYL)-10,13	29.95	290	NJ
7. 474-62-4	CAMPESTEROL	30.84	110	NJ
8.	UNKNOWN	31.06	280	J
9. 83-48-7	STIGMASTEROL	31.13	260	NJ
10. 83-47-6	.GAMMA.-SITOSTEROL	31.68	390	NJ
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FORM I SV-TIC OLM04.2

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EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y3

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG364

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 36 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	520	U
108-95-2	Phenol	520	U
111-44-4	bis(2-Chloroethyl)Ether	520	U
95-57-8	2-Chlorophenol	520	U
95-48-7	2-Methylphenol	520	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520	U
98-86-2	Acetophenone	520	U
106-44-5	4-Methylphenol	520	U
621-64-7	N-Nitroso-di-n-propylamine	520	U
67-72-1	Hexachloroethane	520	U
98-95-3	Nitrobenzene	520	U
78-59-1	Isophorone	520	U
88-75-5	2-Nitrophenol	520	U
105-67-9	2,4-Dimethylphenol	520	U
111-91-1	bis(2-Chloroethoxy)methane	520	U
120-83-2	2,4-Dichlorophenol	520	U
91-20-3	Naphthalene	520	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	520	U
105-60-2	Caprolactam	520	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-57-6	2-Methylnaphthalene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
88-06-2	2,4,6-Trichlorophenol	520	U
95-95-4	2,4,5-Trichlorophenol	1300	U
92-52-4	1,1'-Biphenyl	520	U
91-58-7	2-Chloronaphthalene	520	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	520	U
606-20-2	2,6-Dinitrotoluene	520	U
208-96-8	Acenaphthylene	520	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	520	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y3

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG364

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 36 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	520	U
121-14-2	2,4-Dinitrotoluene	520	U
84-66-2	Diethylphthalate	520	U
86-73-7	Fluorene	520	U
7005-72-3	4-Chlorophenyl-phenylether	520	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	520	U
101-55-3	4-Bromophenyl-phenylether	520	U
118-74-1	Hexachlorobenzene	520	U
1912-24-9	Atrazine	520	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	520	U
120-12-7	Anthracene	520	U
86-74-8	Carbazole	520	U
84-74-2	Di-n-butylphthalate	520	U
206-44-0	Fluoranthene	59	J
129-00-0	Pyrene	63	J
85-68-7	Butylbenzylphthalate	520	U
91-94-1	3,3'-Dichlorobenzidine	520	U
56-55-3	Benzo(a)anthracene	520	U
218-01-9	Chrysene	520	U
117-81-7	bis(2-Ethylhexyl)phthalate	110	J
117-84-0	Di-n-octylphthalate	520	U
205-99-2	Benzo(b)fluoranthene	520	U
207-08-9	Benzo(k)fluoranthene	520	U
50-32-8	Benzo(a)pyrene	520	U
193-39-5	Indeno(1,2,3-cd)pyrene	520	U
53-70-3	Dibenzo(a,h)anthracene	520	U
191-24-2	Benzo(g,h,i)perylene	520	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y3

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG364

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 36 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.05	450	J
2.	UNKNOWN	7.37	870	JB
3.	UNKNOWN	8.12	1700	JB
4.	UNKNOWN	8.49	320	J
5.	UNKNOWN	9.07	640	J
6. 57-10-3	N-HEXADECANOIC ACID	20.52	160	NJ
7. 13360-61-7	1-PENTADECENE	26.74	330	NJ
8.	UNKNOWN	27.55	190	J
9.	UNKNOWN	27.74	520	J
10. 67860-04-2	OXIRANE, HEPTADECYL-	29.12	180	NJ
11. 57-88-5	CHOLESTEROL	29.95	150	NJ
12. 83-47-6	.GAMMA.-SITOSTEROL	31.69	910	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y4

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG365

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 42 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	570	U
108-95-2	Phenol	570	U
111-44-4	bis(2-Chloroethyl)Ether	570	U
95-57-8	2-Chlorophenol	570	U
95-48-7	2-Methylphenol	570	U
108-60-1	2,2'-oxybis(1-Chloropropane)	570	U
98-86-2	Acetophenone	570	U
106-44-5	4-Methylphenol	570	U
621-64-7	N-Nitroso-di-n-propylamine	570	U
67-72-1	Hexachloroethane	570	U
98-95-3	Nitrobenzene	570	U
78-59-1	Isophorone	570	U
88-75-5	2-Nitrophenol	570	U
105-67-9	2,4-Dimethylphenol	570	U
111-91-1	bis(2-Chloroethoxy)methane	570	U
120-83-2	2,4-Dichlorophenol	570	U
91-20-3	Naphthalene	570	U
106-47-8	4-Chloroaniline	570	U
87-68-3	Hexachlorobutadiene	570	U
105-60-2	Caprolactam	570	U
59-50-7	4-Chloro-3-methylphenol	570	U
91-57-6	2-Methylnaphthalene	570	U
77-47-4	Hexachlorocyclopentadiene	570	U
88-06-2	2,4,6-Trichlorophenol	570	U
95-95-4	2,4,5-Trichlorophenol	1400	U
92-52-4	1,1'-Biphenyl	570	U
91-58-7	2-Chloronaphthalene	570	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	570	U
606-20-2	2,6-Dinitrotoluene	570	U
208-96-8	Acenaphthylene	570	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	570	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y4

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG365

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 42 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	570	U
121-14-2	2,4-Dinitrotoluene	570	U
84-66-2	Diethylphthalate	570	U
86-73-7	Fluorene	570	U
7005-72-3	4-Chlorophenyl-phenylether	570	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	570	U
101-55-3	4-Bromophenyl-phenylether	570	U
118-74-1	Hexachlorobenzene	570	U
1912-24-9	Atrazine	570	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	80	J
120-12-7	Anthracene	570	U
86-74-8	Carbazole	570	U
84-74-2	Di-n-butylphthalate	570 ~~82~~	~~JB~~ U
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	200	J
85-68-7	Butylbenzylphthalate	570	U
91-94-1	3,3'-Dichlorobenzidine	570	U
56-55-3	Benzo(a)anthracene	85	J
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)phthalate	110	J
117-84-0	Di-n-octylphthalate	570	U
205-99-2	Benzo(b)fluoranthene	110	J
207-08-9	Benzo(k)fluoranthene	94	J
50-32-8	Benzo(a)pyrene	95	J
193-39-5	Indeno(1,2,3-cd)pyrene	570	U
53-70-3	Dibenzo(a,h)anthracene	570	U
191-24-2	Benzo(g,h,i)perylene	570	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y4

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG365

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 42 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.05	180	J
2.	UNKNOWN	7.37	1300	JB
3.	UNKNOWN	8.12	700	JB
4.	UNKNOWN	8.91	370	J
5.	UNKNOWN	9.07	240	J
6. 103-82-2	BENZENEACETIC ACID	12.11	120	NJ
7. 57-10-3	N-HEXADECANOIC ACID	20.52	150	NJ
8.	UNKNOWN	20.98	420	J
9. 50-29-3	CHLOROPHENOTHANE	24.27	140	NJ
10. 629-66-3	2-NONADECANONE	25.35	140	NJ
11. 75207-54-4	2-PENTACOSANONE	26.88	530	NJ
12.	UNKNOWN	27.74	290	J
13.	UNKNOWN	28.90	380	J
14.	UNKNOWN	29.57	1300	J
15. 17600-99-6	2-NONACOSANONE	29.68	470	NJ
16.	UNKNOWN	31.05	6300	J
17.	UNKNOWN	31.29	1500	J
18. 1000214-20-7	STIGMASTEROL, 22,23-DIHYDRO-	31.69	730	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y5

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG363

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 11 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	940	U
92-52-4	1,1'-Biphenyl	370	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	940	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
208-96-8	Acenaphthylene	370	U
99-09-2	3-Nitroaniline	940	U
83-32-9	Acenaphthene	370	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y5

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG363

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 11 Decanted: (Y/N)N ~~Date Extracted: 10/24/01~~

Concentrated Extract Volume: 500(uL) ~~Date Analyzed: 11/02/01~~

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940	U
100-02-7	4-Nitrophenol	940	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	56	J
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	940	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	940	U
85-01-8	Phenanthrene	39	J
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	372 ~~72~~	~~JB~~
206-44-0	Fluoranthene	82	J
129-00-0	Pyrene	88	J
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	45	J
218-01-9	Chrysene	52	J
117-81-7	bis(2-Ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	45	J
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y5

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG363

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 11 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

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

Number TICs found: 9

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.06	440	J
2. 111-77-3	ETHANOL, 2-(2-METHOXYETHOXY)	7.14	130	NJ
3.	UNKNOWN	7.37	490	JB
4.	UNKNOWN	8.12	1100	JB
5.	UNKNOWN	8.49	170	J
6.	UNKNOWN	9.08	700	J
7.	UNKNOWN	27.74	78	J
8.	UNKNOWN	31.03	85	J
9.	UNKNOWN	31.27	100	J
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FORM I SV-TIC

OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y6

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG370

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 24 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	430	U
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)Ether	430	U
95-57-8	2-Chlorophenol	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
98-86-2	Acetophenone	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
105-60-2	Caprolactam	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	430	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	430	U
606-20-2	2,6-Dinitrotoluene	430	U
208-96-8	Acenaphthylene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y6

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG370

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 24 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	140	J
86-73-7	Fluorene	45	J
7005-72-3	4-Chlorophenyl-phenylether	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
1912-24-9	Atrazine	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	640	
120-12-7	Anthracene	120	J
86-74-8	Carbazole	56	J
84-74-2	Di-n-butylphthalate	430 ~~190~~	~~JB~~ U
206-44-0	Fluoranthene	910	
129-00-0	Pyrene	1100	
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	460	
218-01-9	Chrysene	520	
117-81-7	bis(2-Ethylhexyl)phthalate	150	J
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	490	
207-08-9	Benzo(k)fluoranthene	420	J
50-32-8	Benzo(a)pyrene	420	J
193-39-5	Indeno(1,2,3-cd)pyrene	350	J
53-70-3	Dibenzo(a,h)anthracene	60	J
191-24-2	Benzo(g,h,i)perylene	160	J

(1) - Cannot be separated from Diphenylamine

11/5/01

1G

EPA SAMPLE NO.

E06Y6

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG370

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 24 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Extraction: (Type) SONC

Number TICs found: 17

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.06	260	J
2.		UNKNOWN	7.38	800	JB
3.		UNKNOWN	8.12	1200	JB
4.		UNKNOWN	8.49	100	J
5.		UNKNOWN	8.93	180	J
6.		UNKNOWN	9.09	650	J
7.	610-48-0	ANTHRACENE, 1-METHYL-	20.12	110	NJ
8.	613-12-7	ANTHRACENE, 2-METHYL-	20.17	130	NJ
9.		UNKNOWN	20.37	140	J
10.	84-65-1	9,10-ANTHRACENEDIONE	20.87	100	NJ
11.		UNKNOWN	20.99	150	J
12.	238-84-6	11H-BENZO[A]FLUORENE	23.15	150	NJ
13.		UNKNOWN	24.71	140	J
14.	638-66-4	OCTADECANAL	27.75	540	NJ
15.		UNKNOWN	29.56	590	J
16.		UNKNOWN	31.29	770	J
17.	1000214-20-7	STIGMASTEROL, 22,23-DIHYDRO-	31.69	350	NJ
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y7

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102468

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG366

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 16 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)Ether	390	U
95-57-8	2-Chlorophenol	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	990	U
95-95-4	2,4,5-Trichlorophenol	390	U
92-52-4	1,1'-Biphenyl	390	U
91-58-7	2-Chloronaphthalene	990	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	390	U
606-20-2	2,6-Dinitrotoluene	390	U
208-96-8	Acenaphthylene	990	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene		

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y7

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102468

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG366

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 16 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	990	U
100-02-7	4-Nitrophenol	990	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
86-73-7	Fluorene	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
100-01-6	4-Nitroaniline	990	U
534-52-1	4,6-Dinitro-2-methylphenol	990	U
86-30-6	N-Nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
1912-24-9	Atrazine	390	U
87-86-5	Pentachlorophenol	990	U
85-01-8	Phenanthrene	180	J
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	340 ~~110~~	~~JB~~ CC
206-44-0	Fluoranthene	290	J
129-00-0	Pyrene	350	J
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	160	J
218-01-9	Chrysene	180	J
117-81-7	bis(2-Ethylhexyl)phthalate	42	J
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	160	J
207-08-9	Benzo(k)fluoranthene	140	J
50-32-8	Benzo(a)pyrene	150	J
193-39-5	Indeno(1,2,3-cd)pyrene	85	J
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	61	J

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y7

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102468

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG366

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 16 Decanted: (Y/N) N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.06	310	J
2.	UNKNOWN	7.38	600	JB
3.	UNKNOWN	8.12	1000	JB
4.	UNKNOWN	8.49	130	J
5.	UNKNOWN	8.91	87	J
6.	UNKNOWN	9.08	560	J
7. 111-02-4	2,6,10,14,18,22-TETRACOSAHEX	27.73	640	NJ
8. 57-88-5	CHOLESTEROL	29.96	320	NJ
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG354

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 30 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	470	U
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)Ether	470	U
95-57-8	2-Chlorophenol	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
98-86-2	Acetophenone	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
105-60-2	Caprolactam	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	470	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	470	U
606-20-2	2,6-Dinitrotoluene	470	U
208-96-8	Acenaphthylene	470	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	470	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG354

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 30 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
86-73-7	Fluorene	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
1912-24-9	Atrazine	470	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	220	J
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470 ~~140~~	~~JB~~ U
206-44-0	Fluoranthene	410	J
129-00-0	Pyrene	440	J
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	210	J
218-01-9	Chrysene	240	J
117-81-7	bis(2-Ethylhexyl)phthalate	90	J
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	210	J
207-08-9	Benzo(k)fluoranthene	200	J
50-32-8	Benzo(a)pyrene	220	J
193-39-5	Indeno(1,2,3-cd)pyrene	110	J
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	86	J

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

E06Y8

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG354

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 30 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.06	130	J
2. 80-56-8	.ALPHA.-PINENE	7.14	150	NJ
3.	UNKNOWN	7.38	1400	JB
4.	UNKNOWN	8.12	1300	JB
5.	UNKNOWN	8.49	120	J
6. 5989-27-5	D-LIMONENE	8.76	580	NJ
7.	UNKNOWN	8.90	130	J
8.	UNKNOWN	9.06	360	J
9.	UNKNOWN	16.71	120	J
10. 57-10-3	N-HEXADECANOIC ACID	20.53	160	NJ
11.	UNKNOWN	27.74	260	J
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1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG373

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 37 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	520	U
108-95-2	Phenol	520	U
111-44-4	bis(2-Chloroethyl)Ether	520	U
95-57-8	2-Chlorophenol	520	U
95-48-7	2-Methylphenol	520	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520	U
98-86-2	Acetophenone	520	U
106-44-5	4-Methylphenol	520	U
621-64-7	N-Nitroso-di-n-propylamine	520	U
67-72-1	Hexachloroethane	520	U
98-95-3	Nitrobenzene	520	U
78-59-1	Isophorone	520	U
88-75-5	2-Nitrophenol	520	U
105-67-9	2,4-Dimethylphenol	520	U
111-91-1	bis(2-Chloroethoxy)methane	520	U
120-83-2	2,4-Dichlorophenol	520	U
91-20-3	Naphthalene	520	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	520	U
105-60-2	Caprolactam	520	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-57-6	2-Methylnaphthalene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
88-06-2	2,4,6-Trichlorophenol	520	U
95-95-4	2,4,5-Trichlorophenol	1300	U
92-52-4	1,1'-Biphenyl	520	U
91-58-7	2-Chloronaphthalene	520	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	520	U
606-20-2	2,6-Dinitrotoluene	520	U
208-96-8	Acenaphthylene	520	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	520	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

E06Y9

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG373

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 37 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	520	U
121-14-2	2,4-Dinitrotoluene	520	U
84-66-2	Diethylphthalate	520	U
86-73-7	Fluorene	520	U
7005-72-3	4-Chlorophenyl-phenylether	520	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	520	U
101-55-3	4-Bromophenyl-phenylether	520	U
118-74-1	Hexachlorobenzene	520	U
1912-24-9	Atrazine	520	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	520	U
86-74-8	Carbazole	520	U
84-74-2	Di-n-butylphthalate	520 ~~64~~	~~JB~~ U
206-44-0	Fluoranthene	160	J
129-00-0	Pyrene	190	J
85-68-7	Butylbenzylphthalate	520	U
91-94-1	3,3'-Dichlorobenzidine	520	U
56-55-3	Benzo(a)anthracene	75	J
218-01-9	Chrysene	93	J
117-81-7	bis(2-Ethylhexyl)phthalate	100	J
117-84-0	Di-n-octylphthalate	520	U
205-99-2	Benzo(b)fluoranthene	77	J
207-08-9	Benzo(k)fluoranthene	67	J
50-32-8	Benzo(a)pyrene	71	J
193-39-5	Indeno(1,2,3-cd)pyrene	520	U
53-70-3	Dibenzo(a,h)anthracene	520	U
191-24-2	Benzo(g,h,i)perylene	520	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 OLM04.

EPA SAMPLE NO.

E06Y9

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG373

Level: (low/med) LOW Date Received: 10/18/01

% Moisture: 37 Decanted: (Y/N) N Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.06	190	J
2.	UNKNOWN	7.38	810	JB
3.	UNKNOWN	8.12	930	JB
4.	UNKNOWN	9.07	280	J
5. 75207-54-4	2-PENTACOSANONE	26.88	130	NJ
6.	UNKNOWN	27.03	130	J
7.	UNKNOWN	27.75	510	J
8. 112-92-5	1-OCTADECANOL	28.17	1900	NJ
9. 56554-78-0	7-HEPTADECENE, 1-CHLORO-	29.56	250	NJ
10. 7796-19-2	2-HEPTACOSANONE	29.68	290	NJ
11.	UNKNOWN	31.29	230	J
12. 1000214-20-7	STIGMASTEROL, 22,23-DIHYDRO-	31.69	240	NJ
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1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK46

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1024SSB1

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG351

Level: (low/med) LOW Date Received: _____

% Moisture: 0 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1D

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK46

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1024SSB1

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG351

Level: (low/med) LOW Date Received: _____

% Moisture: 0 Decanted: (Y/N)N Date Extracted: 10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	50	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK46

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1024SSB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG351

Level: (low/med) LOW Date Received: _____

% Moisture: _____ Decanted: (Y/N)___ Date Extracted:10/24/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

Number TICs found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.37	200	J
2.		UNKNOWN	8.11	82	J
3.					
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1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK52

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1030SSB1

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG352

Level: (low/med) LOW Date Received: _____

% Moisture: 0 Decanted: (Y/N)N Date Extracted: 10/30/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK52

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1030SSB1

Sample wt/vol: 30.0(g/mL) G Lab File ID: H73GG352

Level: (low/med) LOW Date Received: _____

% Moisture: 0 Decanted: (Y/N)N Date Extracted: 10/30/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	54	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK52

Lab Name: ENVIROSYSTEMS, INC. Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1030SSB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: H73GG352

Level: (low/med) LOW Date Received: _____

% Moisture: _____ Decanted: (Y/N)___ Date Extracted:10/30/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 11/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Extraction: (Type) SONC

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

GC Column(1): RTXCLP ID: 0.53(mm) GC Column(2): RTXCLP2 ID: 0.53(mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK52	73	76	81	81			0
02	E06U8	68	68	64	73			0
03	E06U9	73	74	66	82			0
04	E06W2	73	76	65	90			0
05	E06X8	68	68	73	74			0
06	E06X9	66	67	73	108			0
07	E06X9DL	64D	64D	68D	98D			0
08	E06Y0	61	63	58	78			0
09	E06Y1	78	82	72	89			0
10	E06Y2	66	70	60	73			0
11	E06Y3	72	74	65	74			0
12	E06Y4	75	78	62	81			0
13	E06Y4DL	86D	77D	54D	66D			0
14	E06Y5	74	76	66	80			0
15	E06Y5DL	76D	76D	61D	68D			0
16	E06Y6	73	75	59	129			0
17	E06Y7	67	69	66	87			0
18	E06Y8	74	76	62	81			0
19	E06Y9	67	70	60	76			0
20	E06Y1MS	76	80	68	86			0
21	E06Y1MSD	68	71	62	77			0

QC LIMITS

TCX = Tetrachloro-m-xylene (30-150)
DCB = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix Spike - EPA Sample No.: E06Y1

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	21.300	0	15.1	71	46-127
Heptachlor	21.300	0	18.4	86	35-130
Aldrin	21.300	0	16.8	79	34-132
Dieldrin	42.700	0	38.5	90	31-134
Endrin	42.700	0	42.4	99	42-139
4,4'-DDT	42.700	0	42.9	100	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	21.300	13.6	64	10	50	46-127
Heptachlor	21.300	17.0	80	7	31	35-130
Aldrin	21.300	15.5	73	8	43	34-132
Dieldrin	42.700	36.2	85	6	38	31-134
Endrin	42.700	38.5	90	10	45	42-139
4,4'-DDT	42.700	40.0	94	6	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK52

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Lab Sample ID: 1025PSB1 Lab File ID:

Matrix:(soil/water) SOIL Extraction: (Type) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 10/25/01

Date Analyzed (1): 11/03/01 Date Analyzed (2): 11/03/01

Time Analyzed (1): 0356 Time Analyzed (2): 0356

Instrument ID (1): HP90B1 Instrument ID (2): HP90B2

GC Column (1): RTXCLP ID: 0.53 (mm) GC Column (2): RTXCLP2 ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	E06U8	01102471	11/03/01	11/03/01
02	E06U9	01102472	11/03/01	11/03/01
03	E06W2	01102463	11/03/01	11/03/01
04	E06X8	01102464	11/03/01	11/03/01
05	E06X9	01102465	11/03/01	11/03/01
06	E06X9DL	01102465DL	11/03/01	11/03/01
07	E06Y0	01102473	11/03/01	11/03/01
08	E06Y1	01102474	11/03/01	11/03/01
09	E06Y2	01102475	11/03/01	11/03/01
10	E06Y3	01102476	11/03/01	11/03/01
11	E06Y4	01102477	11/03/01	11/03/01
12	E06Y4DL	01102477DL	11/03/01	11/03/01
13	E06Y5	01102466	11/03/01	11/03/01
14	E06Y5DL	01102466DL	11/03/01	11/03/01
15	E06Y6	01102467	11/03/01	11/03/01
16	E06Y7	01102468	11/03/01	11/03/01
17	E06Y8	01102469	11/03/01	11/03/01
18	E06Y9	01102470	11/03/01	11/03/01
19	E06Y1MS	01102474MS	11/03/01	11/03/01
20	E06Y1MSD	01102474MSD	11/03/01	11/03/01

COMMENTS:

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U8

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102471

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 89 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	15	U
319-85-7	beta-BHC	15	U
319-86-8	delta-BHC	15	U
58-89-9	gamma-BHC (Lindane)	15	U
76-44-8	Heptachlor	15	U
309-00-2	Aldrin	15	U
1024-57-3	Heptachlor epoxide	15	U
959-98-8	Endosulfan I	15	U
60-57-1	Dieldrin	30	U
72-55-9	4,4'-DDE	30	U
72-20-8	Endrin	30	U
33213-65-9	Endosulfan II	30	U
72-54-8	4,4'-DDD	30	U
1031-07-8	Endosulfan sulfate	30	U
50-29-3	4,4'-DDT	30	U
72-43-5	Methoxychlor	150	U
53494-70-5	Endrin ketone	30	U
7421-93-4	Endrin aldehyde	30	U
5103-71-9	alpha-Chlordane	15	U
5103-74-2	gamma-Chlordane	15	U
8001-35-2	Toxaphene	1500	U
12674-11-2	Aroclor-1016	300	U
11104-28-2	Aroclor-1221	610	U
11141-16-5	Aroclor-1232	300	U
53469-21-9	Aroclor-1242	300	U
12672-29-6	Aroclor-1248	300	U
11097-69-1	Aroclor-1254	300	U
11096-82-5	Aroclor-1260	300	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U9

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102472

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 87 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	13	U
319-85-7	beta-BHC	13	U
319-86-8	delta-BHC	13	U
58-89-9	gamma-BHC (Lindane)	13	U
76-44-8	Heptachlor	13	U
309-00-2	Aldrin	13	U
1024-57-3	Heptachlor epoxide	13	U
959-98-8	Endosulfan I	13	U
60-57-1	Dieldrin	25	U
72-55-9	4,4'-DDE	25	U
72-20-8	Endrin	25	U
33213-65-9	Endosulfan II	25	U
72-54-8	4,4'-DDD	25	U
1031-07-8	Endosulfan sulfate	25	U
50-29-3	4,4'-DDT	25	U
72-43-5	Methoxychlor	130	U
53494-70-5	Endrin ketone	25	U
7421-93-4	Endrin aldehyde	25	U
5103-71-9	alpha-Chlordane	13	U
5103-74-2	gamma-Chlordane	13	U
8001-35-2	Toxaphene	1300	U
12674-11-2	Aroclor-1016	250	U
11104-28-2	Aroclor-1221	520	U
11141-16-5	Aroclor-1232	250	U
53469-21-9	Aroclor-1242	250	U
12672-29-6	Aroclor-1248	250	U
11097-69-1	Aroclor-1254	250	U
11096-82-5	Aroclor-1260	250	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06W2

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102463

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 80 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.5	U
319-85-7	beta-BHC	8.5	U
319-86-8	delta-BHC	8.5	U
58-89-9	gamma-BHC (Lindane)	8.5	U
76-44-8	Heptachlor	8.5	U
309-00-2	Aldrin	8.5	U
1024-57-3	Heptachlor epoxide	8.5	U
959-98-8	Endosulfan I	8.5	U
60-57-1	Dieldrin	16	U
72-55-9	4,4'-DDE	16	U
72-20-8	Endrin	16	U
33213-65-9	Endosulfan II	16	U
72-54-8	4,4'-DDD	16	U
1031-07-8	Endosulfan sulfate	16	U
50-29-3	4,4'-DDT	18	P
72-43-5	Methoxychlor	85	U
53494-70-5	Endrin ketone	16	U
7421-93-4	Endrin aldehyde	20	P
5103-71-9	alpha-Chlordane	11	
5103-74-2	gamma-Chlordane	19	
8001-35-2	Toxaphene	850	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	340	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X8

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102464

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 8 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06X9DL

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102465DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 26 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	11	U
319-85-7	beta-BHC	11	U
319-86-8	delta-BHC	11	U
58-89-9	gamma-BHC (Lindane)	11	U
76-44-8	Heptachlor	11	U
309-00-2	Aldrin	11	U
1024-57-3	Heptachlor epoxide	11	U
959-98-8	Endosulfan I	11	U
60-57-1	Dieldrin	22	U
72-55-9	4,4'-DDE	74	D
72-20-8	Endrin	22	U
33213-65-9	Endosulfan II	22	U
72-54-8	4,4'-DDD	22	U
1031-07-8	Endosulfan sulfate	22	U
50-29-3	4,4'-DDT	130	D
72-43-5	Methoxychlor	110	U
53494-70-5	Endrin ketone	22	U
7421-93-4	Endrin aldehyde	22	U
5103-71-9	alpha-Chlordane	35	PD
5103-74-2	gamma-Chlordane	27	D
8001-35-2	Toxaphene	1100	U
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	450	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y0

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102473

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 31 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.8	U
72-55-9	4,4'-DDE	4.8	U
72-20-8	Endrin	4.8	U
33213-65-9	Endosulfan II	4.8	U
72-54-8	4,4'-DDD	4.8	U
1031-07-8	Endosulfan sulfate	4.8	U
50-29-3	4,4'-DDT	4.8	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin ketone	4.8	U
7421-93-4	Endrin aldehyde	4.8	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	2.5	U
8001-35-2	Toxaphene	250	U
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	97	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MS

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MS

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 22 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	15	
76-44-8	Heptachlor	18	
309-00-2	Aldrin	17	
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	38	
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	42	
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	43	
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y1MSD

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102474MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 22 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	14	
76-44-8	Heptachlor	17	
309-00-2	Aldrin	15	
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	36	
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	38	
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	40	
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y2

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102475

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y3

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102476

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 36 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7	U
8001-35-2	Toxaphene	270	U
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y4

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102477

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 42 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 2.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.9	U
319-85-7	beta-BHC	5.9	U
319-86-8	delta-BHC	5.9	U
58-89-9	gamma-BHC (Lindane)	5.9	U
76-44-8	Heptachlor	5.9	U
309-00-2	Aldrin	5.9	U
1024-57-3	Heptachlor epoxide	5.9	U
959-98-8	Endosulfan I	5.9	U
60-57-1	Dieldrin	11	U
72-55-9	4,4'-DDE	270	E
72-20-8	Endrin	11	U
33213-65-9	Endosulfan II	11	U
72-54-8	4,4'-DDD	11	U
1031-07-8	Endosulfan sulfate	11	U
50-29-3	4,4'-DDT	460	E
72-43-5	Methoxychlor	59	U
53494-70-5	Endrin ketone	11	U
7421-93-4	Endrin aldehyde	11	U
5103-71-9	alpha-Chlordane	5.9	U
5103-74-2	gamma-Chlordane	5.9	U
8001-35-2	Toxaphene	590	U
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	230	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y5

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	130	PE
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	4.9	P
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	78	E
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	9.9	P
5103-74-2	gamma-Chlordane	9.6	
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	75	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y5DL

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102466DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
58-89-9	gamma-BHC (Lindane)	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	37	U
72-55-9	4,4'-DDE	120	D
72-20-8	Endrin	37	U
33213-65-9	Endosulfan II	37	U
72-54-8	4,4'-DDD	37	U
1031-07-8	Endosulfan sulfate	37	U
50-29-3	4,4'-DDT	78	D
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	37	U
7421-93-4	Endrin aldehyde	37	U
5103-71-9	alpha-Chlordane	19	U
5103-74-2	gamma-Chlordane	19	U
8001-35-2	Toxaphene	1900	U
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	750	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	370	U
11096-82-5	Aroclor-1260	370	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y6

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102467

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 24 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	14	
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	88	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y8

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102469

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 30 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	6.4	
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	5.5	P
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	96	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06Y9

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 01102470

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 37 decanted: (Y/N) N Date Received: 10/18/01

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7	U
8001-35-2	Toxaphene	270	U
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK52

Lab Name: ENVIROSYSTEMS Contract: 68W99023

Lab Code: ENVSYS Case No.: 29867 SAS No.: SDG No.: E06U8

Matrix: (soil/water) SOIL Lab Sample ID: 1025PSB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/25/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/03/01

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E0608 CERCLIS No: IND980904379

Case No: 29867 Site Name/Location: Rocks Lake

Contractor or EPA Lab: Enviro Systems Data User: IDEM

No. of Samples: 15 Date Sampled or Date Received: 11/8/01

Have Chain-of-Custody records been received? Yes ✓ No ____
Have traffic reports or packing lists been received? Yes ✓ No ____
If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 15 No. of samples received: 15

Received by: Nicole Jackson/ESAT Date: 11/8/01

Received by LSSS: Nicole Jackson/ESAT Date: 11/8/01

Review started: 11/27/01 Reviewer Signature: [signature]

Total time spent on review: ____ Date review completed: 11/27/01

Copied by: Nicole Jackson/ESAT Date: 11/29/01

Mailed to user by: Nicole Jackson/ESAT Date: 11/29/01

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

Inorganic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: ____

Soil/Sediment/Water
Metals

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: November 14, 2001

SUBJECT: Review of Data
Received for Review on November 7, 2001

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

The data in this case has not been validated.
We have compiled the CADRE files into a narrative format for the following case:

SITE NAME: Becks Lake

CASE NUMBER: 29867 SDG NUMBER: ME06U4

Number and Type of Samples: 19 soils

Sample Numbers: ME06U4-9; ME06W2; ME06X8,9; ME06Y0-9

Laboratory: Chemtech Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

Case Number : 29867 SDG Number: ME06U4
Site Name: Becks Lake Laboratory: Chemtech

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

NUMBER (##) MATRIX samples numbered ##, were collected on DATE. The lab received the samples on DATE in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using CLP SOW ILM04.1 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure.

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

1. HOLDING TIME:

Holding Time Report

SDG NO: ME06U4

HOLDING TIME CRITERIA

Inorganic

	-- Holding Time --		------- pH -------	
	Primary	Expanded	Primary	Expanded
Metals	180	0	2.0	0.0
Mercury	28	0	2.0	0.0
Cyanide	14	0	12.0	0.0

DC-280: The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME06U8, ME06U9, ME06W2, ME06X8, ME06X9, ME06Y0
ME06Y1, ME06Y1D, ME06Y1S, ME06Y2, ME06Y3, ME06Y4
ME06Y5, ME06Y6, ME06Y7, ME06Y8, ME06Y9

2. CALIBRATIONS:

Calibration Report

SDG NO: ME06U4

CALIBRATION CRITERIA

Inorganic

Percent Recovery Limits

--- Primary ---		-- Expanded ---	
Low	High	Low	High

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867 SDG Number: ME06U4
Site Name: Becks Lake Laboratory: Chemtech

Cyanide	85.00	115.00	70.00	130.00
AA	90.00	110.00	75.00	125.00
ICP	90.00	110.00	75.00	125.00
Mercury	80.00	120.00	65.00	135.00

No problems found for this qualification.

CRDL Standards Report

SDG NO: ME06U4

DC-373: The following inorganic samples are associated with a CRDL standard with low percent recovery.

Arsenic
ME06Y1, ME06Y5, ME06Y6, ME06Y7

Chromium
ME06Y1, ME06Y5, ME06Y6, ME06Y7

Lead
ME06U4, ME06U6, ME06U7, ME06U8, ME06U9, ME06W2
ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2, ME06Y3
ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8, ME06Y9

Silver
ME06Y1, ME06Y5, ME06Y6, ME06Y7

Thallium
ME06Y1, ME06Y5, ME06Y6, ME06Y7

DC-374: The following inorganic samples are associated with a CRDL standard with high percent recovery.
Hits and non-detects are flagged .

Antimony
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Arsenic
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y2, ME06Y3
ME06Y4, ME06Y8, ME06Y9, PBS03, PBW03

Beryllium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

Cadmium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Cobalt
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y2, ME06Y3
ME06Y4, ME06Y8, ME06Y9, PBS03, PBW03

Manganese
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Nickel
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Selenium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Thallium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Vanadium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Zinc
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

3. BLANKS:

Laboratory Blanks Report

SDG NO: ME06U4

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867 SDG Number: ME06U4
Site Name: Becks Lake Laboratory: Chemtech

LABORATORY BLANKS CRITERIA

DC-283: The following inorganic samples are associated with a blank analyte with negative concentration whose absolute value is greater than the instrument detection limit (IDL). Professional judgement should be used to qualify the data.

ME06U4
Cadmium, Copper

ME06U4D
Cadmium, Copper

ME06U4S
Cadmium, Copper

ME06U5
Cadmium

ME06U6
Cadmium, Copper

ME06U7
Cadmium, Copper

ME06U8
Copper

ME06U9
Copper

ME06W2
Copper

ME06X8
Copper

ME06X9
Copper

ME06Y0
Copper

ME06Y1
Chromium, Copper, Potassium

ME06Y1D
Chromium, Copper, Potassium

ME06Y1S
Chromium, Copper

ME06Y2

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

Copper

ME06Y3
Copper

ME06Y4
Copper

ME06Y5
Chromium, Copper, Potassium

ME06Y6
Chromium, Copper, Potassium

ME06Y7
Chromium, Copper, Potassium

ME06Y8
Copper

ME06Y9
Copper

DC-284: The following inorganic samples are associated with a blank concentration which is greater than the instrument detection limit (IDL). The sample concentration is also greater than the IDL and less than five times the blank concentration. Hits are qualified "J"; non-detects are not flagged.

Antimony
ME06U6, ME06X9, ME06Y0, ME06Y6, ME06Y7

Arsenic
ME06U8, ME06U9, ME06W2, ME06X8, ME06Y3

Beryllium
ME06U4, ME06U4D, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y1D
ME06Y2, ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7
ME06Y8, ME06Y9

Nickel
ME06U4, ME06U4D, ME06U5, ME06U7

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

Matrix Spike Report

SDG NO: ME06U4

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867 SDG Number: ME06U4
Site Name: Becks Lake Laboratory: Chemtech

MATRIX SPIKE CRITERIA

Inorganic

Percent Recovery Limits

Upper	125.0
Lower	75.0
Extreme lower	30.0

DC-268: The following inorganic samples are associated with a matrix spike recovery which is low (30-74 %) indicating that sample results may be biased low.
Hits are qualified "J" and non-detects are qualified "UJ".

Silver
ME06U8, ME06U9, ME06W2, ME06X8, ME06X9, ME06Y0
ME06Y1, ME06Y1D, ME06Y2, ME06Y3, ME06Y4, ME06Y5
ME06Y6, ME06Y7, ME06Y8, ME06Y9

LCS Report

SDG NO: ME06U4

No problems found for this qualification.

5. LABORATORY AND FIELD DUPLICATE

Duplicates Report

SDG NO: ME06U4

No problems found for this qualification.

6. ICP ANALYSIS

ICS Report

SDG NO: ME06U4

DC-312: The following inorganic samples have elements other than Al, Ca,

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

Fe, and Mg at concentrations higher than 10 ppm that may cause potential interference.
Hits are flagged "J" and non-detects are qualified "UJ".

Sodium
ME06U4, ME06U5, ME06U6, ME06U7

Serial Dilution Report

SDG NO: ME06U4

DC-294: The analyte concentration is high (>50 X the IDL) and serial dilution percent difference is not in criteria (>10%).
Hits are qualified "J" and non-detects are qualified "UJ".

Potassium
ME06U4, ME06U4D, ME06U5, ME06U6, ME06U7, ME06U8
ME06U9, ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1
ME06Y1D, ME06Y2, ME06Y3, ME06Y4, ME06Y5, ME06Y6
ME06Y7, ME06Y8, ME06Y9

7. GFAA ANALYSIS

Furnace AA QC Report

SDG NO: ME06U4

No problems found for this qualification.

8. SAMPLE RESULTS

All data, except those qualified above, are acceptable.

Sample Result Verification Report

SDG NO: ME06U4

DC-336: The following inorganic samples have ICP determined results (for analytes usually determined by furnace AA) whose concentrations

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867 SDG Number: ME06U4
Site Name: Becks Lake Laboratory: Chemtech

are below criteria. Professional judgement should be used to qualify the data.

Selenium
ME06U8, ME06U9

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The data are unusable. (The compound may or may not be present)

Assembled By: ESAT
Date: November 14,2001

Analytical Results (Qualified Data) Page ____ of ____

Case #: 29867 SDG : ME06U4

Site : BECKS LAKE Number of Soil Samples : 15

Lab. : CHEM Number of Water Samples : 4

Reviewer :

Date :

Sample Number :	ME06U8		ME06U9		ME06W2		ME06X8		ME06X9	
Sampling Location :	SD2		SD3		SD1		SS1		SS2	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	10/16/2001		10/16/2001		10/16/2001		10/16/2001		10/16/2001	
Time Sampled :	02:50		03:20		02:30		04:04		03:30	
%Solids :	11.1		14.0		19.6		91.8		75.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	8290		8180		6430		899		3810	
ANTIMONY	6.3	U	5.0	U	3.6	U	0.76	U	1.8	J
ARSENIC	15.5	J	18.1	J	11.5	J	2.7	J	13.8	
BARIUM	178		191		193		8.7		434	
BERYLLIUM	2.0	J	1.8	J	1.3	J	0.18	J	0.45	J
CADMIUM	1.0		0.91		0.40	U	0.090	U	1.2	
CALCIUM	58200		58600		145000		9750		28700	
CHROMIUM	62.8		49.5		42.7		2.6		19.0	
COBALT	9.4		8.2		6.8		1.8		3.0	
COPPER	146		139		108		7.1		44.4	
IRON	38600		36500		35500		3900		10100	
LEAD	630		649		405		5.6		78.4	
MAGNESIUM	11000		10800		10100		4890		5020	
MANGANESE	983		770		1060		47.9		190	
MERCURY	0.54		1.0		0.47		0.050	U	0.29	
NICKEL	57.4		37.3		34.2		3.7		9.3	
POTASSIUM	733	J	871	J	770	J	154	J	647	J
SELENIUM	7.2	U	5.7	U	4.1	U	0.87	U	1.7	
SILVER	1.6	UJ	1.3	UJ	0.91	UJ	0.19	UJ	0.23	UJ
SODIUM	1040		803		997		51.1		131	
THALLIUM	8.6	U	6.9	U	8.4		1.0	U	1.3	U
VANADIUM	37.2		36.8		26.1		3.6		15.9	
ZINC	716		674		466		17.8		540	
CYANIDE										

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Analytical Results (Qualified Data) Page ____ of ____

Case #: 29867 SDG : ME06U4
Site : BECKS LAKE
Lab. : CHEM
Reviewer :
Date :

Sample Number :	ME06Y0		ME06Y1		ME06Y2		ME06Y3		ME06Y4	
Sampling Location :	SS3		SS4		SS5		SS6		SS7	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	10/16/2001		10/16/2001		10/16/2001		10/16/2001		10/16/2001	
Time Sampled :	02:45		02:45		03:00		03:40		02:10	
%Solids :	68.0		77.9		77.9		77.7		58.6	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	3040		3390		2810		1530		5850	
ANTIMONY	1.2	J	0.92	U	0.91	U	0.90	U	1.2	U
ARSENIC	11.8		8.5		7.5		4.8	J	20.9	
BARIUM	112		71.4		66.1		29.9		90.4	
BERYLLIUM	0.50	J	0.60	J	0.46	J	0.30	J	0.64	J
CADMIUM	0.12	U	0.10	U	0.10	U	0.10	U	0.13	U
CALCIUM	74600		32100		27100		26600		19200	
CHROMIUM	6.4		7.1		6.1		4.3		10.1	
COBALT	3.6		3.0		2.7		2.3		4.0	
COPPER	27.0		24.0		23.2		13.6		27.1	
IRON	21900		15700		13200		6680		18600	
LEAD	58.8		46.0		41.8		26.1		43.8	
MAGNESIUM	4210		3800		2930		6290		2020	
MANGANESE	606		262		245		207		135	
MERCURY	0.070	U	0.080		0.060	U	0.060	U	0.10	
NICKEL	6.8		6.8		5.9		4.8		10.5	
POTASSIUM	654	J	410	J	323	J	258	J	466	J
SELENIUM	1.9		1.1	U	1.0	U	1.0	U	3.3	
SILVER	0.26	UJ	0.23	UJ	0.23	UJ	0.22	UJ	0.30	UJ
SODIUM	134		107		82.5		83.2		71.4	
THALLIUM	2.2		2.5		1.2	U	1.2	U	1.6	U
VANADIUM	11.2		13.0		10.8		6.6		16.7	
ZINC	80.6		66.7		59.5		46.3		65.6	
CYANIDE										

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Analytical Results (Qualified Data) Page ____ of ____

Case #: 29867 SDG : ME06U4
Site : BECKS LAKE
Lab. : CHEM
Reviewer :
Date :

Sample Number :	ME06Y5		ME06Y6		ME06Y7		ME06Y8		ME06Y9	
Sampling Location :	SS8		SS9		SS10		SS11		SS12	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	10/16/2001		10/16/2001		10/16/2001		10/16/2001		10/16/2001	
Time Sampled :	01:20		12:50		01:00		12:05		12:30	
%Solids :	88.2		77.2		85.0		72.7		64.5	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	4390		3170		2870		2300		2490	
ANTIMONY	0.79	U	1.7	J	1.7	J	0.97	U	1.1	U
ARSENIC	5.7		9.8		8.5		13.9		11.0	
BARIUM	57.9		58.0		146		71.1		110	
BERYLLIUM	0.40	J	0.47	J	0.53	J	0.36	J	0.37	J
CADMIUM	0.090	U	0.10	U	0.32		0.11	U	0.12	U
CALCIUM	15500		5120		15800		44200		58400	
CHROMIUM	10.7		15.1		10.4		6.0		9.0	
COBALT	4.2		2.5		3.8		2.7		2.9	
COPPER	12.8		25.3		50.5		24.4		33.9	
IRON	9790		11600		11000		12000		18900	
LEAD	29.2		106		164		54.9		67.1	
MAGNESIUM	4030		1030		2730		3540		2780	
MANGANESE	480		166		285		384		404	
MERCURY	0.22		0.070	U	0.27		0.070	U	0.10	
NICKEL	7.9		6.3		8.3		7.3		6.5	
POTASSIUM	561	J	532	J	418	J	293	J	673	J
SELENIUM	0.90	U	1.4		1.5		1.1	U	2.6	
SILVER	0.20	UJ	0.23	UJ	0.21	UJ	0.24	UJ	0.27	UJ
SODIUM	55.3		70.6		131		98.0		115	
THALLIUM	1.1	U	1.2	U	1.4		1.3	U	1.5	U
VANADIUM	13.3		12.8		10.2		8.2		9.6	
ZINC	76.4		102		180		128		129	
CYANIDE										

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Analytical Results (Qualified Data) Page ____ of ____

Case #: 29867 SDG : ME06U4
Site : BECKS LAKE
Lab. : CHEM
Reviewer :
Date :

Sample Number :	ME06Y1D		ME06Y1S							
Sampling Location :	SS4		SS4							
Matrix :	Soil		Soil							
Units :	mg/Kg		mg/Kg							
Date Sampled :	10/16/2001		10/16/2001							
Time Sampled :	02:45		02:45							
%Solids :	78.5		77.9							
Dilution Factor :	1.0		1.0							
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2910									
ANTIMONY	0.92	U	135							
ARSENIC	7.3		19.2							
BARIUM	64.9		639							
BERYLLIUM	0.53	J	13.9							
CADMIUM	0.10	U	13.1							
CALCIUM	33000									
CHROMIUM	7.8		58.6							
COBALT	2.9		131							
COPPER	20.5		88.7							
IRON	14700									
LEAD	40.5		49.7							
MAGNESIUM	6170									
MANGANESE	260		390							
MERCURY	0.080		0.64							
NICKEL	5.9		137							
POTASSIUM	342	J								
SELENIUM	1.1	U	3.1							
SILVER	0.23	UJ	9.6							
SODIUM	76.5									
THALLIUM	1.3	U	13.4							
VANADIUM	11.5		143							
ZINC	60.4		193							
CYANIDE										

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Analytical Results (Qualified Data) Page ____ of ____

Case #: 29867 SDG : ME06U4
Site : BECKS LAKE
Lab. : CHEM
Reviewer :
Date :

Sample Number :	ME06U4		ME06U5		ME06U6		ME06U7		ME06U4D	
Sampling Location :	SW1		SW2		SW3		SW4		SW1	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/17/2001		10/17/2001		10/16/2001		10/16/2001		10/17/2001	
Time Sampled :	11:30		11:30		12:25		12:50		11:30	
%Solids :	0.0		0.0		0.0		0.0		0.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	216		273		251		313		265	
ANTIMONY	3.6	U	3.6	U	3.9	U	3.6	U	3.6	U
ARSENIC	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U
BARIUM	39.3		36.7		39.2		39.5		38.3	
BERYLLIUM	0.42	J	0.30	U	0.43	J	0.44	J	0.52	J
CADMIUM	0.40	U	0.40	U	0.40	U	0.40	U	0.40	U
CALCIUM	29300		27300		28600		27500		28400	
CHROMIUM	2.4		2.2		2.4		3.1		3.6	
COBALT	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
COPPER	14.0		14.9		18.4		18.4		10.9	
IRON	1040		926		957		1340		1100	
LEAD	11.2		10.1		11.1		16.6		11.6	
MAGNESIUM	4020		3730		3890		3830		3920	
MANGANESE	113		102		101		118		114	
MERCURY	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
NICKEL	5.8	J	4.7	J	24.1		5.2	J	6.0	J
POTASSIUM	2120	J	2070	J	2350	J	2050	J	1970	J
SELENIUM	4.1	U	4.1	U	4.1	U	4.1	U	4.1	U
SILVER	0.90	U	2.4		5.5		0.90	U	0.92	
SODIUM	12900	J	12200	J	12100	J	11300	J	12200	
THALLIUM	4.9	U	6.3		4.9	U	4.9	U	5.3	
VANADIUM	2.4		2.5		2.2		2.4		2.3	
ZINC	42.0		35.5		70.8		49.2		40.4	
CYANIDE										

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Analytical Results (Qualified Data)

Case #: 29867 SDG : ME06U4
Site : BECKS LAKE
Lab. : CHEM
Reviewer :
Date :

Sample Number :	ME06U4S									
Sampling Location :	SW1									
Matrix :	Water									
Units :	ug/L									
Date Sampled :	10/17/2001									
Time Sampled :	11:30									
%Solids :	0.0									
Dilution Factor :	1.0									
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2160									
ANTIMONY	516									
ARSENIC	42.2									
BARIUM	2280									
BERYLLIUM	56.5									
CADMIUM	53.9									
CALCIUM										
CHROMIUM	211									
COBALT	514									
COPPER	261									
IRON	2100									
LEAD	31.4									
MAGNESIUM										
MANGANESE	643									
MERCURY	1.0									
NICKEL	525									
POTASSIUM										
SELENIUM	7.8									
SILVER	37.9									
SODIUM										
THALLIUM	51.8									
VANADIUM	515									
ZINC	556									
CYANIDE										

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Soil/Sed/Water
Metals

DATE: October 15,2001

Indiana Dept of Environmental Management
Office of Environmental/Site Investigation Section
P.O. Box 6015
100 N. Senate Avenue
Indianapolis, IN 46206-6015

Attn: Mark Jaworski

SITE NAME: Becks Lake

CASE NO	LAB	NO # OF SAMPLES	SDG	MATRIX
29867	Chemtech	10	ME06U4	Soil

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Date:_____

Signature:_____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

RECEIVED

NOV 19 2001

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

NOV 15 2001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: November 14, 2001

SUBJECT: Review of Data
Received for Review on November 7, 2001

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

The data in this case has not been validated.
We have compiled the CADRE files into a narrative format for the following case:

SITE NAME: Becks Lake

CASE NUMBER: 29867 SDG NUMBER: ME06U4

Number and Type of Samples: 19 soils

Sample Numbers: ME06U4-9; ME06W2; ME06X8,9; ME06Y0-9

Laboratory: Chemtech Hrs. for Review: 2

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

NUMBER (##) MATRIX samples numbered ##, were collected on DATE. The lab received the samples on DATE in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using CLP SOW ILM04.1 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure.

Assembled By: ESAT
Date: November 14, 2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

1. HOLDING TIME:

Holding Time Report

SDG NO: ME06U4

HOLDING TIME CRITERIA

Inorganic

	-- Holding Time --		------- pH -------	
	Primary	Expanded	Primary	Expanded
Metals	180	0	2.0	0.0
Mercury	28	0	2.0	0.0
Cyanide	14	0	12.0	0.0

DC-280: The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME06U8, ME06U9, ME06W2, ME06X8, ME06X9, ME06Y0
ME06Y1, ME06Y1D, ME06Y1S, ME06Y2, ME06Y3, ME06Y4
ME06Y5, ME06Y6, ME06Y7, ME06Y8, ME06Y9

2. CALIBRATIONS:

Calibration Report

SDG NO: ME06U4

CALIBRATION CRITERIA

Inorganic

Percent Recovery Limits

	--- Primary ---		-- Expanded ---	
	Low	High	Low	High
Cyanide	85.00	115.00	[illegible]	[illegible]
AA	90.00	110.00	75.00	125.00
ICP	[illegible]	[illegible]	[illegible]	[illegible]
Mercury	80.00	120.00	[illegible]	[illegible]

[illegible]

[illegible]

Assembled By: ESAT
Date: November 14, 2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

CRDL Standards Report

SDG NO: ME06U4

DC-373: The following inorganic samples are associated with a CRDL standard with low percent recovery.

Arsenic
ME06Y1, ME06Y5, ME06Y6, ME06Y7

Chromium
ME06Y1, ME06Y5, ME06Y6, ME06Y7

Lead
ME06U4, ME06U6, ME06U7, ME06U8, ME06U9, ME06W2
ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2, ME06Y3
ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8, ME06Y9

Silver
ME06Y1, ME06Y5, ME06Y6, ME06Y7

Thallium
ME06Y1, ME06Y5, ME06Y6, ME06Y7

DC-374: The following inorganic samples are associated with a CRDL standard with high percent recovery.
Hits and non-detects are flagged .

Antimony
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Arsenic
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y2, ME06Y3
ME06Y4, ME06Y8, ME06Y9, PBS03, PBW03

Beryllium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Cadmium
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1, ME06Y2
ME06Y3, ME06Y4, ME06Y5, ME06Y6, ME06Y7, ME06Y8
ME06Y9, PBS03, PBW03

Cobalt
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8, ME06U9
ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y2, ME06Y3
ME06Y4, ME06Y8, ME06Y9, PBS03, PBW03

Manganese
ME06U4, [illegible]
ME06W2, [illegible]
[illegible]
[illegible]

Assembled By: ESAT
Date: November 14,2001

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

No problems found for this qualification.

6. ICP ANALYSIS

ICS Report

SDG NO: ME06U4

DC-312: The following inorganic samples have elements other than Al, Ca, Fe, and Mg at concentrations higher than 10 ppm that may cause potential interference.
Hits are flagged "J" and non-detects are qualified "UJ".

Sodium
ME06U4, ME06U5, ME06U6, ME06U7

Serial Dilution Report

SDG NO: ME06U4

DC-294: The analyte concentration is high (>50 X the IDL) and serial dilution percent difference is not in criteria (>10%).
Hits are qualified "J" and non-detects are qualified "UJ".

Potassium
ME06U4, ME06U4D, ME06U5, ME06U6, ME06U7, ME06U8
ME06U9, ME06W2, ME06X8, ME06X9, ME06Y0, ME06Y1
ME06Y1D, ME06Y2, ME06Y3, ME06Y4, ME06Y5, ME06Y6
ME06Y7, ME06Y8, ME06Y9

7. GFAA ANALYSIS

Furnace AA QC Report

SDG NO: ME06U4

No problems found for this qualification.

8. SAMPLE RESULTS

All data, except where qualified above, are acceptable.

Assembled By: ESAT
Date: November 14, 2002

Case Number : 29867
Site Name: Becks Lake

SDG Number: ME06U4
Laboratory: Chemtech

SDG NO: ME06U4

DC-336: The following inorganic samples have ICP determined results (for analytes usually determined by furnace AA) whose concentrations are below criteria. Professional judgement should be used to qualify the data.

Selenium
ME06U8, ME06U9

Assembled By: ESAT
Date: November 14, 2001

CADRE Data Qualifier Sheet

Qualifiers Data Qualifier Definitions

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The data are unusable. (The compound may or may not be present)

SDG # ME06U4

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 29867
DAS No: ME06U~~8~~4
SDG No: ~~ME06U4~~ JJ 10/26/01

L

Date Shipped: 10/17/01
Carrier Name: FedEx
Airbill: 830661906705
Shipped to: Chemtech Consulting Group (CHEM)
110 Route 4
Englewood NJ 07631
(201) 568-7400

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Daniel P. Chester	10/17/01 330PM	Jigarjetty	(10/18/01/10:00)
2			
3			
4			

For Lab Use Only

Lab Contract No: 68W00089
Unit Price: 114.00
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
EO6U4	Surface Water/ Dan Chesterson	L/G	TM (21)	5039182 (HNO3), 5039183 (HNO3) (2)	SW1	S: 10/17/01 E: 10/17/01	11:30	E06U4, EO6U4	~~SAMPLE # ME06U8, ME06U9, ME06W2 ARE IN SDG # ME06U4~~ JJ 10/26/01
EO6U5	Surface Water/ Dan Chesterson	L/G	TM (21)	5039184 (1)	SW2	S: 10/17/01	11:30	EO6U5	
EO6U6	Surface Water/ Dan Chesterson	L/G	TM (21)	5039190 (Ice Only) (1)	SW3	S: 10/16/01	12:25	EO6U6	
EO6U7	Surface Water/ Dan Chesterson	L/G	TM (21)	5039196 (1)	SW4	S: 10/16/01	12:50	EO6U7	
EO6U8	Sediment/ Dan Chesterson	L/G	TM (21)	5039206 (1)	SD2	S: 10/16/01	2:50	EO6U8	
EO6U9	Sediment/ Dan Chesterson	L/G	TM (21)	5039210 (Ice Only) (1)	SD3	S: 10/16/01	3:20	EO6U9	
ME06W2	Sediment/ Dan Chesterson	L/G	TM (21)	5039202 (Ice Only) (1)	SD1	S: 10/16/01	2:30	E06W2	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: EO6U4	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 20434, 20435
Analysis Key: TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? Y

TR Number: 5-514185590-101701-0003

LABORATORY COPY

SDG # 1-E-6L-

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 29867
DAS No: JJ 10/26/01
SDG No: ME06U4

Date Shipped: 10/17/01
Carrier Name: FedEx
Airbill: 830661906690
Shipped to: Chemtech Consulting Group (CHEM)
110 Route 4
Englewood NJ 07631
(201) 568-7400

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	10/17/01 3:30PM	[signature]	10/18/01 10:00
2				
3				
4				

For Lab Use Only

Lab Contract No: 68W00089
Unit Price: 114.00
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME06Y8	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039261 (Ice Only) (1)	SS11	S: 10/16/01 12:05	E06Y8	
ME06Y9	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039265 (Ice Only) (1)	SS12	S: 10/16/01 12:30	E06Y9	

Shipment for Case Complete? N

Sample(s) to be used for laboratory QC: ME06Y1

Additional Sampler Signature(s):

Cooler Temperature Upon Receipt: 4°C

Chain of Custody Seal Number: 20436, 20437

Custody Seal Intact? Y Shipment Iced? Y

Analysis Key: TM = CLP TAL Total Metals

Concentration: L = Low, M = Low/Medium, H = High

Type/Designate: Composite = C, Grab = G

TR Number: 5-514185590-101701-0004

LABORATORY COPY

SDG # ME06U4

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 29867
DAS No:
SDG No: ME06U4 JT 10/26/01 L

Date Shipped: 10/17/01
Carrier Name: FedEx
Airbill: 830661906690
Shipped to: Chemtech Consulting Group (CHEM) 110 Route 4 Englewood NJ 07631 (201) 568-7400

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	David P. Chesterson	10/17/01 7:00PM	[illegible]	10/18/01 10:00
2				
3				
4				

Sampler Signature:

For Lab Use Only

Lab Contract No: 68W00089
Unit Price: 114.00
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION		SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME06X8	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039217 (Ice Only) (1)	SS1	S:	10/16/01	4:04	E06X8	
ME06X9	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	539221 (1)	SS2	S:	10/16/01	3:30	E06X9	
ME06Y0	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	503925 (Ice Only) (1)	SS3	S:	10/16/01	2:45	E06Y0	
ME06Y1	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039232 (Ice Only), 5039233 (Ice Only) (2)	SS4	S:	10/16/01	2:45	E06Y1	
ME06Y2	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039237 (Ice Only) (1)	SS5	S:	10/16/01	3:00	E06Y2	
ME06Y3	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039241 (Ice Only) (1)	SS6	S:	10/16/01	3:40	E06Y3	
ME06Y4	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039245 (Ice Only) (1)	SS7	S:	10/16/01	2:10	E06Y4	
ME06Y5	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039249 (Ice Only) (1)	SS8	S:	10/16/01	1:20	E06Y5	
ME06Y6	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039253 (Ice Only) (1)	SS9	S:	10/16/01	12:50	E06Y6	
ME06Y7	Surface Soil (0"-12")/ Dan Chesterson	L/G	TM (21)	5039257 (Ice Only) (1)	SS10	S:	10/16/01	1:00	E06Y7	

Shipment for Case complete? N

Sample(s) to be used for laboratory QC: ME06Y1

Additional Sampler Signature(s):

Cooler Temperature Upon Receipt: 4°C

Chain of Custody Seal Number: 20436, 20437

Custody Seal Intact? Y

Shipment Iced? Y

Analysis Key: TM = CLP TAL Total Metals

Concentration: L = Low, M = Low/Medium, H = High

Type/Designate: Composite = C, Grab = G

TR Number: 5-514185590-101701-0004

LABORATORY COPY

NOV 07 2001

SDG NARRATIVE

USEPA
LABORATORY NAME: CHEMTECH CONSULTING GROUP
Case # 29867
SDG # ME06U4
Contract # 68-W0-0089
LAB CODE: CHEM
Chemtech Project # 1468R

A. Number of Samples and Date of Receipt
04 Water and 15 Soil Samples were delivered to the laboratory from 10/18/01.

B. Parameters
Test requested was for Total Metals.

C. Cooler Temp
Indicator Bottle: Presence/Absence
Cooler Temp: 4.0 Deg. C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

The sample ID listed in the Traffic report are different than the ID listed in the sample tags and bottles.

E. Corrective Action taken for above:

Per Region 5, please prefix "M" to the sample IDs and make a note in the case narrative. The samples will now be as follows:
ME06U4, ME06U5, ME06U6, ME06U7, ME06U8 and ME06U9. Please let me know if you have any questions or problems.

F. Analytical Techniques:
All analysis done by using **CLP Methodology.**

G. Analytical Problem:

H. QA/ QC
Calibrations met requirements. Blank analyses did not indicate the presence of contamination. Interference Check Sample and Laboratory Control Sample were within Control Limits. The Spike Sample was within Control Limits. Serial Dilution met requirements except for the Potassium. Duplicate analyses and RPDs did met requirements Magnesium (soil matrix only).

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the

data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature _____ Name: Parveen Hasan

Date 11/06/2001 Title: QA/QC Officer

000004

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

SOW No.: ILM04.1

EPA SAMPLE #	Lab Sample ID.
ME06U4	1468R-01S
ME06U4D	1468R-01S2
ME06U4S	1468R-01MS
ME06U5	1468R-02S
ME06U6	1468R-03S
ME06U7	1468R-04S
ME06U8	1468R-05S
ME06U9	1468R-06S
ME06W2	1468R-07S
ME06X8	1468R-10S
ME06X9	1468R-11S
ME06Y0	1468R-12S
ME06Y1	1468R-13S
ME06Y1D	1468R-13S2
ME06Y1S	1468R-13MS
ME06Y2	1468R-14S
ME06Y3	1468R-15S
ME06Y4	1468R-16S
ME06Y5	1468R-17S
ME06Y6	1468R-18S
ME06Y7	1468R-19S
ME06Y8	1468R-08S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:
The "E" qualifiers on Form I and IX for the Potassium indicate chemical or physical interference effects, which were suspected during those elements' analyses only.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: PARVEEN HASAN Title: QA/QC OFFICER Date: 11/06/2001

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

SOW No.: ILM04.1

EPA SAMPLE #	Lab Sample ID.
ME06Y9	1468R-09S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

The "E" qualifiers on Form I and IX for the Potassium indicate chemical or physical interference effects, which were suspected during those elements' analyses only.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: PARVEEN HASAN Title: QA/QC OFFICER Date: 11/06/2001

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1

EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06U4

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Lab Sample ID: 1468R-01S

Level (low/med): LOW Date Received: 10/18/01

% 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	216			P
7440-36-0	Antimony	3.6	U		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	39.3	B		P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	29300			P
7440-47-3	Chromium	2.4	B		P
7440-48-4	Cobalt	1.5	U		P
7440-50-8	Copper	14.0	B		P
7439-89-6	Iron	1040			P
7439-92-1	Lead	11.2			P
7439-95-4	Magnesium	4020	B		P
7439-96-5	Manganese	113			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	5.8	B		P
7440-09-7	Potassium	2120	B	E	P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	12900			P
7440-28-0	Thallium	4.9	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	42.0			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06U5

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Lab Sample ID: 1468R-02S

Level (low/med): LOW Date Received: 10/18/01

% 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	273			P
7440-36-0	Antimony	3.6	U		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	36.7	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	27300			P
7440-47-3	Chromium	2.2	B		P
7440-48-4	Cobalt	1.5	U		P
7440-50-8	Copper	14.9	B		P
7439-89-6	Iron	926			P
7439-92-1	Lead	10.1			P
7439-95-4	Magnesium	3730	B		P
7439-96-5	Manganese	102			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium	2070	B	E	P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	2.4	B		P
7440-23-5	Sodium	12200			P
7440-28-0	Thallium	6.3	B		P
7440-62-2	Vanadium	2.5	B		P
7440-66-6	Zinc	35.5			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1

EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06U6

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Lab Sample ID: 1468R-03S

Level (low/med): LOW Date Received: 10/18/01

% 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	251			P
7440-36-0	Antimony	3.9	B		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	39.2	B		P
7440-41-7	Beryllium	0.43	B		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	28600			P
7440-47-3	Chromium	2.4	B		P
7440-48-4	Cobalt	1.5	U		P
7440-50-8	Copper	18.4	B		P
7439-89-6	Iron	957			P
7439-92-1	Lead	11.1			P
7439-95-4	Magnesium	3890	B		P
7439-96-5	Manganese	101			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	24.1	B		P
7440-09-7	Potassium	2350	B	E	P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	5.5	B		P
7440-23-5	Sodium	12100			P
7440-28-0	Thallium	4.9	U		P
7440-62-2	Vanadium	2.2	B		P
7440-66-6	Zinc	70.8			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06U7

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Lab Sample ID: 1468R-04S

Level (low/med): LOW Date Received: 10/18/01

% 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	313			P
7440-36-0	Antimony	3.6	U		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	39.5	B		P
7440-41-7	Beryllium	0.44	B		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	27500			P
7440-47-3	Chromium	3.1	B		P
7440-48-4	Cobalt	1.5	U		P
7440-50-8	Copper	18.4	B		P
7439-89-6	Iron	1340			P
7439-92-1	Lead	16.6			P
7439-95-4	Magnesium	3830	B		P
7439-96-5	Manganese	118			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	5.2	B		P
7440-09-7	Potassium	2050	B	E	P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	11300			P
7440-28-0	Thallium	4.9	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	49.2			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06U8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-05S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 11.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8290			P
7440-36-0	Antimony	6.3	U		P
7440-38-2	Arsenic	15.5	B		P
7440-39-3	Barium	178	B		P
7440-41-7	Beryllium	2.0	B		P
7440-43-9	Cadmium	1.0	B		P
7440-70-2	Calcium	58200			P
7440-47-3	Chromium	62.8			P
7440-48-4	Cobalt	9.4	B		P
7440-50-8	Copper	146			P
7439-89-6	Iron	38600			P
7439-92-1	Lead	630			P
7439-95-4	Magnesium	11000		*	P
7439-96-5	Manganese	983			P
7439-97-6	Mercury	0.54	B		CV
7440-02-0	Nickel	57.4	B		P
7440-09-7	Potassium	733	B	E	P
7782-49-2	Selenium	7.2	U		P
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	1040	B		P
7440-28-0	Thallium	8.6	U		P
7440-62-2	Vanadium	37.2	B		P
7440-66-6	Zinc	716			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06U9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-06S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 14.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8180			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	18.1			P
7440-39-3	Barium	191	B		P
7440-41-7	Beryllium	1.8	B		P
7440-43-9	Cadmium	0.91	B		P
7440-70-2	Calcium	58600			P
7440-47-3	Chromium	49.5			P
7440-48-4	Cobalt	8.2	B		P
7440-50-8	Copper	139			P
7439-89-6	Iron	36500			P
7439-92-1	Lead	649			P
7439-95-4	Magnesium	10800		*	P
7439-96-5	Manganese	770			P
7439-97-6	Mercury	1.0			CV
7440-02-0	Nickel	37.3	B		P
7440-09-7	Potassium	871	B	E	P
7782-49-2	Selenium	5.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	803	B		P
7440-28-0	Thallium	6.9	U		P
7440-62-2	Vanadium	36.8	B		P
7440-66-6	Zinc	674			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06W2

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-07S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 19.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6430			P
7440-36-0	Antimony	3.6	U		P
7440-38-2	Arsenic	11.5			P
7440-39-3	Barium	193	B		P
7440-41-7	Beryllium	1.3	B		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	145000			P
7440-47-3	Chromium	42.7			P
7440-48-4	Cobalt	6.8	B		P
7440-50-8	Copper	108			P
7439-89-6	Iron	35500			P
7439-92-1	Lead	405			P
7439-95-4	Magnesium	10100		*	P
7439-96-5	Manganese	1060			P
7439-97-6	Mercury	0.47	B		CV
7440-02-0	Nickel	34.2	B		P
7440-09-7	Potassium	770	B	E	P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	0.91	U		P
7440-23-5	Sodium	997	B		P
7440-28-0	Thallium	8.4	B		P
7440-62-2	Vanadium	26.1	B		P
7440-66-6	Zinc	466			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06X8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-10S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 91.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	899			P
7440-36-0	Antimony	0.76	U		P
7440-38-2	Arsenic	2.7			P
7440-39-3	Barium	8.7	B		P
7440-41-7	Beryllium	0.18	B		P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	9750			P
7440-47-3	Chromium	2.6			P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	7.1			P
7439-89-6	Iron	3900			P
7439-92-1	Lead	5.6			P
7439-95-4	Magnesium	4890		*	P
7439-96-5	Manganese	47.9			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.7	B		P
7440-09-7	Potassium	154	B	E	P
7782-49-2	Selenium	0.87	U		P
7440-22-4	Silver	0.19	U		P
7440-23-5	Sodium	51.1	B		P
7440-28-0	Thallium	1.0	U		P
7440-62-2	Vanadium	3.8	B		P
7440-66-6	Zinc	17.8			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06X9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-11S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 75.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3810			P
7440-36-0	Antimony	1.8	B		P
7440-38-2	Arsenic	13.8			P
7440-39-3	Barium	434			P
7440-41-7	Beryllium	0.45	B		P
7440-43-9	Cadmium	1.2	B		P
7440-70-2	Calcium	28700			P
7440-47-3	Chromium	19.0			P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	44.4			P
7439-89-6	Iron	10100			P
7439-92-1	Lead	784			P
7439-95-4	Magnesium	5020		*	P
7439-96-5	Manganese	190			P
7439-97-6	Mercury	0.29			CV
7440-02-0	Nickel	9.3	B		P
7440-09-7	Potassium	647	B	E	P
7782-49-2	Selenium	1.7			P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	131	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	15.9			P
7440-66-6	Zinc	540			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06Y0

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-12S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 68.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3040			P
7440-36-0	Antimony	1.2	B		P
7440-38-2	Arsenic	11.8			P
7440-39-3	Barium	112			P
7440-41-7	Beryllium	0.50	B		P
7440-43-9	Cadmium	0.12	U		P
7440-70-2	Calcium	74600			P
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt	3.6	B		P
7440-50-8	Copper	27.0			P
7439-89-6	Iron	21900			P
7439-92-1	Lead	58.8			P
7439-95-4	Magnesium	4210		*	P
7439-96-5	Manganese	606			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	6.8	B		P
7440-09-7	Potassium	654	B	E	P
7782-49-2	Selenium	1.9			P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium	134	B		P
7440-28-0	Thallium	2.2	B		P
7440-62-2	Vanadium	11.2	B		P
7440-66-6	Zinc	80.6			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06Y1

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-13S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 77.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3390			P
7440-36-0	Antimony	0.92	U		P
7440-38-2	Arsenic	8.5			P
7440-39-3	Barium	71.4			P
7440-41-7	Beryllium	0.60	B		P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	32100			P
7440-47-3	Chromium	7.1			P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	24.0			P
7439-89-6	Iron	15700			P
7439-92-1	Lead	46.0			P
7439-95-4	Magnesium	3800		*	P
7439-96-5	Manganese	262			P
7439-97-6	Mercury	0.08	B		CV
7440-02-0	Nickel	6.8	B		P
7440-09-7	Potassium	410	B	E	P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	107	B		P
7440-28-0	Thallium	2.5	B		P
7440-62-2	Vanadium	13.0			P
7440-66-6	Zinc	66.7			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06Y2

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-14S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 77.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2810			P
7440-36-0	Antimony	0.91	U		P
7440-38-2	Arsenic	7.5			P
7440-39-3	Barium	66.1			P
7440-41-7	Beryllium	0.46	B		P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	27100			P
7440-47-3	Chromium	6.1			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	23.2			P
7439-89-6	Iron	13200			P
7439-92-1	Lead	41.8			P
7439-95-4	Magnesium	2930		*	P
7439-96-5	Manganese	245			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	5.9	B		P
7440-09-7	Potassium	323	B	E	P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	82.5	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	10.8	B		P
7440-66-6	Zinc	59.5			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06Y3

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-15S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 77.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1530			P
7440-36-0	Antimony	0.90	U		P
7440-38-2	Arsenic	4.8			P
7440-39-3	Barium	29.9	B		P
7440-41-7	Beryllium	0.30	B		P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	26600			P
7440-47-3	Chromium	4.3			P
7440-48-4	Cobalt	2.3	B		P
7440-50-8	Copper	13.6			P
7439-89-6	Iron	6680			P
7439-92-1	Lead	26.1			P
7439-95-4	Magnesium	6290		*	P
7439-96-5	Manganese	207			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	4.8	B		P
7440-09-7	Potassium	258	B	E	P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	83.2	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	6.6	B		P
7440-66-6	Zinc	46.3			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06Y4

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-16S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 58.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5850			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	20.9			P
7440-39-3	Barium	90.4			P
7440-41-7	Beryllium	0.64	B		P
7440-43-9	Cadmium	0.13	U		P
7440-70-2	Calcium	19200			P
7440-47-3	Chromium	10.1			P
7440-48-4	Cobalt	4.0	B		P
7440-50-8	Copper	27.1			P
7439-89-6	Iron	18600			P
7439-92-1	Lead	43.8			P
7439-95-4	Magnesium	2020		*	P
7439-96-5	Manganese	135			P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	10.5	B		P
7440-09-7	Potassium	466	B	E	P
7782-49-2	Selenium	3.3			P
7440-22-4	Silver	0.30	U		P
7440-23-5	Sodium	71.4	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	16.7	B		P
7440-66-6	Zinc	65.6			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE #

INORGANIC ANALYSIS DATA SHEET

ME06Y5

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-17S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 88.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4390			P
7440-36-0	Antimony	0.79	U		P
7440-38-2	Arsenic	5.7			P
7440-39-3	Barium	57.9			P
7440-41-7	Beryllium	0.40	B		P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	15500			P
7440-47-3	Chromium	10.7			P
7440-48-4	Cobalt	4.2	B		P
7440-50-8	Copper	12.8			P
7439-89-6	Iron	9790			P
7439-92-1	Lead	29.2			P
7439-95-4	Magnesium	4030		*	P
7439-96-5	Manganese	480			P
7439-97-6	Mercury	0.22			CV
7440-02-0	Nickel	7.9	B		P
7440-09-7	Potassium	561	B	E	P
7782-49-2	Selenium	0.90	U		P
7440-22-4	Silver	0.20	U		P
7440-23-5	Sodium	55.3	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	13.3			P
7440-66-6	Zinc	76.4			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06Y6

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-18S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 77.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3170			P
7440-36-0	Antimony	1.7	B		P
7440-38-2	Arsenic	9.8			P
7440-39-3	Barium	58.0			P
7440-41-7	Beryllium	0.47	B		P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	5120			P
7440-47-3	Chromium	15.1			P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	25.3			P
7439-89-6	Iron	11600			P
7439-92-1	Lead	106			P
7439-95-4	Magnesium	1030	B	*	P
7439-96-5	Manganese	166			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	6.3	B		P
7440-09-7	Potassium	532	B	E	P
7782-49-2	Selenium	1.4			P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	70.6	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	12.8			P
7440-66-6	Zinc	102			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06Y7

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-19S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 85.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2870			P
7440-36-0	Antimony	1.7	B		P
7440-38-2	Arsenic	8.5			P
7440-39-3	Barium	146			P
7440-41-7	Beryllium	0.53	B		P
7440-43-9	Cadmium	0.32	B		P
7440-70-2	Calcium	15800			P
7440-47-3	Chromium	10.4			P
7440-48-4	Cobalt	3.8	B		P
7440-50-8	Copper	50.5			P
7439-89-6	Iron	11000			P
7439-92-1	Lead	164			P
7439-95-4	Magnesium	2730		*	P
7439-96-5	Manganese	285			P
7439-97-6	Mercury	0.27			CV
7440-02-0	Nickel	8.3	B		P
7440-09-7	Potassium	418	B	E	P
7782-49-2	Selenium	1.5			P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	131	B		P
7440-28-0	Thallium	1.4	B		P
7440-62-2	Vanadium	10.2	B		P
7440-66-6	Zinc	180			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06Y8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-08S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 72.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2300			P
7440-36-0	Antimony	0.97	U		P
7440-38-2	Arsenic	13.9			P
7440-39-3	Barium	71.1			P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	44200			P
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	24.4			P
7439-89-6	Iron	12000			P
7439-92-1	Lead	54.9			P
7439-95-4	Magnesium	3540		*	P
7439-96-5	Manganese	364			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	7.3	B		P
7440-09-7	Potassium	293	B	E	P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	98.0	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	8.2	B		P
7440-66-6	Zinc	128			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

ME06Y9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Lab Sample ID: 1468R-09S

Level (low/med): LOW Date Received: 10/18/01

% Solids: 64.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2490			P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	11.0			P
7440-39-3	Barium	110			P
7440-41-7	Beryllium	0.37	B		P
7440-43-9	Cadmium	0.12	U		P
7440-70-2	Calcium	58400			P
7440-47-3	Chromium	9.0			P
7440-48-4	Cobalt	2.9	B		P
7440-50-8	Copper	33.9			P
7439-89-6	Iron	18900			P
7439-92-1	Lead	67.1			P
7439-95-4	Magnesium	2780		*	P
7439-96-5	Manganese	404			P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	6.5	B		P
7440-09-7	Potassium	673	B	E	P
7782-49-2	Selenium	2.6			P
7440-22-4	Silver	0.27	U		P
7440-23-5	Sodium	115	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	9.6	B		P
7440-66-6	Zinc	129			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

3
BLANKS

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	6.5	B	10.9	B	16.1	B	4.6	U	8.085	B	P
Antimony	3.6	U	3.6	U	3.6	U	5.9	B	3.600	U	P
Arsenic	3.2	U	3.2	U	3.2	U	3.2	U	3.200	U	P
Barium	0.1	U	0.4	B	0.1	U	0.2	B	0.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.5	B	0.300	U	P
Cadmium	0.4	U	0.4	U	0.4	U	0.4	U	0.465	B	P
Calcium	11.6	U	11.6	U	11.6	U	11.6	U	11.600	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Cobalt	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Copper	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Iron	17.8	U	17.8	U	17.8	U	17.8	U	17.800	U	P
Lead	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Magnesium	8.1	U	8.1	U	8.1	U	8.1	U	8.100	U	P
Manganese	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	0.7	U	0.8	B	0.7	U	1.2	B	0.700	U	P
Potassium	17.5	U	17.5	U	17.5	U	17.5	U	17.500	U	P
Selenium	4.1	U	4.1	U	4.1	U	4.1	U	4.100	U	P
Silver	0.9	U	0.9	U	0.9	U	0.9	U	0.900	U	P
Sodium	12.6	U	12.6	U	12.6	U	12.6	U	12.600	U	P
Thallium	4.9	U	4.9	U	4.9	U	4.9	U	4.900	U	P
Vanadium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Zinc	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			4.6	U	8.0	B	6.3	B	1.836	B	P
Antimony			7.5	B	4.5	B	3.6	U	0.720	U	P
Arsenic			3.2	U	3.2	U	3.2	U	0.687	B	P
Barium			0.4	B	0.1	U	0.1	U	0.020	U	P
Beryllium			0.7	B	0.8	B	1.3	B	0.060	U	P
Cadmium			0.4	U	-0.4	B	0.4	U	0.080	U	P
Calcium			11.6	U	11.6	U	11.6	U	2.320	U	P
Chromium			0.6	U	0.6	U	-0.7	B	0.120	U	P
Cobalt			1.5	U	1.5	U	1.5	U	0.300	U	P
Copper			-0.7	B	-0.7	B	-0.8	B	0.060	U	P
Iron			17.8	U	17.8	U	17.8	U	3.560	U	P
Lead			2.2	U	2.2	U	2.2	U	0.440	U	P
Magnesium			8.1	U	8.1	U	8.1	U	1.620	U	P
Manganese			0.2	U	0.2	U	0.2	U	0.040	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U	CV
Nickel			1.0	B	1.1	B	0.7	U	0.140	U	P
Potassium			17.5	U	17.5	U	-21.4	B	3.500	U	P
Selenium			4.1	U	4.1	U	4.1	U	0.820	U	P
Silver			0.9	U	0.9	U	0.9	U	0.180	U	P
Sodium			12.6	U	12.6	U	12.6	U	2.520	U	P
Thallium			4.9	U	4.9	U	4.9	U	0.980	U	P
Vanadium			1.0	U	1.0	U	1.0	U	0.200	U	P
Zinc			1.6	U	1.6	U	1.6	U	0.320	U	P
Cyanide											NR

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3
BLANKS

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			8.5	B	12.0	B	7.8	B			P
Antimony			3.6	U	4.7	B	7.5	B			P
Arsenic			3.2	U	3.2	U	3.2	U			P
Barium			0.1	U	0.1	U	1.3	B			P
Beryllium			1.5	B	1.6	B	1.8	B			P
Cadmium			-0.5	B	0.4	U	0.4	U			P
Calcium			11.6	U	11.6	U	11.6	U			P
Chromium			0.6	U	0.6	U	0.6	U			P
Cobalt			1.5	U	1.5	U	1.5	U			P
Copper			-1.3	B	-1.1	B	-1.1	B			P
Iron			17.8	U	17.8	U	17.8	U			P
Lead			2.2	U	2.2	U	2.2	U			P
Magnesium			8.1	U	8.1	U	8.1	U			P
Manganese			0.2	U	0.2	U	0.2	B			P
Mercury			0.1	U	0.1	U					CV
Nickel			0.7	U	0.7	U	1.7	B			P
Potassium			17.5	U	17.5	U	17.5	U			P
Selenium			4.1	U	4.1	U	4.1	U			P
Silver			0.9	U	0.9	U	0.9	U			P
Sodium			12.6	U	12.6	U	12.6	U			P
Thallium			-6.2	B	4.9	U	4.9	U			P
Vanadium			1.0	U	1.0	U	2.4	B			P
Zinc			1.6	U	1.6	U	1.6	U			P
Cyanide											NR

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5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE #

ME06U4S

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2163.7700		215.7050		2000.00	97.4		P
Antimony	75-125	515.6350		3.6000	U	500.00	103.1		P
Arsenic	75-125	42.2200		3.2000	U	40.00	105.6		P
Barium	75-125	2276.9050		39.2800	B	2000.00	111.9		P
Beryllium	75-125	56.4900		0.4150	B	50.00	112.2		P
Cadmium	75-125	53.8800		0.4000	U	50.00	107.8		P
Calcium									NR
Chromium	75-125	210.8750		2.4500	B	200.00	104.2		P
Cobalt	75-125	513.7550		1.5000	U	500.00	102.8		P
Copper	75-125	261.0250		13.9800	B	250.00	98.8		P
Iron	75-125	2100.0550		1044.5200		1000.00	105.6		P
Lead	75-125	31.3600		11.1750		20.00	100.9		P
Magnesium									NR
Manganese	75-125	643.0500		112.7400		500.00	106.1		P
Mercury	75-125	1.0410		0.1000	U	1.00	104.1		CV
Nickel	75-125	525.3200		5.8000	B	500.00	103.9		P
Potassium									NR
Selenium	75-125	7.8100		4.1000	U	10.00	78.1		P
Silver	75-125	37.9350		0.9000	U	50.00	75.9		P
Sodium									NR
Thallium	75-125	51.8150		4.9000	U	50.00	103.6		P
Vanadium	75-125	515.1450		2.4300	B	500.00	102.5		P
Zinc	75-125	556.3700		41.9900		500.00	102.9		P
Cyanide									NR

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE #

ME06Y1S

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 77.9

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	134.9166		0.9243	U	128.37	105.1		P
Arsenic	75-125	19.2221		8.4621		10.27	104.8		P
Barium	75-125	639.2593		71.3633		513.48	110.6		P
Beryllium	75-125	13.8703		0.5995	B	12.84	103.4		P
Cadmium	75-125	13.0668		0.1027	U	12.84	101.8		P
Calcium									NR
Chromium	75-125	58.5969		7.1451		51.35	100.2		P
Cobalt	75-125	131.1463		2.9538	B	128.37	99.9		P
Copper	75-125	88.6560		24.0231		64.18	100.7		P
Iron									NR
Lead		49.6855		45.9730		5.13	72.4		P
Magnesium									NR
Manganese	75-125	389.6739		261.7022		128.37	99.7		P
Mercury	75-125	0.6374		0.0789	B	0.64	87.3		CV
Nickel	75-125	137.1220		6.7664	B	128.37	101.5		P
Potassium									NR
Selenium	75-125	3.1451		1.0526	U	2.57	122.4		P
Silver	75-125	9.6008		0.2311	U	12.84	74.8		P
Sodium									NR
Thallium	75-125	13.3992		2.4698	B	12.84	85.1		P
Vanadium	75-125	142.7869		13.0167		128.37	101.1		P
Zinc	75-125	193.1643		66.7304		128.37	98.5		P
Cyanide									NR

Comments:

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DUPLICATES

EPA SAMPLE #

ME06U4D

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	215.7050		264.6550		20.4		P
Antimony		3.6000	U	3.6000	U			P
Arsenic		3.2000	U	3.2000	U			P
Barium		39.2800	B	38.2900	B	2.6		P
Beryllium		0.4150	B	0.5200	B	22.5		P
Cadmium		0.4000	U	0.4000	U			P
Calcium		29272.1600		28411.0050		3.0		P
Chromium		2.4500	B	3.5950	B	37.9		P
Cobalt		1.5000	U	1.5000	U			P
Copper		13.9800	B	10.8800	B	24.9		P
Iron		1044.5200		1096.2600		4.8		P
Lead	3.0	11.1750		11.6100		3.8		P
Magnesium		4017.1300	B	3920.0200	B	2.4		P
Manganese		112.7400		113.6650		0.8		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		5.8000	B	5.9600	B	2.7		P
Potassium		2122.1700	B	1968.0650	B	7.5		P
Selenium		4.1000	U	4.1000	U			P
Silver		0.9000	U	0.9150	B	200.0		P
Sodium	5000.0	12887.3650		12226.7850		5.3		P
Thallium		4.9000	U	5.2750	B	200.0		P
Vanadium		2.4300	B	2.2650	B	7.0		P
Zinc	20.0	41.9900		40.4450		3.7		P
Cyanide								NR

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DUPLICATES

EPA SAMPLE #

ME06Y1D

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 77.9 % Solids for Duplicate: 78.5

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		3392.2709		2910.4352		15.3		P
Antimony		0.9243	U	0.9243	U			P
Arsenic	2.6	8.4621		7.3132		14.6		P
Barium	51.3	71.3633		64.9371		9.4		P
Beryllium		0.5995	B	0.5327	B	11.8		P
Cadmium		0.1027	U	0.1027	U			P
Calcium		32089.8460		33010.0526		2.8		P
Chromium	2.6	7.1451		7.7625		8.3		P
Cobalt		2.9538	B	2.8845	B	2.4		P
Copper	6.4	24.0231		20.4711		16.0		P
Iron		15695.5841		14681.1181		6.7		P
Lead		45.9730		40.5237		12.6		P
Magnesium	1283.7	3795.0257		6167.6765		47.6	*	P
Manganese		261.7022		259.6470		0.8		P
Mercury		0.0789	B	0.0809	B	2.5		CV
Nickel		6.7664	B	5.9243	B	13.3		P
Potassium		410.0424	B	341.9743	B	18.1		P
Selenium		1.0526	U	1.0526	U			P
Silver		0.2311	U	0.2311	U			P
Sodium		106.9474	B	76.5186	B	33.2		P
Thallium		2.4698	B	1.2580	U	200.0		P
Vanadium	12.8	13.0167		11.4827	B	12.5		P
Zinc		66.7304		60.3736		10.0		P
Cyanide								NR

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9

ICP SERIAL DILUTIONS

EPA SAMPLE #

ME06U4L

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	215.70		199.62	B	7.5		P
Antimony	3.60	U	18.00	U			P
Arsenic	3.20	U	16.00	U			P
Barium	39.28	B	40.80	B	3.9		P
Beryllium	0.42	B	2.52	B	500.0		P
Cadmium	0.40	U	2.00	U			P
Calcium	29272.16		30179.52		3.1		P
Chromium	2.45	B	3.00	U	100.0		P
Cobalt	1.50	U	7.50	U			P
Copper	13.98	B	10.72	B	23.3		P
Iron	1044.52		1048.38		0.4		P
Lead	11.18		11.00	U	100.0		P
Magnesium	4017.13	B	4145.75	B	3.2		P
Manganese	112.74		116.80		3.6		P
Mercury							NR
Nickel	5.80	B	7.42	B	27.9		P
Potassium	2122.17	B	1817.12	B	14.4	E	P
Selenium	4.10	U	20.50	U			P
Silver	0.90	U	4.50	U			P
Sodium	12887.36		12191.92	B	5.4		P
Thallium	4.90	U	24.50	U			P
Vanadium	2.43	B	5.00	U	100.0		P
Zinc	41.99		39.40	B	6.2		P

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ICP SERIAL DILUTIONS

EPA SAMPLE #

ME06Y1L

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	13212.90		13512.40		2.3		P
Antimony	3.60	U	18.00	U			P
Arsenic	32.96		43.05	B	30.6		P
Barium	277.96		294.28	B	5.9		P
Beryllium	2.34	B	7.28	B	211.1		P
Cadmium	0.40	U	2.00	U			P
Calcium	124989.95		133273.38		6.6		P
Chromium	27.83		27.12	B	2.6		P
Cobalt	11.50	B	12.02	B	4.5		P
Copper	93.57		91.90	B	1.8		P
Iron	61134.30		65358.02		6.9		P
Lead	179.06		185.45		3.6		P
Magnesium	14781.62		15607.85	B	5.6		P
Manganese	1019.33		1092.22		7.2		P
Mercury							NR
Nickel	26.36	B	32.38	B	22.8		P
Potassium	1597.12	B	1298.15	B	18.7	E	P
Selenium	4.10	U	20.50	U			P
Silver	0.90	U	4.50	U			P
Sodium	416.56	B	335.50	B	19.5		P
Thallium	9.62	B	24.50	U	100.0		P
Vanadium	50.70		54.58	B	7.7		P
Zinc	259.92		275.05		5.8		P

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

ICP ID Number: Date: 10/15/01

Flame AA ID Number: CV

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR
Cyanide			10		NR

Comments:

CV: LEEMANPS200II AUTOMATED MERCURY ANALYZER

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

ICP ID Number: P0 Date: 10/15/01

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	4.6	P
Antimony	206.80		60	3.6	P
Arsenic	189.00		10	3.2	P
Barium	493.40		200	0.1	P
Beryllium	313.00		5	0.3	P
Cadmium	226.50		5	0.4	P
Calcium	317.90		5000	11.6	P
Chromium	267.70		10	0.6	P
Cobalt	228.60		50	1.5	P
Copper	324.70		25	0.3	P
Iron	271.40		100	17.8	P
Lead	220.40		3	2.2	P
Magnesium	279.00		5000	8.1	P
Manganese	257.60		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	0.7	P
Potassium	766.50		5000	17.5	P
Selenium	196.00		5	4.1	P
Silver	328.00		10	0.9	P
Sodium	588.90		5000	12.6	P
Thallium	190.90		10	4.9	P
Vanadium	292.40		50	1.0	P
Zinc	206.20		20	1.6	P
Cyanide			10		NR

Comments:

P0: ICP 61E TRACE ANALYZER

13

PREPARATION LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	10/29/01	0.20	100
ME06U8	10/29/01	0.20	100
ME06U9	10/29/01	0.20	100
ME06W2	10/29/01	0.20	100
ME06X8	10/29/01	0.20	100
ME06X9	10/29/01	0.20	100
ME06Y0	10/29/01	0.20	100
ME06Y1	10/29/01	0.20	100
ME06Y1D	10/29/01	0.20	100
ME06Y1S	10/29/01	0.20	100
ME06Y2	10/29/01	0.20	100
ME06Y3	10/29/01	0.20	100
ME06Y4	10/29/01	0.20	100
ME06Y5	10/29/01	0.20	100
ME06Y6	10/29/01	0.20	100
ME06Y7	10/29/01	0.20	100
ME06Y8	10/29/01	0.20	100
ME06Y9	10/29/01	0.20	100
PBS	10/29/01	0.20	100

13

PREPARATION LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29867 SAS No.: SDG No.: ME06U4

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	10/29/01	1.00	200
ME06U8	10/29/01	1.03	200
ME06U9	10/29/01	1.02	200
ME06W2	10/29/01	1.01	200
ME06X8	10/29/01	1.03	200
ME06X9	10/29/01	1.03	200
ME06Y0	10/29/01	1.02	200
ME06Y1	10/29/01	1.00	200
ME06Y1D	10/29/01	1.00	200
ME06Y1S	10/29/01	1.00	200
ME06Y2	10/29/01	1.02	200
ME06Y3	10/29/01	1.03	200
ME06Y4	10/29/01	1.02	200
ME06Y5	10/29/01	1.03	200
ME06Y6	10/29/01	1.03	200
ME06Y7	10/29/01	1.02	200
ME06Y8	10/29/01	1.02	200
ME06Y9	10/29/01	1.03	200
PBS	10/29/01	1.00	200

Water
VOCs, SVOCs, and PCB/Pesticides

1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

DATE: November 28, 2001

SUBJECT: Electronic (**Level 2**) Review of Data

Received for Review on November 7, 2001

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

The following data has been electronically reviewed by CADRE. No review of the raw data, laboratory narrative, laboratory forms or chain-of-custody forms was performed.

SITE NAME: Becks Lake (IN)
CASE NUMBER: 29867 SDG NUMBER: E06U4
Number and Type of Samples: 5 (waters)
Sample Numbers: E06U4-7 , E06W3
Laboratory: Shealy Hrs. for Review:
Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Five (5) Water samples, numbered *E06U4-7* and *E06W3* were collected on *October 17, 2001*. The lab received the samples on *October 19, 2001. Two bottles of E06U4 were received broken.* Four (4) samples E06U4 -7 were analyzed for the full list of organic analytes. Sample E06W3 was analyzed for only the volatile organic analytes. All were analyzed according to CLP SOW *OLC03.2*.

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

1. HOLDING TIME

DC-2 The following pesticide water samples are outside primary extraction holding time criteria. Hits are qualified "J" and non-detects are qualified "UJ".

E06U5RE, E06U7RE

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

DC-5 The following pesticide samples had no associated continuing PEM. Professional judgement is recommended Hits and non-detects are not flagged.

E06U4, E06U4DL, E06U4MS, E06U4MSD, E06U5, E06U5DL, E06U5RE, E06U6, E06U6DL, E06U7, E06U7DL, E06U7RE

3. CALIBRATION

DC-8 The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Dichlorodifluoromethane
E06U4MS, E06U4MSD, E06W3DL, VBLK02, VHBLK09

Methylene Chloride
E06U4MS, E06U4MSD, E06W3DL, VBLK02, VHBLK09

DC-6 The following semivolatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

Hexachlorocyclopentadiene
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7, SBLK01

DC-7 The following pesticide samples are associated with an incorrect continuing calibration sequence. Professional judgement should be used to qualify the data.

E06U4, E06U4DL, E06U4MS, E06U4MSD, E06U5, E06U5DL, E06U5RE, E06U6, E06U6DL,

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

E06U7, E06U7DL, E06U7RE

4. BLANKS

DC-19 The following volatile samples are associated with a contaminated storage blank. Hits are qualified "J" and non-detects are not flagged.

Methylene Chloride
E06W3, E06W3DL

DC-23 The following volatile samples have analyte concentrations reported at or above the CRQL. The associated method blank concentration is less than the concentration criteria. Hits are qualified "VS" and non-detects are not flagged.

Methylene Chloride
E06W3, E06W3DL

DC-11 The following semivolatile samples have analyte concentrations reported below the CRQL. The associated method blank concentration is less than the concentration criteria. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Di-n-butylphthalate
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7

Pyrene
E06U5, E06U6, E06U7

Benzo(a)anthracene
E06U4, E06U4MSD

Chrysene
E06U4MSD

Di-n-octylphthalate
E06U4MS, E06U4MSD

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

Indeno(1,2,3-cd)pyrene
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7

Dibenzo (a,h) - anthracene
E06U4

Benzo (g,h,i) perylene
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7

DC-13 The following semivolatile samples have analyte concentrations reported at or above the CRQL. The associated method blank concentration is less than the concentration criteria. Hits are qualified "VS" and non-detects are not flagged.

Pyrene
E06U4MS, E06U4MSD

DC-25 The following pesticide samples have analyte concentrations reported below the CRQL. The associated method blank concentration is more than or equal to the concentration criteria. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

beta-BHC
E06U4DL, E06U4MS, E06U4MSD

DC-27 The following pesticide samples have analyte concentrations reported at or above the CRQL and less than the method blank concentration. The associated method blank concentration is more than or equal to the concentration criteria. Blank concentration value is reported as the sample result. Hits are qualified "VS" and non-detects are not flagged.

beta-BHC
E06U4

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

DC-3 The following volatile samples have DMC recoveries above the upper limit of the criteria window. Hits are qualified "J" and non-detects are not flagged.

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

E06U4MSD

DC-4 The following volatile samples have one or more DMC recovery values below the lower limit of the criteria window. Hits are biased low and qualified "J" and non-detects are qualified "UJ".

E06W3

DC-20 The following semivolatile samples have deuterated monitoring compound recovery below the lower limit of the criteria window. Hits are qualified "J" and non-detects are qualified "VS".

E06U4
4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U4MS
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U4MSD
2,4-Dichlorophenol, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, Hexachlorocyclopentadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 1,2,4,5 Tetrachlorobenzene, Pentachlorophenol, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U5
4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U6
4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine,

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U7
4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

DC-5 The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".

E06U5, E06U7

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

DC-3 The following volatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria.Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and non-detects are estimated "UJ.

E06U4MS, E06U4MSD
1,1-Dichloroethene

DC-2 The following semivolatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria .Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and non-detects are estimated "UJ"

E06U4MS, E06U4MSD
4-Nitrophenol, Pentachlorophenol

DC-1 The relative percent difference (RPD) between the following pesticide matrix spike and matrix spike duplicate recoveries is outside criteria. Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and Non-detects are estimated "UJ

E06U4MS, E06U4MSD
Heptachlor, Aldrin

DC-2 The following pesticide matrix spike/matrix spike duplicate samples have percent recovery

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

outside criteria.Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and non-detects are estimated "UJ

E06U4MS
Aldrin

7. FIELD BLANK AND FIELD DUPLICATE

Sample E06U5 is a field duplicate of sample E06U4. Sample E06W3 is a trip blank.

8. INTERNAL STANDARDS

No defects found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SVOA, and Pesticide/PCB compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

DC-1 The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U7
Acetone

E06W3
Acetone

VBLK01
Methylene Chloride, Xylenes (total)

VBLK02
Chloromethane, Methylene Chloride, Xylenes (total)

VHBLK09

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

Chloromethane, Methylene Chloride

DC-1 The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U4MSD
Fluorene, N-Nitrosodiphenylamine, bis(2-Ethylhexyl)phthalate

SBLK01
Acetophenone, Di-n-butylphthalate, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

DC-1 The following pesticide samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U4
Endosulfan II, Endrin ketone, Endrin aldehyde, gamma-Chlordane

E06U4MS
Endrin ketone, Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

E06U4MSD
Heptachlor epoxide, Endrin ketone, Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

E06U5
alpha-Chlordane

E06U5RE
4,4-DDD

E06U6
Aldrin, Endrin aldehyde, alpha-Chlordane

E06U7
Endrin aldehyde, alpha-Chlordane

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

E06U7RE
Heptachlor, Endrin, Endosulfan II, alpha-Chlordane, gamma-Chlordane

DC-3 The following pesticide samples have analytes for which the percent difference between columm results exceeds primary criteria. Professional judgement should be used to qualify the data.

E06U4
Endosulfan II, Endrin ketone, Endrin aldehyde, gamma-Chlordane

E06U4DL
beta-BHC

E06U4MS
gamma-BHC (Lindane), Aldrin, Endrin ketone, Endrin aldehyde, alpha-Chlordane

E06U4MSD
beta-BHC, gamma-BHC (Lindane), Heptachlor epoxide, Endrin ketone, Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

E06U5
alpha-Chlordane, gamma-Chlordane

E06U6
Aldrin, Endrin aldehyde, alpha-Chlordane

E06U7
Endrin aldehyde, alpha-Chlordane

E06U7RE
Endosulfan II

11. SYSTEM PERFORMANCE
GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

12. ADDITIONAL INFORMATION

None

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867 **SDG Number: E06U4**
Site Name: Becks Lake (IN) **Laboratory: Shealy**

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

Level 2 - Assembled By: Richard Baltrus/IITRI-ESAT
Date: November 28, 2001

Water
VOCs, SVOCs, Pest PCB

DATE: November 30, 2001

Indiana Dept of Environmental Management
Office of Environmental/Site Investigation Section
P.O. Box 6015
100 N. Senate Avenue
Indianapolis, IN 46206-6015

Attn: Mark Jaworski

SITE NAME: Becks Lake

CASE NO	LAB	NO # OF SAMPLES	SDG	MATRIX
29867	Shealy	5	E06U4	Water

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by: _____ Date: _____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.
Date: _____

Signature: _____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

RECEIVED

DEC 05 2001

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

.049 mg/l

NOV 3 0 2001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

DATE: November 28, 2001

SUBJECT: Electronic (Level 2) Review of Data

Received for Review on November 7, 2001

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

The following data has been electronically reviewed by CADRE. No review of the raw data, laboratory narrative, laboratory forms or chain-of-custody forms was performed.

SITE NAME: Becks Lake (IN)

CASE NUMBER: 29867 SDG NUMBER: E06U4

Number and Type of Samples: 5 (waters)

Sample Numbers: E06U4-7 , E06W3

Laboratory: Shealy Hrs. for Review:

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Five (5) Water samples, numbered *E06U4-7* and *E06W3* were collected on *October 17, 2001*. The lab received the samples on *October 19, 2001. Two bottles of E06U4 were received broken.* Four (4) samples E06U4 -7 were analyzed for the full list of organic analytes. Sample E06W3 was analyzed for only the volatile organic analytes. All were analyzed according to CLP SOW *OLC03.2*.

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

1. HOLDING TIME

DC-2 The following pesticide water samples are outside primary extraction holding time criteria. Hits are qualified "J" and non-detects are qualified "UJ".

E06U5RE, E06U7RE

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

DC-5 The following pesticide samples had no associated continuing PEM. Professional judgement is recommended Hits and non-detects are not flagged.

E06U4, E06U4DL, E06U4MS, E06U4MSD, E06U5, E06U5DL, E06U5RE, E06U6, E06U6DL, E06U7, E06U7DL, E06U7RE

3. CALIBRATION

DC-8 The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Dichlorodifluoromethane
E06U4MS, E06U4MSD, E06W3DL, VBLK02, VHBLK09

Methylene Chloride
E06U4MS, E06U4MSD, E06W3DL, VBLK02, VHBLK09

DC-6 The following semivolatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

Hexachlorocyclopentadiene
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7, SBLK01

DC-7 The following pesticide samples are associated with an incorrect continuing calibration sequence. Professional judgement should be used to qualify the data.

E06U4, E06U4DL, E06U4MS, E06U4MSD, E06U5, E06U5DL, E06U5RE, E06U6, E06U6DL, E06U7, E06U7DL, E06U7RE

4. BLANKS

DC-19 The following volatile samples are associated with a contaminated storage blank. Hits are

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

qualified "J" and non-detects are not flagged.

Methylene Chloride
E06W3, E06W3DL

DC-23 The following volatile samples have analyte concentrations reported at or above the CRQL. The associated method blank concentration is less than the concentration criteria. Hits are qualified "VS" and non-detects are not flagged.

Methylene Chloride
E06W3, E06W3DL

DC-11 The following semivolatile samples have analyte concentrations reported below the CRQL. The associated method blank concentration is less than the concentration criteria. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Di-n-butylphthalate
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7

Pyrene
E06U5, E06U6, E06U7

Benzo(a)anthracene
E06U4, E06U4MSD

Chrysene
E06U4MSD

Di-n-octylphthalate
E06U4MS, E06U4MSD

Indeno(1,2,3-cd)pyrene
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7

Dibenzo (a,h) - anthracene
E06U4

Benzo (g,h,i) perylene
E06U4, E06U4MS, E06U4MSD, E06U5, E06U6, E06U7

DC-13 The following semivolatile samples have analyte concentrations reported at or above the

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

CRQL. The associated method blank concentration is less than the concentration criteria. Hits are qualified "VS" and non-detects are not flagged.

Pyrene

E06U4MS, E06U4MSD

DC-25 The following pesticide samples have analyte concentrations reported below the CRQL. Th associated method blank concentration is more than or equal to the concentration criteria. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

beta-BHC

E06U4DL, E06U4MS, E06U4MSD

DC-27 The following pesticide samples have analyte concentrations reported at or above the CRQl and less than the method blank concentration. The associated method blank concentration is more than or equal to the concentration criteria. Blank concentration value is reported as the sample result. Hits are qualified "VS" and non-detects are not flagged.

beta-BHC

E06U4

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

DC-3 The following volatile samples have DMC recoveries above the upper limit of the criteria window. Hits are qualified "J" and non-detects are not flagged.

E06U4MSD

DC-4 The following volatile samples have one or more DMC recovery values below the lower limit of the criteria window. Hits are biased low and qualified "J" and non-detects are qualified "UJ".

E06W3

DC-20 The following semivolatile samples have deuterated monitoring compound recovery below t lower limit of the criteria window. Hits are qualified "J" and non-detects are qualified "VS".

E06U4

4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine,

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U4MS

Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U4MSD

2,4-Dichlorophenol, 4-Chloroaniline, Hexachlorobutadiene, 4-Chloro-3-methylphenol, Hexachlorocyclopentadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 1,2,4,5 Tetrachlorobenzene, Pentachlorophenol, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U5

4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U6

4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E06U7

4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

DC-5 The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".

E06U5, E06U7

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

DC-3 The following volatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria.Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and non-detects are estimated "UJ.

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

E06U4MS, E06U4MSD
1,1-Dichloroethene

DC-2 The following semivolatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria .Results for the outlier compound(s) in the unspiked sample (E06U4) are estimate "J" and non-detects are estimated "UJ"

E06U4MS, E06U4MSD
4-Nitrophenol, Pentachlorophenol

DC-1 The relative percent difference (RPD) between the following pesticide matrix spike and matrix spike duplicate recoveries is outside criteria. Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and Non-detects are estimated "UJ

E06U4MS, E06U4MSD
Heptachlor, Aldrin

DC-2 The following pesticide matrix spike/matrix spike duplicate samples have percent recovery outside criteria.Results for the outlier compound(s) in the unspiked sample (E06U4) are estimated "J" and non-detects are estimated "UJ

E06U4MS
Aldrin

7. FIELD BLANK AND FIELD DUPLICATE

Sample E06U5 is a field duplicate of sample E06U4. Sample E06W3 is a trip blank.

8. INTERNAL STANDARDS

No defects found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SVOA, and Pesticide/PCB compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

DC-1 The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

E06U7
Acetone

E06W3
Acetone

VBLK01
Methylene Chloride, Xylenes (total)

VBLK02
Chloromethane, Methylene Chloride, Xylenes (total)

VHBLK09
Chloromethane, Methylene Chloride

DC-1 The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U4MSD
Fluorene, N-Nitrosodiphenylamine, bis(2-Ethylhexyl)phthalate

SBLK01
Acetophenone, Di-n-butylphthalate, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

DC-1 The following pesticide samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E06U4
Endosulfan II, Endrin ketone, Endrin aldehyde, gamma-Chlordane

E06U4MS
Endrin ketone, Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

E06U4MSD
Heptachlor epoxide, Endrin ketone, Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

E06U5
alpha-Chlordane

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

E06U5RE
4,4-DDD

E06U6
Aldrin, Endrin aldehyde, alpha-Chlordane

E06U7
Endrin aldehyde, alpha-Chlordane

E06U7RE
Heptachlor, Endrin, Endosulfan II, alpha-Chlordane, gamma-Chlordane

DC-3 The following pesticide samples have analytes for which the percent difference between columm results exceeds primary criteria. Professional judgement should be used to qualify the data.

E06U4
Endosulfan II, Endrin ketone, Endrin aldehyde, gamma-Chlordane

E06U4DL
beta-BHC

E06U4MS
gamma-BHC (Lindane), Aldrin, Endrin ketone, Endrin aldehyde, alpha-Chlordane

E06U4MSD
beta-BHC, gamma-BHC (Lindane), Heptachlor epoxide, Endrin ketone, Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

E06U5
alpha-Chlordane, gamma-Chlordane

E06U6
Aldrin, Endrin aldehyde, alpha-Chlordane

E06U7
Endrin aldehyde, alpha-Chlordane

E06U7RE
Endosulfan II

11. SYSTEM PERFORMANCE

Case Number : 29867
Site Name: Becks Lake (IN)

SDG Number: E06U4
Laboratory: Shealy

GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

12. ADDITIONAL INFORMATION

None

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may c may not represent the action limit of quantitation necessary to accurate and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 11-7-01

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: DEM

We have reviewed the data for the following case:

SITE NAME: Beeks Lake (IN)

CASE NUMBER: 29567 SDG NUMBER: E06K4

Number and Type of Samples: 5 (Water)

Sample Numbers: E06K4-7, E06K3

Laboratory: SHEALY Hrs for Review:

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 29867
DAS No:
SDG No: E06U4

L

Date Shipped:	10/17/01
Carrier Name:	FedEx
Airbill:	830661906727
Shipped to:	Shealy 106 Vantage Point Dr. Cayce SC 29033 (803) 791-9700

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	David P. Chesterson	10/17/01 3:30PM	[illegible]	10/19/01, 9:45
2				
3				
4				

For Lab Use Only

Lab Contract No: 68W01040
Unit Price: $475.00
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
EO6U5	Surface Water/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039185 (Ice Only), 5039186 (Ice Only), 5039187 (Ice Only), 5039188 (Ice Only), 5039189 (HCL) (5)	SW2	S: 10/17/01 11:30	EO6U5	OK
EO6U6	Surface Water/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039191 (Ice Only), 5039192 (Ice Only), 5039193 (Ice Only), 5039194 (Ice Only), 5039195 (HCL) (5)	SW3	S: 10/16/01 12:25	EO6U5	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3.6°C	Chain of Custody Seal Number: 20432, 20433
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles

TR Number: 5-514185590-101701-0002

LABORATORY COPY

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

EPA

Case No: 29867
DAS No:
SDG No: E06U4

L

Date Shipped:	10/17/01
Carrier Name:	FedEx
Airbill:	830661906738
Shipped to:	Shealy 106 Vantage Point Dr. Cayce SC 29033 (803) 791-9700

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	Daniel P. Chester	10/17/01 330PM	PMcClanahan	10/19/01, 845
2				
3				
4				

For Lab Use Only

Lab Contract No:	68W01040
Unit Price:	$475.00
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E06U4	Surface Water/ Dan Chesterson	L/G	PEST (21)	5039174 (Ice Only), 5039175 (Ice Only), 5039176 (Ice Only), 5039177 (Ice Only) (4)	SW1	S: 10/17/01 11:30 E: 10/17/01	EO6U4	~~OK~~ 5039174 + 5039176 were broken upon arrival
EO6U4	Surface Water/ Dan Chesterson	L/G	BNA (21), VOA (21)	5039172 (HCL), 5039173 (HCL), 5039178 (Ice Only), 5039179 (Ice Only), 5039180 (Ice Only), 5039181 (Ice Only) (6)	SW1	S: 10/17/01 11:30 E: 10/17/01	EO6U4	OK

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E06U4, EO6U4	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 0.7°C	Chain of Custody Seal Number: 20430 + 20431
Analysis Key: BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? Y

TR Number: 5-514185590-101701-0001

Requests for preliminary results will increase analytical costs.

LABORATORY COPY

F2V5.0.66 Page 1 of 1

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

EPA

Case No: 29867
DAS No:
SDG No: E06U4

L

Date Shipped: 10/17/01
Carrier Name: FedEx
Airbill: 830661906716
Shipped to: Shealy
106 Vantage Point Dr.
Cayce SC 29033
(803) 791-9700

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	Daniel P. Chesterson	10/19/01 330PM	PMC Clarendon	10-19-01 845
2				
3				
4				

For Lab Use Only

Lab Contract No: 68001040
Unit Price: $475.00
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E06W3	Surface Water/ Dan Chesterson	L/G	VOA (21)	5039266 (HCL) (1)	SW5	S: 10/16/01 7:30		OK
E06U7	Surface Water/ Dan Chesterson	L/G	BNA (21), PEST (21), VOA (21)	5039197 (Ice Only), 5039198 (Ice Only), 5039199 (Ice Only), 5039200 (Ice Only), 5039201 (HCL) (5)	SW4	S: 10/16/01 12:50	E06U7	

"SDG ... Final sample"

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4.2°C	Chain of Custody Seal Number: 20407, 20408
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles

TR Number: 5-514185590-101701-0007

LABORATORY COPY

Shealy Environmental Services, Inc.

NOV 07 2001

Contract Number: 68W01040

Date: 11/06/2001

SDG Narrative

Case 29867

SDG E06U4

EPA Sample Numbers

EPA Sample Number	Volatile Fraction	Dilution/ Reanalysis	BNA/Pesticide Fraction	Dilution/ Reanalysis	pH of volatile samples
E06U4	Yes	No	Yes	Yes	<2
E06U4MS	Yes	No	Yes	No	<2
E06U4MSD	Yes	No	Yes	No	<2
E06U5	Yes	No	Yes	Yes	<2
E06U6	Yes	No	Yes	Yes	<2
E06U7	Yes	No	Yes	Yes	<2
E06W3	Yes	Yes	No	N/A	<2

Columns	VOC RTX-624, 40m x 0.18mm x 1.0um SVOC DB-5MS 30m x 0.25mm x 0.25um Pesticides #1 RTX-Clpesticides11 30m x 0.32mm x 0.25um Pesticides #2 DB-17MS 30m x 0.32mm x 0.25um
Trap	VOCARB 3000, 17 cm of packing material

The INDAM at the end of the sequence failed acceptance criteria for several compounds three times when the sample extracts were analyzed undiluted. This demonstrated a matrix effect with respect to forming active sites in the inlet of the GC. All of the pesticides extracts exhibited a green color after the florisil cleanup. A suggestion was made by Shealy to the Region to analyze the extracts at a 10x dilution and report both the undiluted and diluted analyses. The Region concurred to this suggestion. Samples E06U4, E06U5, E06U6 and E06U7 were diluted and analyzed. The INDAM associated with the diluted samples passed the acceptance criteria.

The surrogate recoveries for samples E06U5 and E06U7 fell outside the acceptance criteria. Both samples were re-extracted and reanalyzed. The surrogates were within the acceptance criteria for the re-extracted samples. The re-extraction was performed outside holding time.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature.

11/6/2001

Daniel J. Wright

Laboratory Director

2LCA

LOW CONCENTRATION WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
==	==========	======	======	======	======	======	======	======
01	VBLK01	72	76	68	94	82	88	98
02	E06U4	76	84	72	84	86	90	96
03	E06U5	72	80	72	68	86	90	98
04	E06U6	74	80	72	84	86	90	98
05	E06U7	70	80	72	76	86	88	98
06	E06W3	72	78	68	76	82	86	94
07	VBLK02	78	82	68	86	80	88	84
08	E06U4MS	86	104	104	106	108	116	104
09	E06U4MSD	92	110	108	110	116	132*	116
10	E06W3DL	80	102	86	100	108	120	100
11	VHBLK09	88	102	90	104	110	122	104
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

			QC LIMITS
VDMC1	(VCL)	= Vinyl Chloride-d3	(49-138)
VDMC2	(CLA)	= Chloroethane-d5	(60-126)
VDMC3	(DCE)	= 1,1-Dichloroethene-d2	(65-130)
VDMC4	(BUT)	= 2-Butanone-d5	(42-171)
VDMC5	(CLF)	= Chloroform-d	(80-123)
VDMC6	(DCA)	= 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN)	= Benzene-d6	(78-121)

Column to be used to flag recovery values
* Values outside of contract required QC limits

2LCA

LOW CONCENTRATION WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (BRF) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
==	==========	======	======	======	======	======	======	======	===
01	VBLK01	92	92	96	64	92	84	100	0
02	E06U4	94	92	90	58	92	82	98	0
03	E06U5	88	92	88	60	88	82	96	0
04	E06U6	94	94	92	64	90	80	102	0
05	E06U7	94	96	88	70	90	84	96	0
06	E06W3	88	92	84	52	88	74*	98	1
07	VBLK02	86	78	82	58	88	86	84	0
08	E06U4MS	106	98	100	78	118	110	108	0
09	E06U4MSD	120	110	110	76	138*	124	128	2
10	E06W3DL	104	90	96	72	116	104	108	0
11	VHBLK09	106	94	102	74	130	112	114	0
12									
13									
14									
15									
16									
17									
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19									
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21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

			QC LIMITS
VDMC8	(DPA)	= 1,2-Dichloropropane-d6	(84-123)
VDMC9	(TOL)	= Toluene-d8	(77-120)
VDMC10	(TDP)	= trans-1,3-Dichloropropene-d4	(80-128)
VDMC11	(HEX)	= 2-Hexanone-d5	(37-169)
VDMC12	(BRF)	= Bromoform-d	(76-135)
VDMC13	(TCA)	= 1,1,2,2-Tetrachloroethane-d2	(75-131)
VDMC14	(DCZ)	= 1,2-Dichlorobenzene-d4	(50-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits

3LCA
LOW CONCENTRATION WATER VOLATILE
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Matrix Spike - EPA Sample No.: E06U4

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE AMOUNT (UG/L)	MS AMOUNT (UG/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	5.0	0.00	3.0	60*	61-145
Benzene	5.0	0.00	4.7	94	76-127
Trichloroethene	5.0	0.00	5.0	100	71-120
Toluene	5.0	0.00	4.9	98	76-125
Chlorobenzene	5.0	0.00	5.0	100	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD AMOUNT (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	5.0	2.6	52*	14	14	61-145
Benzene	5.0	4.2	84	11	11	76-127
Trichloroethene	5.0	4.7	94	6	14	71-120
Toluene	5.0	4.4	88	11	13	76-125
Chlorobenzene	5.0	4.6	92	8	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS:

4LCA

LOW CONCENTRATION WATER
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Analyzed: 10/22/2001

Lab File ID: BLK-11 Time Analyzed: 1615

Instrument ID: MSD5

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLE ANALYSES:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E06U4	CJ19010-001	J1901001	2206
02	E06U5	CJ19010-002	J1901002	2235
03	E06U6	CJ19010-003	J1901003	2304
04	E06U7	CJ19010-004	J1901004	2333
05	E06W3	CJ19010-005	J1901005	0002
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COMMENTS:

4LCA
~~LOW CONCENTRATION WATER~~
VOLATILE METHOD BlANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Analyzed: 10/23/2001

Lab File ID: BLK-2 Time Analyzed: 1132

Instrument ID: MSD5

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLE ANALYSES:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E06U4MS	CJ19010-001	J19010MS	1403
02	E06U4MSD	CJ19010-001	J19010MD	1432
03	E06W3DL	CJ19010-005	1901005X	1501
04	VHBLK09	CJ19010-006	J1901006	1534
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COMMENTS:

1LCA

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J1901001 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1LCB
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J1901001 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J1901001 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U4MS

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J19010MS Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	3.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	4.7	
107-06-2	1,2-Dichloroethane	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

E06U4MS

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J19010MS Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	5.0	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.9	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	5.0	
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCA
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4MSD

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J19010MD Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	2.6	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	4.2	
107-06-2	1,2-Dichloroethane	0.50	U

1LCB
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4MSD

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: J19010MD Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	4.7	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.4	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	4.6	
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Lab File ID: J1901002 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1LCB
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Lab File ID: J1901002 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Lab File ID: J1901002 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Lab File ID: J1901003 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Lab File ID: J1901003 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Lab File ID: J1901003 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Lab File ID: J1901004 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.1	J
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1LCB
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Lab File ID: J1901004 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Lab File ID: J1901004 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06W3

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-005 Date Received: 10/19/2001

Lab File ID: J1901005 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.1	J
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	180	EB
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06W3

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-005 Date Received: 10/19/2001

Lab File ID: J1901005 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.68	
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06W3

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-005 Date Received: 10/19/2001

Lab File ID: J1901005 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06W3DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-005 Date Received: 10/19/2001

Lab File ID: 1901005X Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 2.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl Chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	1.0	U
79-20-9	Methyl Acetate	1.0	U
75-09-2	Methylene Chloride	35	DB
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06W3DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-005 Date Received: 10/19/2001

Lab File ID: 1901005X Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 2.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	1.0	U
108-87-2	Methylcyclohexane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06W3DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-005 Date Received: 10/19/2001

Lab File ID: 1901005X Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 2.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Received: _____

Lab File ID: BLK-11 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.15	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Received: _____

Lab File ID: BLK-11 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.062	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Received: _____

Lab File ID: BLK-11 Date Analyzed: 10/22/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Received: _____

Lab File ID: BLK-2 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.10	J
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.21	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1LCB
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Received: _____

Lab File ID: BLK-2 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.083	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: METHOD BLANK Date Received: _____

Lab File ID: BLK-2 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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1LCA
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

VHBLK09

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-006 Date Received: 10/19/2001

Lab File ID: J1901006 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.21	JB
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.14	JB
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1LCB

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

VHBLK09

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-006 Date Received: 10/19/2001

Lab File ID: J1901006 Date Analyzed: 10/23/2001

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.18(MM) Length: 40.0(M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

2LCC

LOW CONCENTRATION WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

	EPA SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
==	==========	======	======	======	======	======	======	======	======
01	SBLK01	68	70	68	68	68	68	63	63
02	E06U4	65	65	65	68	65	65	65	0*
03	E06U5	60	63	60	55	63	63	50	0*
04	E06U6	58	60	60	53	63	63	53	0*
05	E06U7	58	58	55	53	60	60	50	0*
06	E06U4MS	65	68	65	63	68	68	58	8
07	E06U4MSD	46	48	47	43	49	49	41*	0*
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			QC LIMITS
SDMC1	(PHL)	= Phenol-d5	(10-110)
SDMC2	(BCE)	= bis-(2-Chloroethyl)ether-d8	(41- 94)
SDMC3	(2CP)	= 2-Chlorophenol-d4	(33-110)
SDMC4	(4MP)	= 4-Methylphenol-d8	(38- 95)
SDMC5	(NBZ)	= Nitrobenzene-d5	(35-114)
SDMC6	(2NP)	= 2-Nitrophenol-d4	(40-106)
SDMC7	(DCP)	= 2,4-Dichlorophenol-d3	(42- 98)
SDMC8	(4CA)	= 4-Chloroaniline-d4	(8- 70)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D DMC diluted out

2LCC

LOW CONCENTRATION WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

	EPA SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	SBLK01	73	68	73	68	68	78	80	90	0
02	E06U4	78	68	113	70	85	65	65	40*	2
03	E06U5	73	68	110	68	85	63	63	43*	2
04	E06U6	73	65	103	68	83	60	58	35*	2
05	E06U7	73	63	108	68	80	63	63	40*	2
06	E06U4MS	80	70	105	73	83	65	68	40*	1
07	E06U4MSD	65	55	100	60	80	60	70	43*	3
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			QC LIMITS
SDMC9	(DMP)	= Dimethylphthalate-d6	(62-102)
SDMC10	(ACY)	= Acenaphthylene-d8	(49- 98)
SDMC11	(4NP)	= 4-Nitrophenol-d4	(9-181)
SDMC12	(FLR)	= Fluorene-d10	(50- 97)
SDMC13	(NMP)	= 4,6-Dinitro-2-methylphenol-d2	(53-153)
SDMC14	(ANC)	= Anthracene-d10	(55-116)
SDMC15	(PYR)	= Pyrene-d10	(47-114)
SDMC16	(BAP)	= Benzo(a)pyrene-d12	(54-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D DMC diluted out

3LCB

LOW CONCENTRATION WATER SEMIVOLATILE
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Matrix Spike - EPA Sample No.: E06U4

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE AMOUNT (NG/UL)	MS AMOUNT (UG/L)	MS % REC #	QC. LIMITS REC.
Phenol	80	0.00	49	61	12-110
2-Chlorophenol	80	0.00	48	60	27-123
N-Nitroso-di-n-prop.(1)	20	0.00	14	70	41-116
4-Chloro-3-methylphenol	80	0.00	62	78	23- 97
Acenaphthene	20	0.00	15	75	46-118
4-Nitrophenol	80	0.00	89	111*	10- 80
2,4-Dinitrotoluene	20	0.00	17	85	24- 96
Pentachlorophenol	80	0.00	110	138*	9-103
Pyrene	20	0.00	14	70	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD AMOUNT (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	80	36	45	30	42	12-110
2-Chlorophenol	80	36	45	29	40	27-123
N-Nitroso-di-n-prop.(1)	20	10	50	33	38	41-116
4-Chloro-3-methylphenol	80	52	65	18	42	23- 97
Acenaphthene	20	11	55	31	31	46-118
4-Nitrophenol	80	87	109*	2	50	10- 80
2,4-Dinitrotoluene	20	16	80	6	38	24- 96
Pentachlorophenol	80	110	138*	0	50	9-103
Pyrene	20	14	70	0	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 9 outside limits
Spike Recovery: 4 out of 18 outside limits

COMMENTS:

4LCB
LOW CONCENTRATION WATER
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: 3478MB Date Extracted: 10/22/2001

Lab File ID: 1025A07 Date Analyzed: 10/25/2001

Instrument ID: MSD7 Time Analyzed: 1529

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLE ANALYSES:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	E06U4	CJ19010-001	1025A10	10/25/2001
02	E06U5	CJ19010-002	1025A11	10/25/2001
03	E06U6	CJ19010-003	1025A12	10/25/2001
04	E06U7	CJ19010-004	1025A13	10/25/2001
05	E06U4MS	CJ19010-001MS	1025A14	10/25/2001
06	E06U4MSD	CJ19010-001MSD	1025A15	10/25/2001
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COMMENTS:

FORM IV LCSV OLC03.2

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL . Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: 1025A10 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: 1025A10 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.59	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	0.12	JB
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.47	JB
53-70-3	Dibenzo(a,h)anthracene	0.27	JB
191-24-2	Benzo(g,h,i)perylene	0.55	JB

(1) - Cannot be separated from Diphenylamine

1LCG
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Lab File ID: 1025A10 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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02					
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1LCC

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4MS

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MS Date Received: 10/19/2001

Lab File ID: 1025A14 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	49	
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	48	
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	14	
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	62	
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	15	

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U4MS

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MS Date Received: 10/19/2001

Lab File ID: 1025A14 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	89	
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	17	
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	110	E
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.66	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	14	B
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	0.098	JB
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.26	JB
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	0.29	JB

(1) - Cannot be separated from Diphenylamine

1LCC

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U4MSD

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MSD Date Received: 10/19/2001

Lab File ID: 1025A15 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	36	
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	36	
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	10	
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	52	
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	11	

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U4MSD

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MSD Date Received: 10/19/2001

Lab File ID: 1025A15 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	87	
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	16	
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	0.072	J
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	0.18	J
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	110	E
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.42	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	14	B
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	0.076	JB
218-01-9	Chrysene	0.040	JB
117-81-7	bis(2-Ethylhexyl)phthalate	0.80	J
117-84-0	Di-n-octylphthalate	0.076	JB
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.22	JB
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	0.24	JB

(1) - Cannot be separated from Diphenylamine

1LCC

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Lab File ID: 1025A11 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Lab File ID: 1025A11 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.55	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	0.066	JB
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.43	JB
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	0.45	JB

(1) - Cannot be separated from Diphenylamine

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Lab File ID: 1025A11 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Lab File ID: 1025A12 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Lab File ID: 1025A12 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.42	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	0.065	JB
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.35	JB
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	0.32	JB

(1) - Cannot be separated from Diphenylamine

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Lab File ID: 1025A12 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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1LCC

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Lab File ID: 1025A13 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Lab File ID: 1025A13 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.69	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	0.073	JB
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.28	JB
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	0.33	JB

(1) - Cannot be separated from Diphenylamine

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Lab File ID: 1025A13 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
05					
06					
07					
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30					

FORM I LCSV-TIC OLC03.2

1LCC

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: 3478MB Date Received: _____

Lab File ID: 1025A07 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)Ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	0.11	J
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: 3478MB Date Received: _____

Lab File ID: 1025A07 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	0.41	J
206-44-0	Fluoranthene	0.12	J
129-00-0	Pyrene	0.18	J
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	0.48	J
218-01-9	Chrysene	0.49	J
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	0.27	J
205-99-2	Benzo(b)fluoranthene	0.59	J
207-08-9	Benzo(k)fluoranthene	0.61	J
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.1	J
53-70-3	Dibenzo(a,h)anthracene	1.1	J
191-24-2	Benzo(g,h,i)perylene	1.2	J

(1) - Cannot be separated from Diphenylamine

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: 3478MB Date Received: _____

Lab File ID: 1025A07 Date Extracted: 10/22/2001

Sample Volume: 1000(ML) Date Analyzed: 10/25/2001

Concentrated Extract Volume: 1000(UL) Dilution Factor: 1.0

Injection Volume: 1.0(UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
05					
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30					

2LCE

LOW CONCENTRATION WATER PESTICIDE SURROGATE RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

GC Column(1):RTXCLP2 ID:0.32(MM) GC Column(2):DB-17MS ID:0.32(MM)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK01	78	75	83	83			0
02	PLCS01	88	88	95	50			0
03	E06U4DL	98	73	50	48			0
04	E06U5DL	88	75	40	38			0
05	E06U6DL	78	73	40	40			0
06	E06U7DL	73	70	40	40			0
07	E06U4	95	68	35	38			0
08	E06U5	78	63	25*	30			1
09	E06U6	65	63	30	30			0
10	E06U7	60	58	25*	30			1
11	E06U4MS	83	78	38	45			0
12	E06U4MSD	75	60	33	38			0
13	PBLK02	65	68	68	68			0
14	PLCS02	68	83	75	78			0
15	E06U5RE	75	58	30	35			0
16	E06U7RE	50	55	30	33			0
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
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29								
30								

		QC LIMITS
S1 (TCX)	= Tetrachloro-m-Xylene	(30-150)
S2 (DCB)	= Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

3LCC
LOW CONCENTRATION WATER PESTICIDE
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Matrix Spike - EPA Sample No.: E06U4

Instrument ID: GC7 GC Column: RTXCLP2 ID: 0.32(MM)

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE AMOUNT (NG)	MS AMOUNT (UG/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	0.10	0.00	0.076	76	56-123
Heptachlor	0.10	0.00	0.059	59	40-131
Aldrin	0.10	0.00	0.025	25 *	40-120
Dieldrin	0.20	0.00	0.14	70	52-126
Endrin	0.20	0.00	0.15	75	56-121
4,4'-DDT	0.20	0.00	0.095	48	38-127

COMPOUND	SPIKE ADDED (UG/L)	MSD AMOUNT (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.10	0.074	74	3	15	56-123
Heptachlor	0.10	0.050	50	17	20	40-131
Aldrin	0.10	0.042	42	51*	22	40-120
Dieldrin	0.20	0.12	60	15	18	52-126
Endrin	0.20	0.13	65	14	21	56-121
4,4'-DDT	0.20	0.076	38	23	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

COMMENTS:

3LCD
LOW CONCENTRATION WATER PESTICIDE LAB CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

PLCS01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: LCS3477 LCS Lot No: A8070106

LCS Aliquot: 1.0(UL) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

Instrument ID: GC7 GC Column: RTXCLP2 ID: 0.32(MM)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
gamma-BHC (Lindane)	0.10	0.085	85	50-120
Heptachlor Epoxide	0.10	0.098	98	50-150
Dieldrin	0.20	0.19	95	30-130
4,4'-DDE	0.20	0.19	95	50-150
Endrin	0.20	0.22	110	50-120
Endosulfan sulfate	0.20	0.21	105	50-120
gamma-Chlordane	0.10	0.10	100	30-130

Instrument ID: GC7 GC Column: DB-17MS ID: 0.32(MM)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
gamma-BHC (Lindane)	0.10	0.095	95	50-120
Heptachlor Epoxide	0.10	0.094	94	50-150
Dieldrin	0.20	0.19	95	30-130
4,4'-DDE	0.20	0.19	95	50-150
Endrin	0.20	0.23	115	50-120
Endosulfan sulfate	0.20	0.21	105	50-120
gamma-Chlordane	0.10	0.085	85	30-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 outside limits out of 14 total.

COMMENTS:

3LCD

LOW CONCENTRATION WATER PESTICIDE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

PLCS02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: LCS3487 LCS Lot No: A8070106

LCS Aliquot: 1.0(UL) Date Extracted: 10/29/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 11/02/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

Instrument ID: GC7 GC Column: RTXCLP2 ID: 0.32(MM)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
gamma-BHC (Lindane)	0.10	0.074	74	50-120
Heptachlor Epoxide	0.10	0.077	77	50-150
Dieldrin	0.20	0.16	80	30-130
4,4'-DDE	0.20	0.16	80	50-150
Endrin	0.20	0.18	90	50-120
Endosulfan sulfate	0.20	0.16	80	50-120
gamma-Chlordane	0.10	0.079	79	30-130

Instrument ID: GC7 GC Column: DB-17MS ID: 0.32(MM)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
gamma-BHC (Lindane)	0.10	0.086	86	50-120
Heptachlor Epoxide	0.10	0.084	84	50-150
Dieldrin	0.20	0.17	85	30-130
4,4'-DDE	0.20	0.17	85	50-150
Endrin	0.20	0.21	105	50-120
Endosulfan sulfate	0.20	0.17	85	50-120
gamma-Chlordane	0.10	0.087	87	30-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 outside limits out of 14 total.

COMMENTS:

4LCC

LOW CONCENTRATION WATER
PESTICIDE METHOD BlANK SUMMARY

EPA SAMPLE NO.

PBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Date Extracted: 10/22/2001 Lab Sample ID: MB3477

Date Analyzed (1): 10/31/2001 Date Analyzed (2): 10/31/2001

Time Analyzed (1): 1712 Time Analyzed (2): 1730

Instrument ID (1): GC7 Instrument ID (2): GC7

GC Column (1): RTXCLP2 ID: 0.32(MM) GC Column (2): DB-17MS ID: 0.32(MM)

Sulfur Cleanup (Y/N) N Extraction: (Sepf/Cont) CONT

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLE ANALYSES:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLCS01	LCS3477	10/31/2001	10/31/2001
02	X02S3	CJ19017-003	10/31/2001	10/31/2001
03	X02S4	CJ19017-004	10/31/2001	10/31/2001
04	E06U4DL	CJ19010-001	10/31/2001	10/31/2001
05	E06U5DL	CJ19010-002	10/31/2001	10/31/2001
06	E06U6DL	CJ19010-003	10/31/2001	10/31/2001
07	E06U7DL	CJ19010-004	10/31/2001	10/31/2001
08	E06U4MSDL	CJ19010-001MS	10/31/2001	10/31/2001
09	E06U4MSDDL	CJ19010-001MSD	10/31/2001	10/31/2001
10	E06U4	CJ19010-001	10/31/2001	10/31/2001
11	E06U5	CJ19010-002	10/31/2001	10/31/2001
12	E06U6	CJ19010-003	10/31/2001	10/31/2001
13	E06U7	CJ19010-004	10/31/2001	10/31/2001
14	E06U4MS	CJ19010-001MS	10/31/2001	10/31/2001
15	E06U4MSD	CJ19010-001MSD	10/31/2001	11/01/2001
16				
17				
18				
19				
20				
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22				
23				
24				
25				
26				

COMMENTS:

4LCC
LOW CONCENTRATION WATER
PESTICIDE METHOD BlANK SUMMARY

EPA SAMPLE NO.

PBLK02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Date Extracted: 10/29/2001 Lab Sample ID: MB3487

Date Analyzed (1): 11/02/2001 Date Analyzed (2): 11/02/2001

Time Analyzed (1): 0742 Time Analyzed (2): 0801

Instrument ID (1): GC7 Instrument ID (2): GC7

GC Column (1): RTXCLP2 ID: 0.32(MM) GC Column (2): DB-17MS ID: 0.32(MM)

Sulfur Cleanup (Y/N) N Extraction: (Sepf/Cont) CONT

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLE ANALYSES:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLCS02	LCS3487	11/02/2001	11/02/2001
02	F06Q0	CJ24010-002	11/02/2001	11/02/2001
03	F0AF4	CJ25032-001	11/02/2001	11/02/2001
04	F0AF3	CJ25032-003	11/02/2001	11/02/2001
05	F0AF8	CJ25032-004	11/02/2001	11/02/2001
06	F0AF5	CJ25032-005	11/02/2001	11/02/2001
07	F0AF6	CJ25032-006	11/02/2001	11/02/2001
08	F0AF4MS	CJ25032-001MS	11/02/2001	11/02/2001
09	F0AF4MSD	CJ25032-001MSD	11/02/2001	11/02/2001
10	E06U5RE	CJ19010-002	11/02/2001	11/02/2001
11	E06U7RE	CJ19010-004	11/02/2001	11/02/2001
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COMMENTS:

1LCE
LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.037	PB
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.0021	JP
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.0028	JP
7421-93-4	Endrin Aldehyde	0.0021	JP
5103-71-9	alpha-Chlordane	0.010	U
5103-74-2	gamma-Chlordane	0.0030	JP
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
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EPA SAMPLE NO.

E06U4DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 10.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	0.034	DJPB
319-86-8	delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor Epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin Ketone	0.20	U
7421-93-4	Endrin Aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

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LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U4MS(1)

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MS Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.0057	J
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.096	
76-44-8	Heptachlor	0.059	
309-00-2	Aldrin	0.025	
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.14	
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.15	
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.095	
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.033	
7421-93-4	Endrin Aldehyde	0.0044	J
5103-71-9	alpha-Chlordane	0.0026	J
5103-74-2	gamma-Chlordane	0.0051	J
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U4MS(2)

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MS Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.0052	J
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.076	
76-44-8	Heptachlor	0.066	
309-00-2	Aldrin	0.054	
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.14	
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.16	
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.11	
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.0025	J
7421-93-4	Endrin Aldehyde	0.0058	J
5103-71-9	alpha-Chlordane	0.0069	J
5103-74-2	gamma-Chlordane	0.0053	J
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U4MSD(1)

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MSD Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.0079	J
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.094	
76-44-8	Heptachlor	0.050	
309-00-2	Aldrin	0.042	
1024-57-3	Heptachlor Epoxide	0.0099	J
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.12	
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.13	
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.076	
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.16	
7421-93-4	Endrin Aldehyde	0.0038	J
5103-71-9	alpha-Chlordane	0.0024	J
5103-74-2	gamma-Chlordane	0.0055	J
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U4MSD(2)

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-001MSD Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 11/01/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.0027	J
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.074	
76-44-8	Heptachlor	0.053	
309-00-2	Aldrin	0.045	
1024-57-3	Heptachlor Epoxide	0.0021	J
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.12	
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.15	
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.084	
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.0033	J
7421-93-4	Endrin Aldehyde	0.0026	J
5103-71-9	alpha-Chlordane	0.0099	J
5103-74-2	gamma-Chlordane	0.014	
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U5

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.010	U
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.020	U
5103-71-9	alpha-Chlordane	0.0045	JP
5103-74-2	gamma-Chlordane	0.010	P
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U5DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 10.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	0.10	U
319-86-8	delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor Epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin Ketone	0.20	U
7421-93-4	Endrin Aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

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LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
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EPA SAMPLE NO.

E06U5RE

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-002 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/29/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 11/02/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.010	U
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.0014	J
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.020	U
5103-71-9	alpha-Chlordane	0.010	U
5103-74-2	gamma-Chlordane	0.010	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U6

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.010	U
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.0014	JP
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.0024	JP
5103-71-9	alpha-Chlordane	0.0021	JP
5103-74-2	gamma-Chlordane	0.013	
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

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EPA SAMPLE NO.

E06U6DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-003 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 10.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	0.10	U
319-86-8	delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor Epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin Ketone	0.20	U
7421-93-4	Endrin Aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

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LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
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EPA SAMPLE NO.

E06U7

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.010	U
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.0068	JP
5103-71-9	alpha-Chlordane	0.0069	JP
5103-74-2	gamma-Chlordane	0.011	
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

1LCE

LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U7DL

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 10.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	0.10	U
319-86-8	delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor Epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin Ketone	0.20	U
7421-93-4	Endrin Aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

1LCE

LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E06U7RE

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: CJ19010-004 Date Received: 10/19/2001

Sample Volume: 1000(ML) Date Extracted: 10/29/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 11/02/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.010	U
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.0017	J
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.027	
72-20-8	Endrin	0.00036	J
33213-65-9	Endosulfan II	0.00064	JP
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.020	U
5103-71-9	alpha-Chlordane	0.0049	J
5103-74-2	gamma-Chlordane	0.0027	J
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

1LCE

LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

PBLK01

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: MB3477 Date Received: _____

Sample Volume: 1000(ML) Date Extracted: 10/22/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 10/31/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.098	
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.020	U
5103-71-9	alpha-Chlordane	0.010	U
5103-74-2	gamma-Chlordane	0.010	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

1LCE
LOW CONCENTRATION WATER PESTICIDE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

PBLK02

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 29867 Client No.: SDG No.: E06U4

Lab Sample ID: MB3487 Date Received: _____

Sample Volume: 1000(ML) Date Extracted: 10/29/2001

Concentrated Extract Volume: 2000(UL) Date Analyzed: 11/02/2001

Injection Volume: 1.0(UL) Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N Extraction: (Sepf/Cont) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
319-84-6	alpha-BHC	0.010	U
319-85-7	beta-BHC	0.020	
319-86-8	delta-BHC	0.010	U
58-89-9	gamma-BHC (Lindane)	0.010	U
76-44-8	Heptachlor	0.010	U
309-00-2	Aldrin	0.010	U
1024-57-3	Heptachlor Epoxide	0.010	U
959-98-8	Endosulfan I	0.010	U
60-57-1	Dieldrin	0.020	U
72-55-9	4,4'-DDE	0.020	U
72-20-8	Endrin	0.020	U
33213-65-9	Endosulfan II	0.020	U
72-54-8	4,4'-DDD	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
50-29-3	4,4'-DDT	0.020	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin Ketone	0.020	U
7421-93-4	Endrin Aldehyde	0.020	U
5103-71-9	alpha-Chlordane	0.010	U
5103-74-2	gamma-Chlordane	0.010	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E0644 CERCLIS No: IND980904379

Case No: 29867 Site Name/Location: Beeks Lake

Contractor or EPA Lab: SHEALY Data User: IDEM

No. of Samples: 5 Date Sampled or Date Received: 11-7-01

Have Chain-of-Custody records been received? Yes ✓ No ____
Have traffic reports or packing lists been received? Yes ✓ No ____
If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 5 No. of samples received: 5

Received by: Eva M. Dixon / ESAT Date: 11-7-01

Received by LSSS: Eva M. Dixon / ESAT Date: 11-7-01

Review started: ____ Reviewer Signature: ____

Total time spent on review: ____ Date review completed: ____

Copied by: Eva M. Dixon / ESAT Date: 11-30-01

Mailed to user by: Eva M. Dixon / ESAT Date: 11-30-01

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: ____

Sample Field Sheets

MS / MSD

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E Ø6U4 / ME Ø6U4

IDEM CONTROL: SW1

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other: LAKE	
Blank (Equip/Trip)		Duplicate (of _____)	
Background			

SAMPLE DATE: 10 / 16 / 01

TIME: 11 : 30 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic	2	HCl	(2 drops)	N/A
1 L Glass	6	H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials	4	NaOH	(50%)	
		Zn-Acetate	(2N)	
		Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
- Surface water sample, North side of lake. 6' from shore. 150' west of western edge of lake.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):
Top 2". Grayish in color with slight sewage smell.

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN: N/A

SAMPLING EQUIPMENT USED: N/A

SIGNATURE: D. Frith

DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: E0645/ME0645

IDEM CONTROL: SW 2

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other: lake	
Blank (Equip/Trip)		Duplicate (of SW 1)	
Background			

SAMPLE DATE: 10/16/01

TIME: 11 : 30 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic	1	HCL	(2 drops)	N/A
1 L Glass	4	H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials	2	NaOH	(50%)	
		Zn-Acetate	(2N)	
		Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: See SW 1

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED:

SIGNATURE: D. Fisher

DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E06 W 6

IDEM CONTROL: SW 3

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other lake	
Blank (Equip/Trip)		Duplicate (of _____)	
Background			

SAMPLE DATE: 12 / 16 / 01

TIME: 12 : 25 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic	1	HCL	(2 drops)	N/A
1 L Glass	4	H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials	2	NaOH	(50%)	
		Zn-Acetate	(2N)	
		Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
East end of lake, 50' west of shoreline

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):
top 2 inches

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: N/A

SIGNATURE: _____ DATE: _____

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E0647 / ME0647 IDEM CONTROL: SW4

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of lake)	
Background			

SAMPLE DATE: 10 / 16 / 01 TIME: 12 : 50 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic	1	HCL	(2 drops)	N/A
1 L Glass	4	H2SO4	(50%)	
500 ml Glass		HNO3	(conc.)	
40 ml Vials	2	NaOH	(50%)	
		Zn-Acetate	(2N)	
		Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: Surface water top 2 inches. Sample at west end of lake.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

Top 2 inches ≈ 70' west of bank. No odor, some particulates

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN: N/A

SAMPLING EQUIPMENT USED: N/A

SIGNATURE: D. Fisher DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E06W3

IDEM CONTROL: SW5

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 7 : 30 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials	2	NaOH	(50%)	
		Zn-Acetate	(2N)	
		Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
Kroger - Reverse Osmosis

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED:

SIGNATURE: David P. Christ DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: E06W2 / ME06W2

IDEM CONTROL: ~~SW5~~ SD1

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other: sediment	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10 / 16 / 01

TIME: 2 : 30 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz	3	Zn-Acetate	(2N)	
4 oz	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: East end of Lake. 25' west of shore line. Dk. Black silty sediment.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

Top 6" in depth

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN: N/A

SAMPLING EQUIPMENT USED: Ponar Dredge sampler, stainless Steel bowls, disp. scoops

SIGNATURE: D. [signature] DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E06U8/ M06U8

IDEM CONTROL: ~~SW 6~~ SD2

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	~~Sand~~	Liquid
Truck	Drum	Other: Sediment	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 2 : 50 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
4 oz	1	Zn-Acetate	(2N)	
8 oz	3	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: Center of Becks lake. Same as SW 5. for sample description.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

top 4 inches. DK. Black

~~FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling~~
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN: N/A

SAMPLING EQUIPMENT USED: Power Dredge, Stainless Steel bowl, disp. scoop.

SIGNATURE: [signature]

DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: E0649/ME0649

IDEM CONTROL: ~~SW7~~ SD3

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other	
Blank (Equip/Trip)		Duplicate (of Sediment	
Background			

SAMPLE DATE: 10 / 16 / 01

TIME: 3 : 20 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		HNO3	(conc.)	
~~40 ml Vials~~		NaOH	(50%)	
4 oz	1	Zn-Acetate	(2N)	
8 oz	3	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: Sample obtained from west side of lake (central), 50' west of western bank.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

top 4 inches. Dk. black mucky sediment.

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN: N/A

SAMPLING EQUIPMENT USED: ponar dredge, stainless steel bowls, disp. scoops

SIGNATURE: D. Fila

DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: EØ6X8/ MEØ6X8

IDEM CONTROL: SS1 ~~[illegible]~~

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

Field Test Performed	Result

SAMPLE DATE: 10/16/01

TIME: 4 : 05 AM/PM

Container Type	#of Containers
1 L Plastic	
1 L Glass	
500 ml Glass	
40 ml Vials	
8 oz glass	3
4 oz glass	1

Preservatives		Lab/Lot Number
HCL	(2 drops)	N/A
H2SO4	(50%)	
1 HNO3	(conc.)	
NaOH	(50%)	
Zn-Acetate	(2N)	
Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
Background - west of Park, N side of Linden St.
(near Kenmore) - just west of - N side of ~~the~~ floodwall

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):
light brown loamy sand - top 6"

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED:

SIGNATURE: David P. Chester DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: EØ6X9, MEØ6X9

IDEM CONTROL: SS2

Field Test Performed	Result
_____	_____
_____	_____

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 3 : 30 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic	_____	HCL	(2 drops)	N/A
1 L Glass	_____	H2SO4	(50%)	_____
500 ml Glass	_____	1 HNO3	(conc.)	_____
40 ml Vials	_____	NaOH	(50%)	_____
5 oz glass	3	Zn-Acetate	(2N)	_____
4 oz glass	1	(Sample Iced)		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
SW Corner of Nashville & Iowa
approx 40 feet from each street

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):
dark brown loam

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED:

SIGNATURE: Daniel R. Christ DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E0640 / ME0640

IDEM CONTROL: ~~SS7~~ SS3

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 2 : 45 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: SW corner of intersection of Washington & Liberty Sts. approx. 40 ft from each street

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.): dark brown sandy loam - top 5"

FOR WELL SAMPLES: ~~Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling~~
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Clark DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: E06Y1 / ME06Y1

IDEM CONTROL: ~~558~~ 554

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background	MS/MSD		

SAMPLE DATE: 10/16/01

TIME: 2 : 55 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	6	Zn-Acetate	(2N)	
4 oz glass	2	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: Southeast corner of Washington & Liberty - approx 50 ft from each street. former garden between sample & Washington St.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.): dark brown sandy loam - 6"

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Clayton DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: E0642 / ME0642

IDEM CONTROL: ~~554~~ 555

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of 5584)	
Background			

Field Test Performed	Result

SAMPLE DATE: 10/16/01

TIME: 3 : 00 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	~~1~~ 3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: See 5584

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.): See 5584

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Clark DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E0643/ME0643

IDEM CONTROL: ~~SS1~~ DC SS6

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 3 : 40 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
Southwest corner of Washington & Camden Streets
-under large tree

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.): dark brown sandy loam
top 6"

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Chester DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E06YY/ME06YY

IDEM CONTROL: ~~SS6~~ SS7

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 2 : 10 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: near playground – ~~east~~ west end of park

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.): dark brown loam - 0 to 6"

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: [illegible] DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E06Y5 / ME06Y5

IDEM CONTROL: ~~555~~ 558

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result				
		Mon. Well	Lagoon	Ash	Indus. Waste
		Res. Well	Leachate	Soil	Waste Pile
		Creek	Oil	Sludge	Solid
		Ditch	Solvent	Sand	Liquid
		Truck	Drum	Other:	
		Blank (Equip/Trip)		Duplicate (of_____)	
		Background			

SAMPLE DATE: 10/16/01

TIME: 1 : 20 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: Near NE corner of lake, approx. 30 ft from lake

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

light brown sandy loam - top 6"

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED:

SIGNATURE: David P. Christ DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: EØ6Y6 / MEØ6Y6

IDEM CONTROL: ~~553~~ 559

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10 / 16 / 01

TIME: 12 : 50 AM/PM

Container Type	#of Containers
1 L Plastic	
1 L Glass	
500 ml Glass	
40 ml Vials	
8 oz glass	3
4 oz glass	1

Preservatives		Lab/Lot Number
HCL	(2 drops)	N/A
H2SO4	(50%)	
1 HNO3	(conc.)	
NaOH	(50%)	
Zn-Acetate	(2N)	
Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: Taken NW of hill in slight depression area
- top 4"

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):
brown sandy loam

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Christ DATE: 10/16/01

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: EØ6Y7/ME06Y7

IDEM CONTROL: ~~SSF~~ 5510

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 1 : 00 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION: SW corner of hill near trees.

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

top 4" - brown sandy loam

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Chest[illegible]

DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: Beck's Lake

SAMPLE ID: ED649 / MED649

IDEM CONTROL: SS12

Field Test Performed	Result

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/16/01

TIME: 12 : 30 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
Approx 40 ft West of lake - just East of highest point of hill - top 6"

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):
brown sandy loam

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED: plastic scoop

SIGNATURE: David P. Christ DATE: 10/16/01

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
SAMPLE FIELD SHEET

SITE NAME: **Beck's Lake**

SAMPLE ID: E06Y8 / ME06Y8

IDEM CONTROL: SS11

SAMPLE TYPES (CIRCLE ALL APPLICABLE):

Field Test Performed	Result

Mon. Well	Lagoon	Ash	Indus. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	Other:	
Blank (Equip/Trip)		Duplicate (of_____)	
Background			

SAMPLE DATE: 10/6/01

TIME: 12 : 05 AM/PM

Container Type	#of Containers	Preservatives		Lab/Lot Number
1 L Plastic		HCL	(2 drops)	N/A
1 L Glass		H2SO4	(50%)	
500 ml Glass		1 HNO3	(conc.)	
40 ml Vials		NaOH	(50%)	
8 oz glass	3	Zn-Acetate	(2N)	
4 oz glass	1	Sample Iced		No Preservative used for non aqueous samples

ADDITIONAL SAMPLE LOCATION INFORMATION:
sample take approx 30 ft from NW corner of Lake -
top 6" - wet - brown sandy loam

ADDITIONAL SAMPLE TYPE INFORMATION AND OBSERVATIONS: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.):

FOR WELL SAMPLES: Well Purged (less / greater) than (1 2 4 6 12 24 48) hours prior to sampling
Purged approximately (to dryness) / (1 2 3 4 5 8 10 G.T.10 well volumes)

DEVIATIONS FROM SAMPLING PLAN:

SAMPLING EQUIPMENT USED:

SIGNATURE: Daniel P. Chart DATE: 10/16/01