US EPA RECORDS CENTER REGION 5
544691

HYDROGEOLOGIC REPORT
ON THE
NORTHEAST GRAVEL COMPANY SITE
BELMONT, MICHIGAN
MID049236821
TDD: R05-8504-12

OCTOBER 28, 1986

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1. INTRODUCTION

The Northeast Gravel Company is located in a rural area approximately 8 miles north-northeast of Grand Rapids, Michigan. Extensive sand and gravel deposits underlie the site and adjoining area. A portion of the site has been mined for these deposits. Sludges and electroplating wastes were disposed in the excavated areas until 1976. The rural population surrounding the site obtains drinking water from wells completed in the sand and gravel deposits. Based on the potential that wastes could migrate from the site, enter the sand and gravel deposits, and contaminate the drinking water wells, the site received a preliminary score of 18.33 under the Hazard Ranking System (HRS) model. An observed release to groundwater would raise the HRS score to 25.08. Scores exceeding 28.50 qualify the site for the National Priorities List (NPL).

The scope of work for this investigation included:

- Surface and subsurface geological review;
- Soil borings and groundwater monitoring well installation;
- Determination of aquifer characteristics;
- Sampling and chemical analysis of groundwater; and
- Preparation of a hydrogeologic report based on results of the geologic and groundwater sampling data.

On April 22, 1985, this investigation was authorized by the United State Environmental Protection Agency (U.S. EPA) under TDD R05-8504-12.

2. SITE BACKGROUND

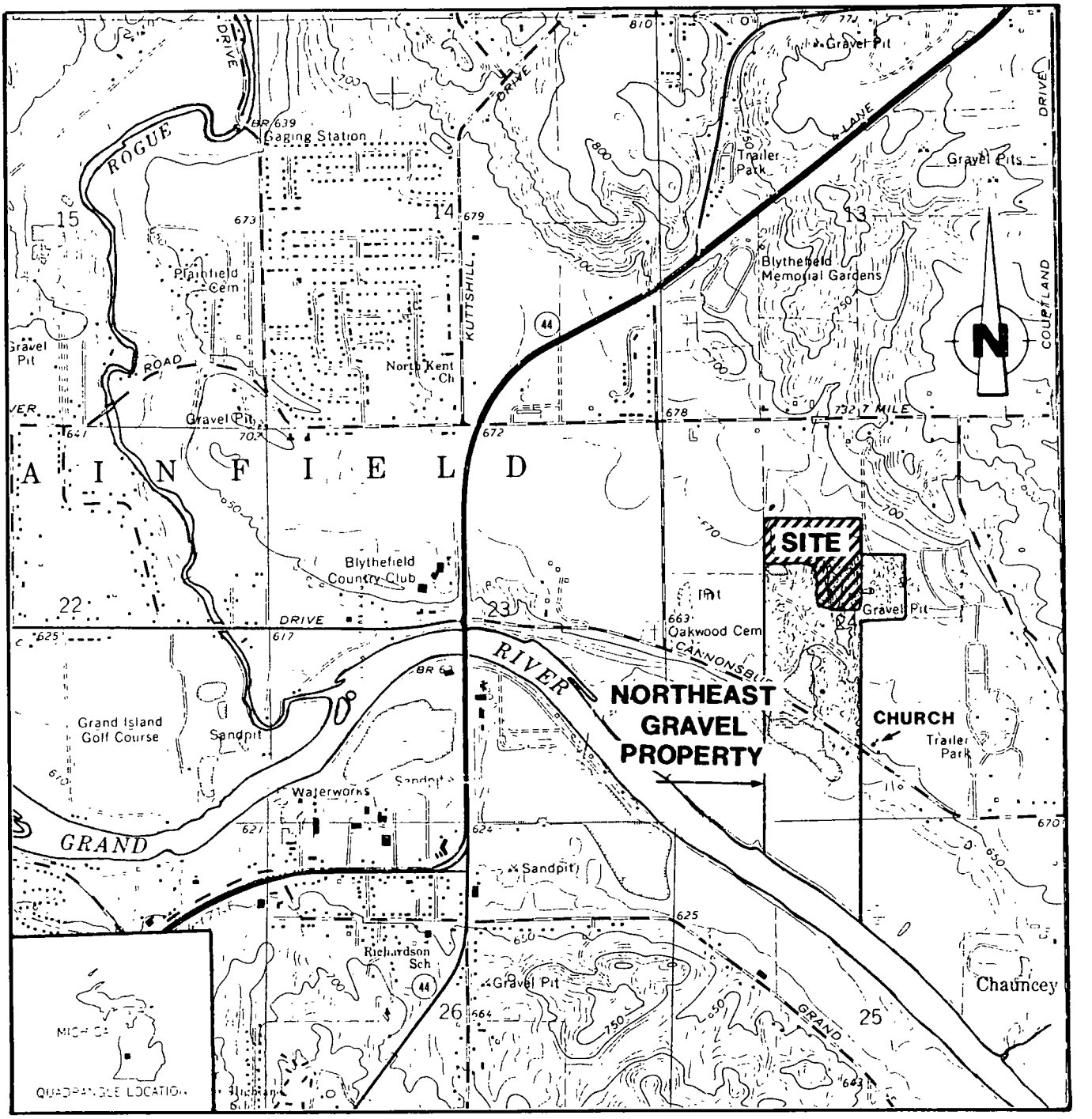
2.1 SITE DESCRIPTION

The Northeast Gravel Company site is located approximately 8 miles north-northeast of Grand Rapids, Michigan in Plainfield Township, Kent County (see Figure 2-1). The 20-acre site is situated at the northern end of a 150-acre property located in T.8N., R.11W., Sec. 24. The site is approximately 7000 feet east of the confluence of the Grand and Rogue rivers.

2.2 SITE HISTORY

The site history prior to 1966 is unclear. Northeast Gravel Company purchased the property in 1966, by which time some landfilling of wastes had already occurred. After acquisition of the property, the company proceeded to landfill sludge and electroplating wastes. Due to numerous violations, the Michigan Department of Natural Resources (MDNR) halted landfilling operations in 1976.

During landfilling, Northeast Gravel Company accepted dewatered sludge from Wolverine Worldwide Company (Bauer 1986). This sludge was landfilled in previously excavated trenches in the extreme northern portion of the site. The original landfill is believed to be located southeast of this area. Neither the types nor quantities of wastes in the original landfill are known, and their source cannot be confirmed. Directly west of the original landfill some liquid wastes, including metal hydroxides and waste plating baths, were disposed. These wastes were accepted from several nearby electroplating companies, including Gulf & Western and Knapp & Bolt (Bauer 1986).



SOURCE: USGS

SCALE

0 .5 1 MILE

0 .5 1 KILOMETER

FIGURE 2–1 SITE LOCATION MAP

The approximate locations of the fill areas are shown in Figure 2-2.

2.3 GEOGRAPHY

2.3.1 Physiography

The regional topography of the area is closely related to glacial landforms and drainage. Prior to excavation and landfilling, the surface elevations were in the 650 foot range. The highest elevations were on recessional moraines, and the lowest were in outwash channels (Western Michigan University Department of Geology 1981a). Surface elevations vary between 620 and 670 feet above Mean Sea Level.

The region is drained by the Grand and Rogue rivers. Numerous excavations in and around the site have caused ponding as groundwater flows into the depressions. Perched water tables in the northern part of the property are responsible for numerous springs which flow north to south over the site and disappear into the sand and gravel deposits in the center of the site.

2.3.2 Climate

The midcontinental climate in this region is characterized by temperature extremes, high summer humidity, and winter snowstorms. The mean annual precipitation is 36 inches and mean annual evaporation is 33.5 inches (U.S. Department of Commerce 1979), resulting in a net annual precipitation of 2.5 inches. Temperatures range from an average daily high of 70° F in August to an average daily low of 25°F in January (U.S. Department of Commerce 1979).

2.3.3 Demography and Land Use

The site is located in rural Plainfield Township (pop. 20,000) about 2 miles southeast of Belmont. It is bordered on all sides by farmland, except on the south where sand and gravel is being mined by Northeast Gravel Company. The population is mainly rural and amounts to approximately 32,000 people in the 3-mile radius. The population within 1 mile of the site is about 830. Except for a trailer park 1/2 mile southeast of site, the land use is primarily agricultural. Belmont (pop. 11,400) is located about 2 miles northwest of site and is the largest community within 2 miles of site. To the south and west, the far northeast portion of the city of Grand Rapids falls

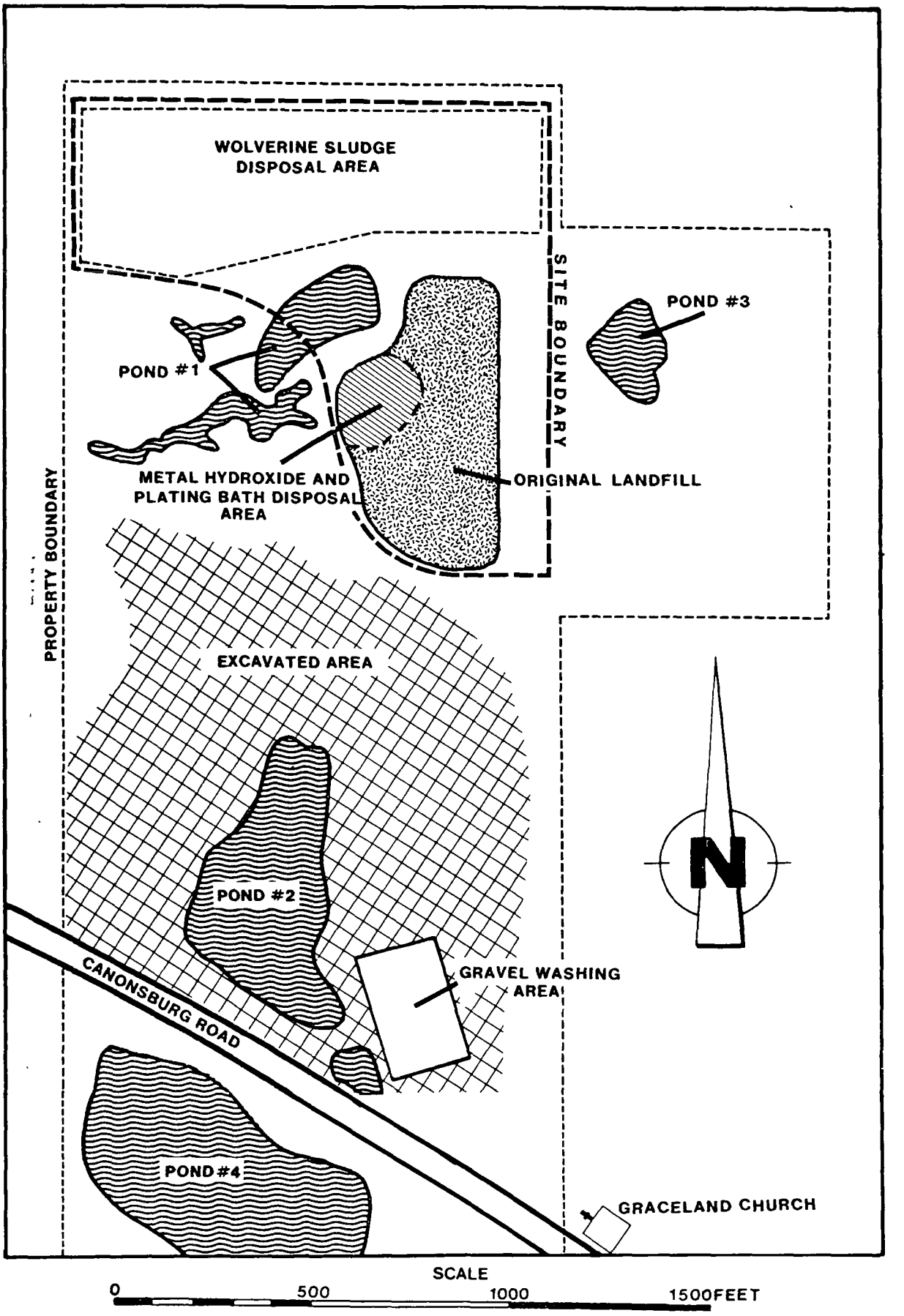


FIGURE 2-2 SITE FEATURES MAP

within the 3-mile radius.

2.4 GEOLOGY

2.4.1 Regional Geology

The subsurface geology of this region consists of sand and gravel deposits with occasional clay lenses and boulders. These sediments were deposited from the Michigan and Saginaw ice lobes during the Wisconsinan glaciation. Development of surficial materials was influenced by differing rates of recession. Most of the region is covered with moraines, outwash plains, and lake beds (Western Michigan University Department of Geology 1981b). The site itself is located on an outwash channel of relatively uniform elevation. The highest elevation is part of the interlobate moraine between the Michigan and Saginaw ice lobes (Western Michigan University Department of Geology 1981a). Subsurface materials on-site are predominantly heterogeneous mixtures of sand, gravel, and clay with assorted boulders. The leaching actions of the Grand and Rogue rivers have washed away most of the silts and clays, leaving behind coarser-grained sands and gravels which are an excellent source of groundwater.

2.4.2 Site Stratigraphy and Groundwater Occurrence

The general stratigraphy of this site consists of fine- to medium-grained sand and gravel from the surface to a depth of approximately 175 feet. This glacial drift is underlain by a clay and limestone bedrock (Dorr and Eschman 1971). The clay layer protects the limestone which extends to a depth of 450 feet and contains intermittent clay with broken limestone. The clay layer provides a sufficient degree of hydraulic separation between the unconsolidated glacial drift and the limestone bedrock, which is the Michigan Formation of Mississippian age. However, the eroding action of the Grand and Rogue rivers may have washed away much of the clay in this region, providing an area of connection between the sand and gravel and the limestone aquifers. On-site groundwater occurrence consists of a sand and gravel aquifer with lenses of clay providing perched water tables. This condition explains the relatively high water levels found adjacent to excavated areas which appear to be dry. Surface depressions in the northern portion contain water which discharges to the south in

the form of small surface streams. These streams disappear into the subsurface in the central portion of the property. Regionally, this groundwater discharge is north to south. The lower aquifer acts as the area recharge to the Grand River.

About 830 people live within 1 mile of the site, with 27 homes on private wells within 2000 feet. The population depends on private wells for its potable water supply. Most of the private domestic wells tap into the sand and gravel deposits which constitute the aquifer of concern. The City of Plainfield maintains a well field in the lower aquifer for its water supply. The well field is used intermittently to augment low flows in the Grand River, which forms the major source of supply.

3. PROCEDURES

3.1 INTRODUCTION

The hydrogeologic study of this site included:

- Soil borings and monitoring well installation,
- Groundwater level measurements,
- Hydraulic conductivity testing, and
- Groundwater sampling and analysis.

3.2 SOIL BORINGS

Soil borings and monitoring well installations were conducted at Northeast Gravel between March 5 and March 26, 1986 by Mateco Drilling Company, Grand Rapids, Michigan, under the direct supervision of Ecology and Environment, Inc., (E & E, FIT), Region V personnel. Ten borings were drilled (see Figure 3-1). Boring depths varied from 18 to 80.5 feet. A CME-550 drilling rig mounted on an all terrain vehicle was used. All boreholes were drilled by advancing 3.75-inch inside diameter (ID) hollow stem augers. When dense sands and gravels or clay units were encountered, drilling was accomplished by rotary drilling with a bentonite-based drilling mud. Drilling mud was used to minimize fluid loss by sealing borehole walls, lift cuttings from the borehole, and support the borehole walls to prevent caving.

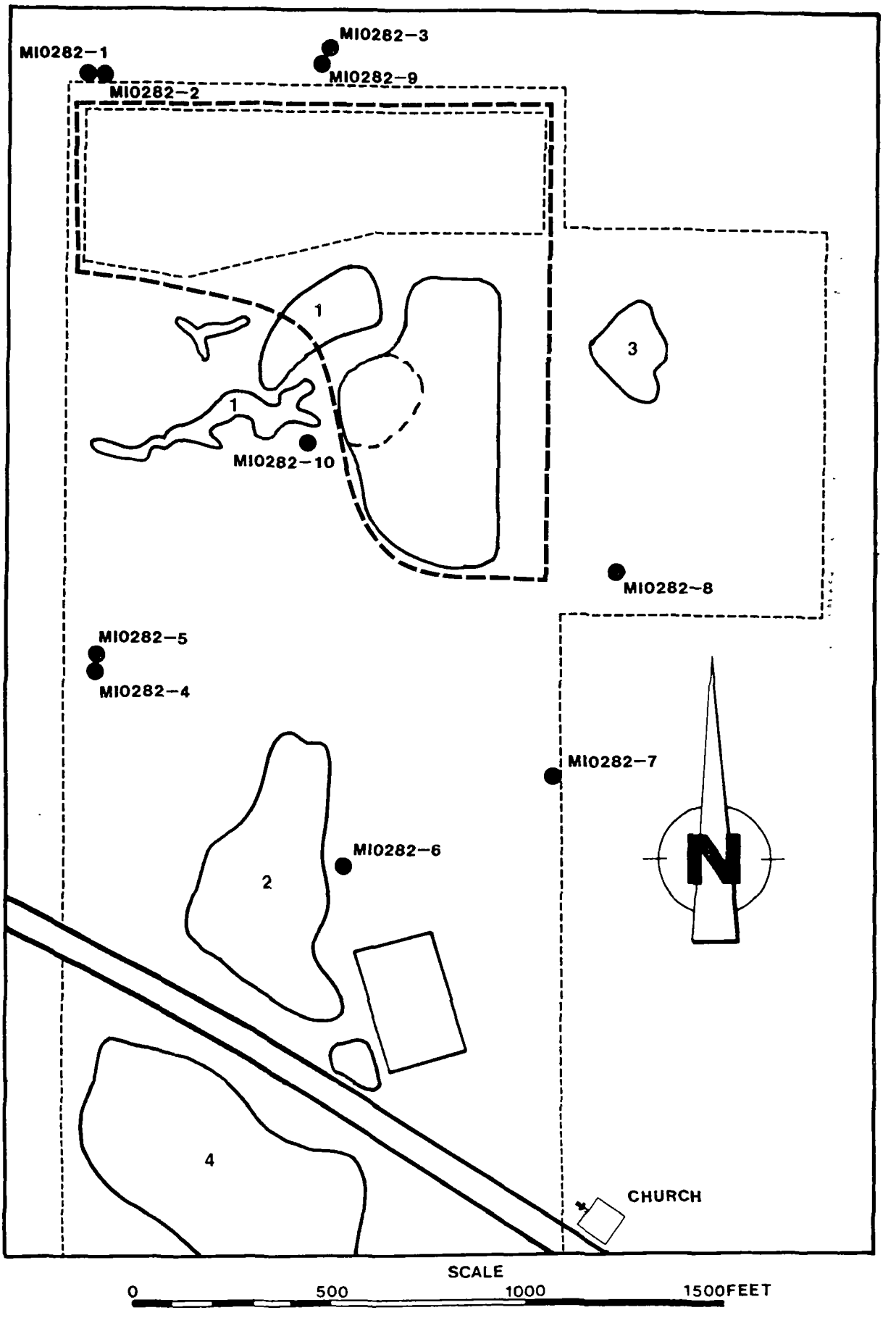


FIGURE 3-1 BORING/MONITORING WELL LOCATION MAP

When clays were encountered, 4-inch (ID) steel casing was driven into the clay, and mud was used to flush the hole as it was drilled to the required depth.

Borehole MI0282-2 was drilled with the intent of penetrating the clay layer. After 100 feet of drilling, this layer was not penetrated. The borehole was abandoned after it was grouted to the surface. Borehole MI0282-3 was drilled in the same manner as MI0282-2. A 4-inch (ID) steel casing was installed in anticipation of drilling through the clay unit observed in borehole MI0282-2. No clay was encountered, however, and the borehole was rotary drilled to the required depth.

Representative soil samples were collected at 2.5-foot intervals for the first 10 feet and at 5-foot intervals thereafter. Samples were collected with a split-spoon sampler and logged for size, color, and soil type (Appendix A). All samples were scanned with an HNU vapor analyzer and left on-site.

All drilling tools and equipment were decontaminated before initial use and between each borehole. The equipment was scrubbed with acetone, steam cleaned, and allowed to air-dry. Sampling equipment was cleaned with soap and water, followed by acetone, rinsed with distilled water, and allowed to air dry.

3.3 MONITORING WELL INSTALLATION

Nine wells were installed, eight of which were installed in four nests of two each. All wells were constructed of flush-jointed 2-inch (ID) Schedule 40 PVC. Typical well construction is shown on Figure 3-2. All screens were 10 feet long and constructed from 0.010-inch factory-slotted PVC. The filter pack surrounding the well screens consisted of natural cave-in as the augers were withdrawn. This natural cave-in extended to about 2 feet above the screens. A 2-foot bentonite seal was placed above the sand pack, and a bentonite-cement grout was then tremied into place above the bentonite seal to within 2 feet of the surface. The remainder of the annulus was filled with a concrete plug. A 5-foot long, 6-inch (ID) steel pipe with a locking cap was placed over the well casing and embedded in the concrete plug. The casing extended 2.5 feet above the ground.

3.4 HYDROGEOLOGIC INVESTIGATION

3.4.1 Water Level Measurements

After assigning the top of the protective outer casing of well MI0282-3 an elevation of 100 feet and using it as an arbitrary

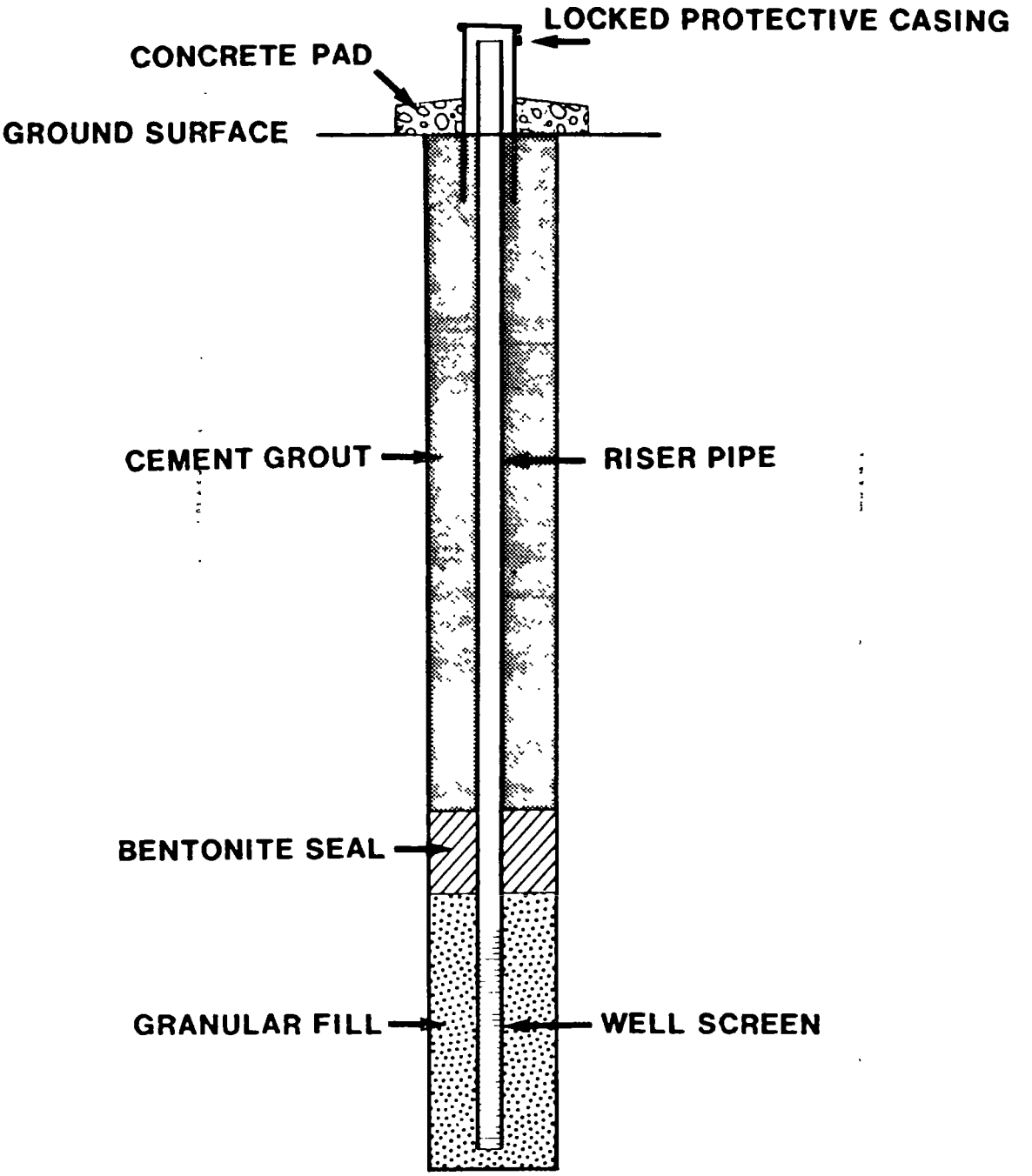


FIGURE 3–2 TYPICAL MONITORING WELL CONSTRUCTION

benchmark, all other well and pond elevations were surveyed on April 24, 1986. Groundwater levels were obtained using a steel tape and chalk. The top of the outer casing of each well was used to reference all tape down measurements.

3.4.2 Hydraulic Conductivity Testing

On April 23 and 24, 1986, hydraulic conductivity tests were performed on the monitored aquifers using the rising head slug test method. These tests were done using a Model SE1000A Pressure Transducer, manufactured by In-Situ, Inc. The procedure entailed recording the static water level and placing the transducer probe at least 10 feet below the water surface. A 5-foot long, 1.25-inch outside diameter (OD) PVC slug was then inserted into the water. The well was allowed to stabilize to the original water level, and the slug was swiftly removed. The pressure transducer continually recorded changes in the water level until the original static water level was achieved. Test analysis is included in Appendix B.

Values collected were used to calculate a hydraulic conductivity for each test using the Hvorslev method for unconfined aquifers (Attwell and Farmer 1979).

3.4.3 Groundwater Sampling

All monitoring wells and the Graceland Church well were sampled on April 16, 1986. At least five static well volumes were purged from the monitoring wells prior to sample collection to insure that representative samples were obtained. Once purged, the wells were allowed to recharge before samples were collected. The church well was allowed to run for about 10 minutes before the sample was collected.

Wells were purged and sampled with stainless steel bailers. These bailers were decontaminated before and after each use by rinsing them several times with acetone and distilled water. Plastic sheets were placed on the concrete plug around the well to prevent contamination of the bailing lines.

Thirteen samples were collected: nine monitoring well samples, a duplicate (MI0282-6), a matrix spike duplicate (MI0282-10), a private domestic well at the Graceland Church, and a blank prepared from distilled water poured into the bailer and then into sampling

bottles. Each sample consisted of one 1-liter bottle for inorganic constituents (preserved with nitric acid), and one 1-liter bottle for cyanides (preserved with sodium hydroxide), two 80-ounce jars for organic compounds, and two 40-mL jars for volatile organic compounds. The inorganic constituent samples from the monitoring wells were filtered before preservation.

The samples were packed, iced, and shipped via next day delivery service to U.S. EPA Contract Laboratory Program (CLP) laboratories. All organic and inorganic samples were shipped to IT Analytical Services, Cerritos, California and Rocky Mountain Analytical Labs, Arvada, Colorado, respectively. All residential well samples, organic and inorganics, were shipped to the U.S. EPA, Region V, Central Regional Laboratory, Chicago, Illinois. Standard U.S. EPA Chain-of- Custody procedures were followed at all times.

4. RESULTS AND DISCUSSIONS

4.1 PHYSICAL RESULTS AND DISCUSSIONS

The physical investigation was based on soil borings, water elevation measurements, and hydraulic conductivity testing.

4.1.1 Geology and Soils

Results

Drilling logs (Appendix A) were used to develop stratigraphic cross-sections A-A' and B-B' for the locations shown in Figure 4-1. The cross-sections are shown in Figures 4-2 and 4-3, respectively.

Discussion

Regional geology suggests the existence of two aquifers: an upper aquifer consisting of unconsolidated glacial outwash, and a deeper sandstone aquifer protected by a fairly thick layer of clay. In the locality of the site, however, the eroding actions of the Michigan and Saginaw ice lobes and, subsequently, the Grand and Rogue rivers have washed away this clay layer. It is not certain from the literature or existing well logs whether this clay is completely absent, thus establishing connectivity between the aquifers in the region near the confluence of the two rivers. Boring MI0282-2 confirmed the presence of a fairly thick layer of clay, about 40 feet below ground surface. This hole was rotary drilled to 100 feet, and because the clay was not penetrated, the hole was sealed and abandoned. About 700 feet east, the clay was encountered at 73 feet in

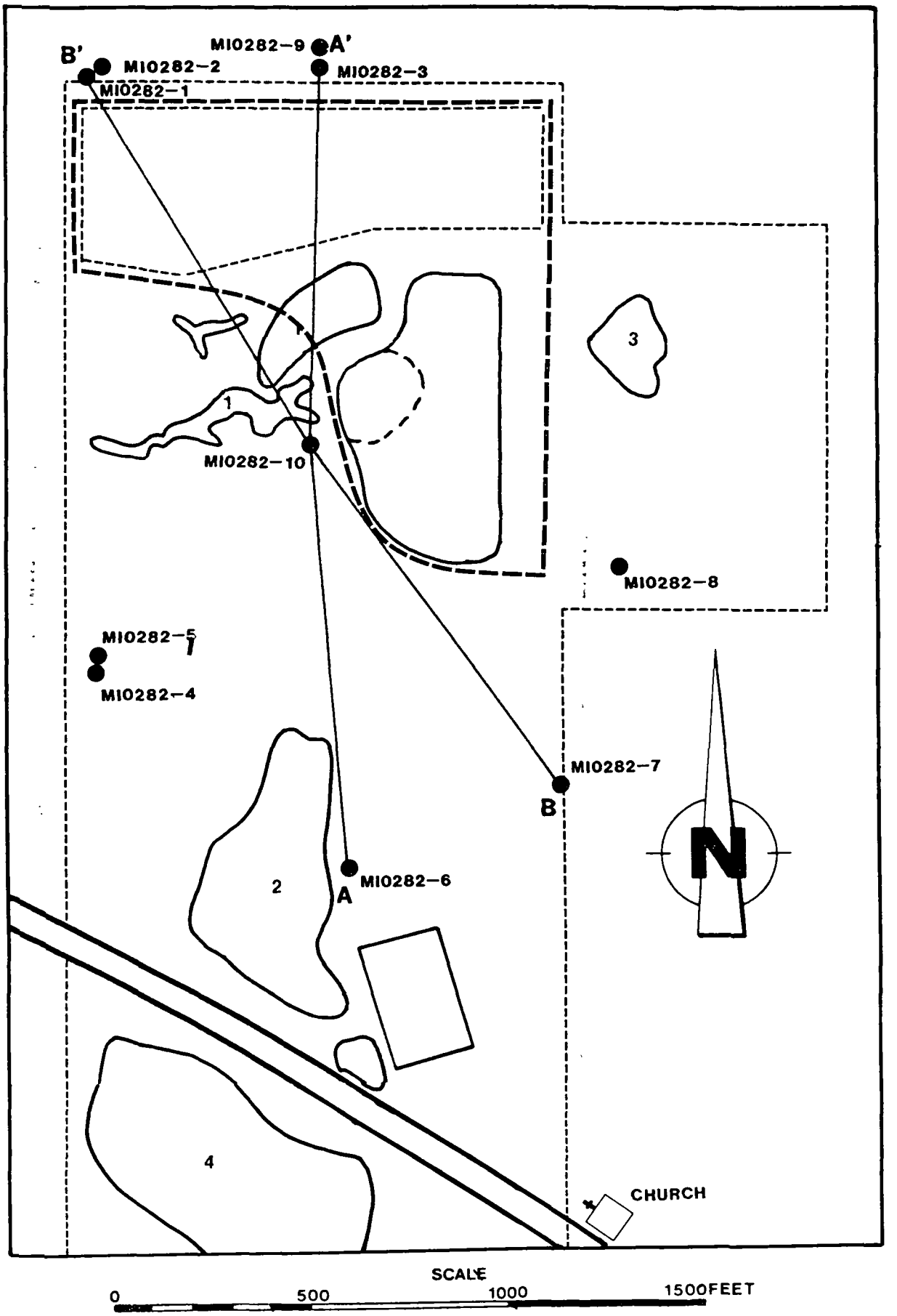


FIGURE 4-1 GEOLOGIC CROSS-SECTION LOCATION MAP

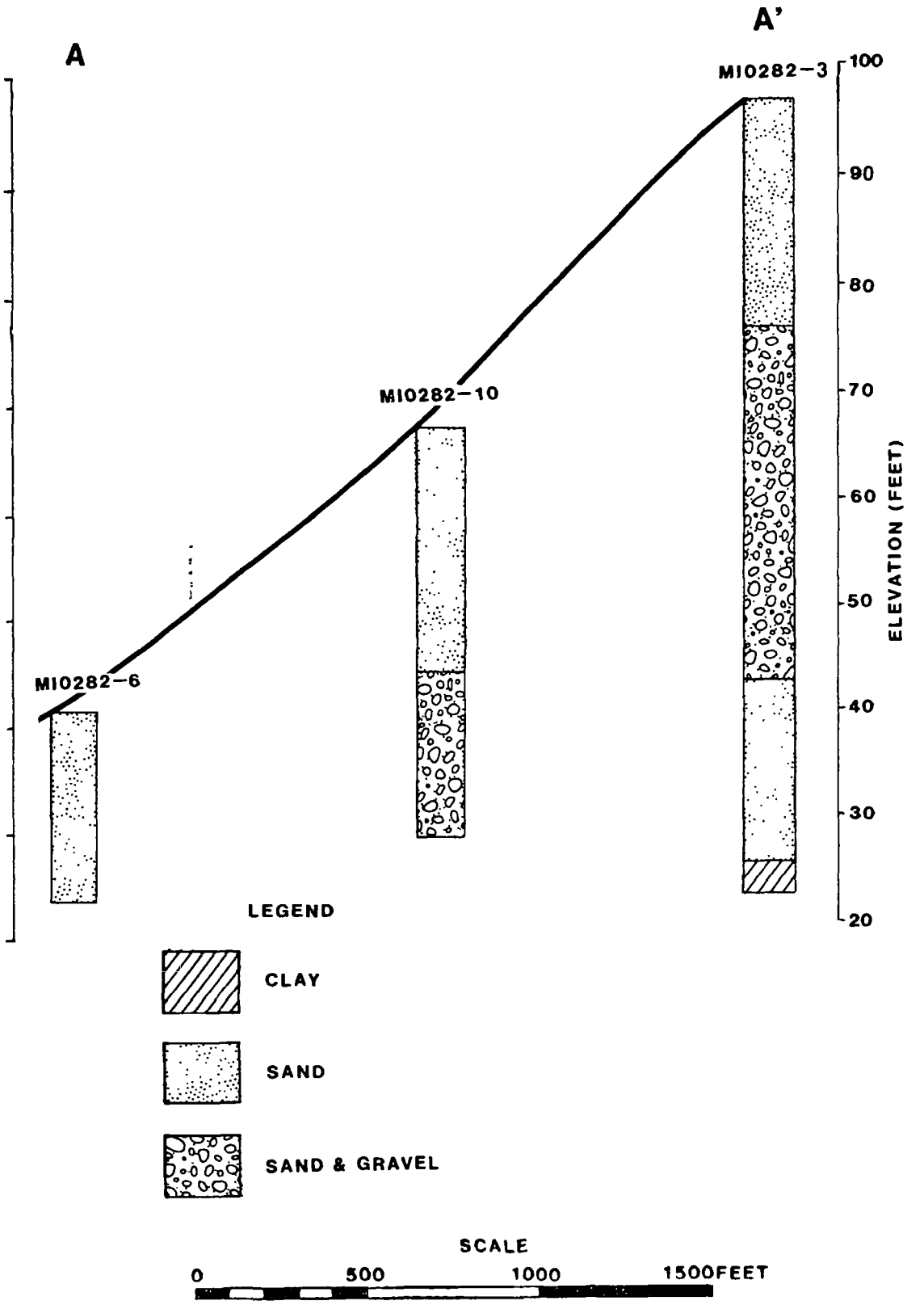


FIGURE 4-2 GEOLOGIC CROSS-SECTION A-A'

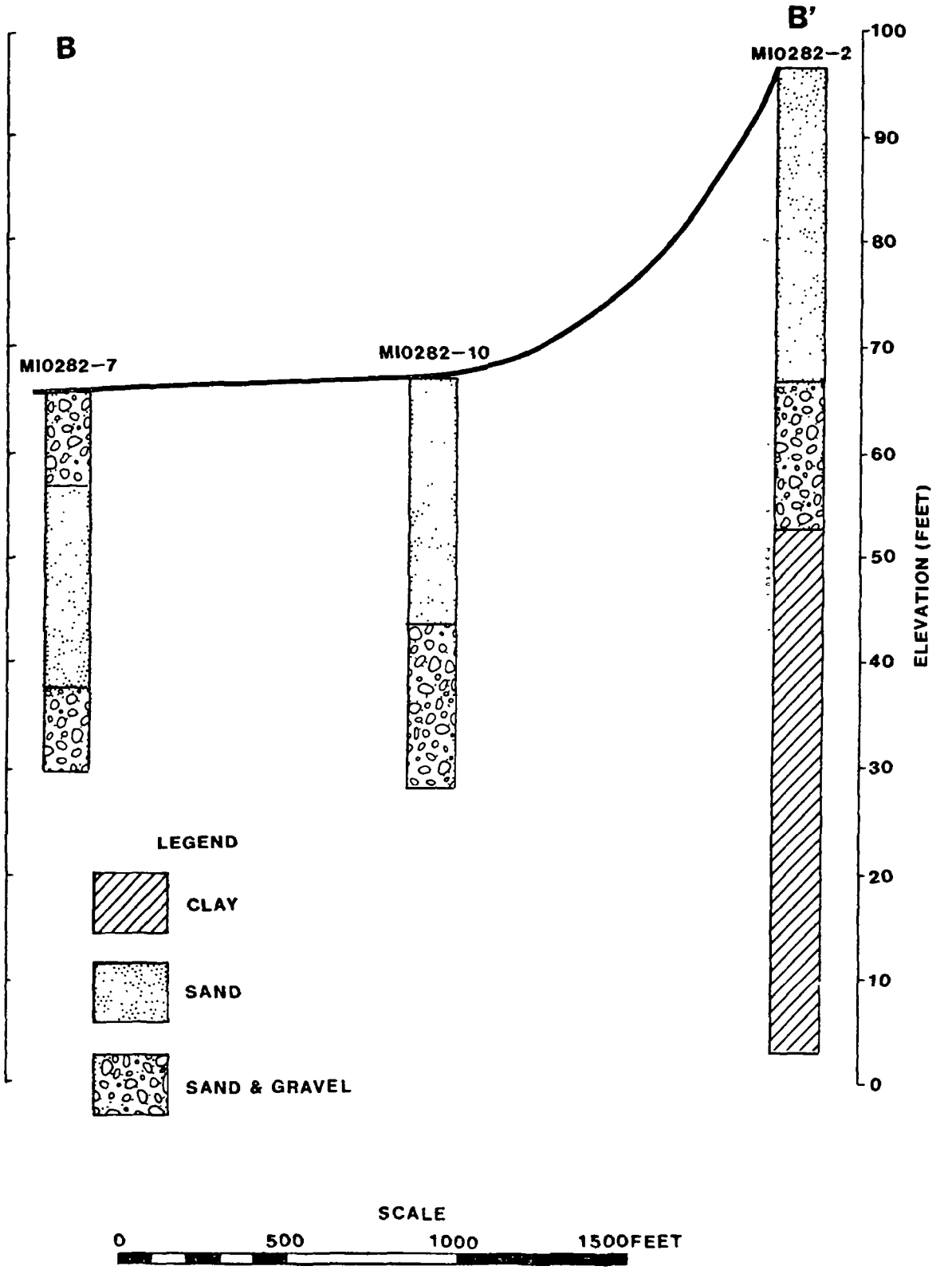


FIGURE 4-3 GEOLOGIC CROSS SECTION B-B'

boring MI0282-3. However, this clay layer was not encountered in borehole MI0282-10 about 1200 feet farther south and boreholes MI0282-4 and MI0282-5, both 1500 feet south of MI0282-1.

4.1.2 Groundwater

Groundwater data collection included water level measurements in all monitoring wells and three surface ponds on-site. Slug tests were conducted in the wells to determine the hydraulic conductivity of the aquifer.

Results

Groundwater and surface water elevations (see Table 4-1) were used to draw a water table surface map (see Figure 4-4). Slug tests were conducted in all monitoring wells on April 23 and 24, 1986, in order to determine hydraulic conductivity. Results of subsequent analysis of slug test data are shown in Table 4-2. Groundwater elevations were also used to determine horizontal and vertical gradients.

Discussion

The regional trend in groundwater movement is south, toward the Grand River. The water table surface indicates that groundwater flow on-site has a southwest orientation. This direction is the result of the excavations in and around the site.

The horizontal gradient of the groundwater surface was 0.016 between wells MI0282-1 and MI0282-6 and 0.009 between MI0282-8 and MI0282-6. Vertical gradients are small. The vertical gradient at well nest MI0282-3/MI0282-9, located north of the sludge disposal area, was 0.019. This value indicates a tendency for groundwater to move downward. The vertical gradient at MI0282-4/MI0282-5, located in the central area, was -0.006. The upward component of this vertical gradient indicates discharge conditions, probably to the adjacent pond.

Hydraulic conductivity values ranged from 2.38×10^{-3} to 2.6×10^{-2} cm/sec, with a logarithmic mean of 8.9×10^{-3} cm/sec. Freeze and Cherry (1979) report a range of 10^{-3} to 1.0 cm/sec for sand and silty sands. Lower values for wells north of sludge disposal area suggest higher silt contents.

Table 4-1

GROUNDWATER AND SURFACE WATER ELEVATIONS

April 3, 1986

Location	Water Elevation (ft)
MI0282-1	23.89
MI0282-3	21.87
MI0282-4	22.83
MI0282-5	23.25
MI0282-6	2.57
MI0282-7	25.15
MI0282-8	19.62
MI0282-9	25.20
MI0282-10	24.29
Pond #1	66.07
Pond #2	34.96
Pond #3	51.88

Note: These elevations are relative to the top of the protective casing on well MI0282-3 which was arbitraril assigned 100 feet elevation.

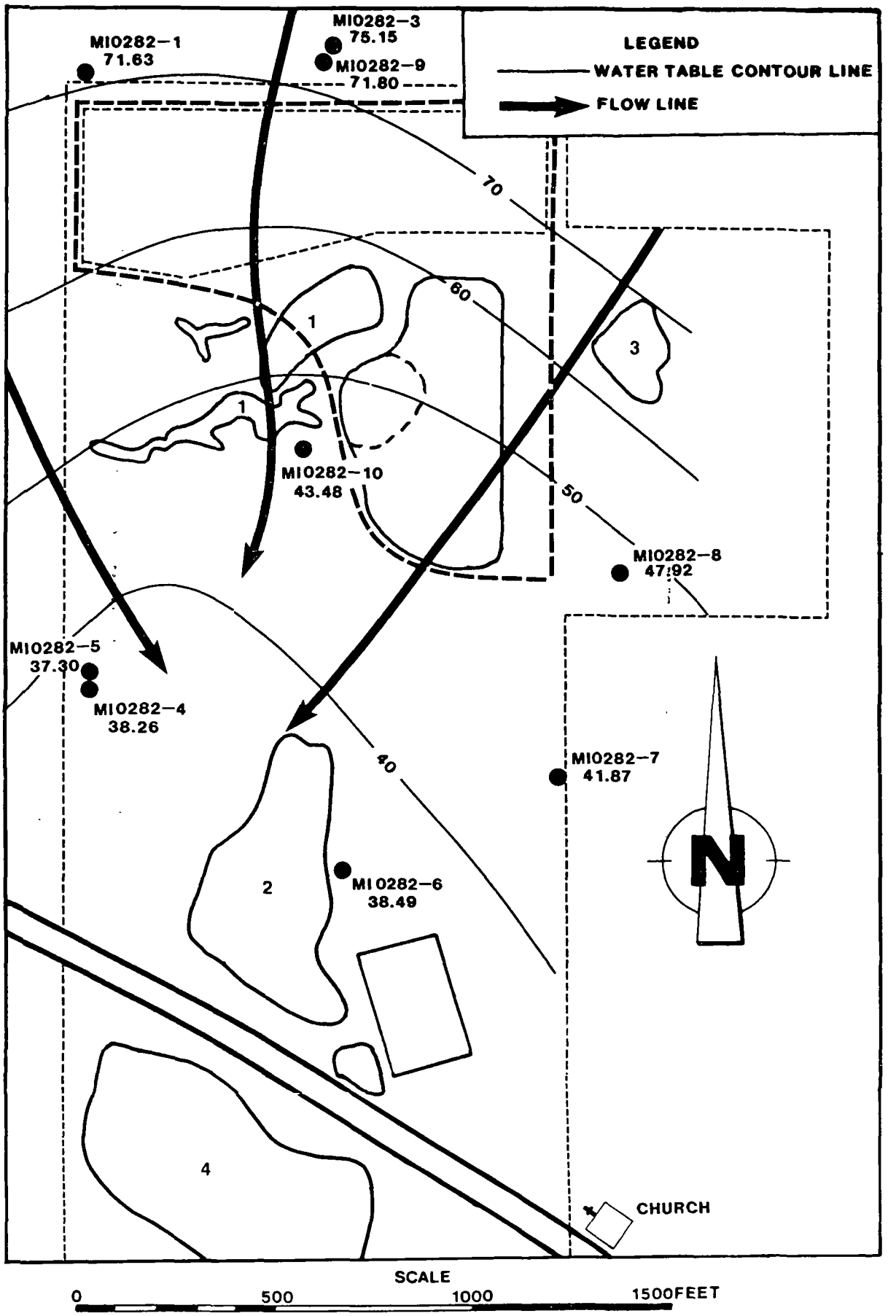


FIGURE 4-4 WATER TABLE CONTOUR MAP, APRIL 3, 1986

Table 4-2

HYDRAULIC CONDUCTIVITY RATES
April 23 and 24, 1986

Monitoring Well	Hydraulic Conductivity (cm/sec)
MI0282-1	2.39×10^{-3}
MI0282-4	2.68×10^{-3}
MI0282-5	5.70×10^{-3}
MI0282-6	1.64×10^{-2}
MI0282-7	1.47×10^{-2}
MI0282-8	2.18×10^{-2}
MI0282-9	1.10×10^{-2}
MI0282-10	1.95×10^{-2}

Note: Hydraulic conductivity rates can be converted to ft/sec by dividing these values by 30.48.

4.2 CHEMICAL RESULTS AND DISCUSSION

The chemical analysis at Northeast Gravel consisted of the analysis of nine groundwater samples and one domestic well sample collected at the Graceland Church building located about 3000 feet from the site. Complete analytical results are listed in Appendix C.

Results

A summary of the analytical results is shown in Table 4-3. Groundwater quality impairment is documented by elevated levels of chromium, chloromethane, and 1,1-dichloroethane in some of the samples.

Discussion

This discussion is limited to those pollutants whose concentrations in the samples exceed those detected in the blank. The domestic sample collected at Graceland Church contained several heavy metals including barium, zinc, iron, strontium, calcium, potassium, magnesium, and sodium. However, only the copper concentration (36.2 mg/L) is considered toxic. No organic compounds or cyanide were detected in this well. Of the nine samples collected from monitoring wells, only two (downgradient wells MI0282-4 and MI0282-10) contained organic contaminants: chloromethane and 1,1-dichloroethane (see Table 4-3). Tentatively Identified Compounds (TICs) were detected in several samples. One such compound, caprolactan, was detected at high levels, but can be attributed to the bailing ropes. Although all samples contained copper and nickel, these constituents were also detected in the blank. The sample from downgradient well MI0282-6 was contaminated with chromium (43.0 mg/L). This contaminant can be attributed to the site.

No organic or inorganic contamination was detected in any of the upgradient monitoring wells (MI0282-1, MI0282-3, and MI0282-9).

Table 4-3

CONCENTRATIONS OF GROUNDWATER CONTAMINANTS (mg/L)

Chemical	MI0282-1*	-3*	-4	-5	-6	Duplicate -6	-7	-8	-9*	-10	Graceland Church Well	Blank
Copper	--	--	--	--	7.9	7.3	--	--	--	--	36.2	4.0
Chromium	--	--	--	--	43.0	43.0	--	--	--	--	--	--
Chloromethane	--	--	6.0	--	--	--	--	--	--	4.0	--	--
1,1-Dichloroethane	--	--	8.0	--	--	--	--	--	--	7.0	--	--

--Not Detected.

* Upgradient Wells.

5. CONCLUSIONS

This section consists of the results of the investigation and the inferences that can be drawn from those results. Conclusions relevant to the Hazard Ranking System (HRS) are also presented.

5.1 SUMMARY OF INVESTIGATION

Northeast Gravel Company is located on a sandy to silty sandy glacial outwash which has a relatively high hydraulic conductivity and high water content. This unit forms the primary source of groundwater for the local population. The predominant groundwater flow direction is north to south. A slight southwest orientation exists on-site due to local excavations on and around the site.

The landfills are contributing to organic and inorganic groundwater contamination. Copper, chromium, chloromethane, and 1,1-dichlorethane were detected in downgradient wells. These contaminants were not detected in upgradient wells.

5.1.1 Geology

- The Northeast Gravel site is located on unconsolidated materials consisting of a mixture of sands, gravel, clay, and assorted boulders.
- A discontinuous layer of clay appears to be present in the northern area of the site.
- The eroding action of the Grand River has resulted in a coarser-grained sand and gravel unit which has a fairly high conductivity, thus forming a good source of groundwater.

5.1.2 Hydrogeology

- The regional groundwater flow direction is north to south. However, a northeast to southwest flow dominates on-site due to numerous excavations.

- The hydraulic conductivity of this aquifer is in the range of 10^{-3} to 10^{-2} cm/sec.

- Groundwater surface elevations vary from 2.57 feet in well MI0282-6 to 25.20 feet in well MI0282-9.

- Groundwater exists under water table (unconfined) conditions. The drilling logs indicate the presence of 40 to 55 feet of unconsolidated materials holding a sizable amount of water. This upper aquifer is sitting on a fairly thick layer of clay which overlies a deeper sandstone aquifer.

- The clay layer appears to be discontinous at the site. This discontinuity may indicate hydraulic connectivity between the upper glacial till aquifer and the sandstone below. However, current knowledge is inconclusive with regard to the discontinuity, and the aquifers must be considered separate for HRS purposes.

- Hydraulic conductivity values suggest that the silt content of the sand and gravel is higher in the northern portion of the site than the south.

- Groundwater surface lines indicate a general north to south flow, while vertical gradients show a general downward tendency in the northern portion and discharge conditions in the south.

5.1.3 Groundwater Quality

- High conductivity values and the presence of copper, chromium, chloromethane, and 1,1-dichloroethane in the groundwater suggest potential hazards to local wells. Wells located north and east of the site are not threatened. One residence is located within 1300 feet southeast of the site, with several others beyond 1500 feet.

5.2 HAZARD RANKING SYSTEM (HRS) CONCLUSIONS

- The aquifer of concern is the unconsolidated sand and gravel aquifer. This aquifer is used by practically all the population in the area.

- The permeability of sands and gravels varies between 10^{-5} and 10^{-2} (Freeze and Cherry 1978).

- Depth to saturated zone of the aquifer of concern is 25 feet (Appendix A).

- Depth of waste disposal is 15 to 20 feet (Sec. 2.2).

- Depth to aquifer of concern is 5 feet.

- The average annual precipitation is 36 inches and annual evaporation is 32.5 inches, resulting in a net annual precipitation of 3.5 inches (Sec. 2.3.2).

- Chemical analysis of groundwater samples has documented an observed release to the aquifer of concern by the presence of copper, chromium, chloromethane, and 1,1-dichloroethane (Sec. 4.2, Appendix C).

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APPENDIX A
DRILLING LOGS

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-1

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 5, 1986

Completion Date March 10, 1986

Ground El. 95.52'

Top of Inner Casing El. 96.84'

Groundwater El.

at completion 71.63'

after ____ days ____

Total Depth of Boring 46.5'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 2'	
	1	Top soil, dark brown			5' protective casing set around monitoring well	
	2	Sand, light brown, fine, well-sorted, loose, moist.	2/2/2			
	3			1		
	4				Well info: Sand:22.5' to 46.5'; bentonite seal: 19.5' to 22.5'; grout: surface to 19.5' 10' screen sch 40 PVC	
	5	Sand, light brown, fine, well-sorted, loose, moist.	2/6/3			
	6			2		
	7					
	8					
	9					

04H:1F

State Michigan

Boring No. MI0282-1

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10	Sand, light brown, fine-med, loose, moist.	4/3/3			
	11			3		
	12					
	13					
	14					
	15	Sand, light brown, fine, well-sorted, firm, moist.	9/8/7	4		
	16					
	17					
	18					
	19					
	20	Sand, light brown, fine-med., trace of gravel, fine-med., trace of silt.	6/6/6			
	21			5		
	22					
	23					
	24					
	25	Sand, light brown, fine grading into med.-coarse, trace of gravel, fine-med., firm, saturated.	7/9/8			
	26			6		
	27					
	28					

State Michigan

Boring No. MI0282-1

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	Gravel and Sand,				
	31	Gravel, med.-coarse, sand light brown, med.-coarse, dense.	31/31	7		
	32					
	33					
	34					
	35	Gravel med-coarse, trace of silt dense.	42/54			
	36			8		
	37					
	38					
	39	Gravel, med.-coarse, trace of coarse sand, light brown, dense.	31/34	9		
	40					
	41					
	42					
	43					
	44	Clay, gray, dense, damp				
	45		20/21/24	10		
	46	Clay, gray, very tight, dry, E.O.B.	17/20/27	11		
	47					

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-2

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 11, 1986

Completion Date March 12, 1986

Ground El.

Groundwater El.
at completion Borehole

after ____ days

Total Depth of Boring 100.0'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface				
	1 2 3 4 5 6 7 8 9	Due to the close proximity to monitoring well MI0282-1 (5 ft.) the borehole was blind drilled to a depth of 31 ft.	6/8/9		Well info: No well installed back filled with grout from surface to 100'	

State Michigan

Boring No. MI0282-2

Site Northeast Gravel Company

Page 2 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					

State Michigan

Boring No. MI0282-2

Site Northeast Gravel Company

Page 3 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	Gravel, med.-coarse, trace of sand, light brown, med., dense.	41/65			
	31			1		
	32					
	33					
	34					
	35	Gravel, med.-coarse, trace of sand, light brown, med.-coarse dense.	23/23/15			
	36			2		
	37					
	38					
	39					
	40	Same as above	42/22/60			
	41			3		
	42					
	43	Clay, gray, very light, trace of sand, light brown, fine dense, dry.				
	44		30/29/30	4		
	45	Clay, gray, very tight, dense, dry.	23/26/26	5		
	46					
	47					

State Michigan

Boring No. MI0282-2

Site Northeast Gravel Company

Page 4 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	48	Same as above	30/44	6		
	49					
	50					
	51					
	52					
	53	Clay and Silt, gray, dense dry.				
	54		44/57/46	7		
	55					
	56					
	57					
	58	Clay, gray, trace of silt, dense, dry.				
	59		38/37	8		
	60					
	61					
	62					
	63	Saem as above				
	64		38/40	9		
	65					
	66					

State Michigan

Boring No. MI0282-2

Site Northeast Gravel Company

Page 5 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	67					
	68					
	69	Clay, gray trace of fine-med., gravel, dense, dry.	37/47/40	10		
	70					
	71					
	72					
	73	Same as above				
	74		40/52	11		
	75					
	76					
	77					
	78					
	79	No sample recovered, (blockage due to rock)	60	12		
	80					
	81	?				
	82					
	83					
	84	Silt and gravel, silt, gray, gravel, fine-med., dense, moist.	60	13		
	85					

State Michigan

Boring No. MI0282-2

Site Northeast Gravel Company

Page 6 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	86					
	87					
	88					
		Clay, gray, dense, dry.				
	89					
			64/104	14		
	90					
	91					
	92					
	93					
	94					
	95					
	96					
	97					
	98					
		Clay, brown, trace of silt,				
	99	dense, dry.	87	15		
	100	E.O.B.				

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-3

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 14, 1986

Completion Date March 17, 1986

Ground El. 97.02'

Top of Inner Casing 99.78'

Groundwater El.

at completion 75.15'

after ____ days ____

Total Depth of Boring 74.5'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 3'	
	1	Top Soil, dark brown.			5' protective casing set around monitoring well	
	2					
	3					
	4				Well info: Sand:42.5' to 74.5', bentonite seal: 39.5' to 42.5';grout: surface to 39.5' 10' screen sch 40 PVC	
	5	Sand, light brown, med.-coarse, sorted, loose, moist.	6/8/9	1		
	6					
	7					
	8					
	9	Sand, light brown med.-coarse,				

State Michigan

Boring No. MI0282-3

Site Northeast Gravel Company

Page 2 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10	sorted, trace of gravel, fine-med. loose, moist.	6/8/10	2		
	11					
	12					
	13					
	14					
	15	Sand, light brown, med-coarse grading into sand, tan, fine, well-sorted, firm, moist.	9/14/17	3		
	16					
	17					
	18					
	19					
	20	Sand, light brown, fine-med. trace of fine-med. gravel, dense, moist.	14/30/35	4		
	21					
	22					
	23					
	24					
	25	Sand and gravel, sand, light brown, med.-coarse, gravel fine-med., dense, satarated.	8/14/16	5		
	26					
	27					
	28					

State Michigan

Boring No. MI0282-3

Site Northeast Gravel Company

Page 3 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
		Sand, light brown, med.-coarse				
	30					
			-	6		
	31					
	32					
	33					
	34	Sand, light brown, fine, well-sorted, firm.				
	35		14/16/10	7		
	36					
	37					
	38					
	39	Sand, light brown, fine-med, trace of med.-coarse gravel, firm.				
	40		16/15/22	8		
	41					
	42					
	43					
	44	No sample recovered, (blockage due to rock)				
	45					
	46					
	47					

State Michigan

Boring No. MI0282-3

Site Northeast Gravel Company

Page 4 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	48					
	49	Sand, light brown, fine-med., dense.	16/42/67	9		
	50					
	51					
	52					
	53					
	54	Sand and silt, 6" layer of sand, light brown, med.-coarse, underlain by silt, brown, dense, most.	30/67	10		
	55					
	56					
	57					
	58	Silt and sand, 6" layer of silt with trace of clay, brown, underlain by sand, light gray, med.-coarse, dense, moist.	42/90	11		
	59					
	60					
	61					
	62					
	63					
	64	Sand, light gray, fine-med., sorted, dense.	53/75	12		
	65					
	66					

State Michigan

Boring No. MI0282-3

Site Northeast Gravel Company

Page 5 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	67					
	68					
	69	Gravel, med.-coarse grading into sand, light brown, med.-coarse, dense.	78/105	13		
	70					
	71					
	72					
	73	Clay, gray, dense, moist.				
	74		28/48	14		

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-4

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 17, 1986

Completion Date March 18, 1986

Ground El. 61.09'

Top of Inners Casing El. 63.97'

Groundwater El.

at completion 38.26'

after ____ days ____

Total Depth of Boring 46.0'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 3'	
	1	Fill, light brown, sandy.			5' protective casing set around monitoring well	
	2					
	3					
	4	Sand, light brown fine-med., sorted, well-sorted, loose, moist.			Well info: Sand:23.0' to 46.0'; bentonite seal: 20.0' to 23.0'; grout: surface to 20.0' 10' screen sch 40 PVC	
	5		2/6/3	1		
	6					
	7					
	8					
	9	Same as above	4/5/6	2		

04H:1F

State Michigan

Boring No. MI0282-4

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10					
	11					
	12					
	13					
	14					
		Same as above, firm.				
	15					
			6/9/11	3		
	16					
	17					
	18					
	19					
		Sand, tan, fine, well-sorted, firm, moist.				
	20					
			11/14/16	4		
	21					
	22					
	23					
	24					
		Sand, light brown, fine-med., firm, saturated.				
	25					
	26		6/9/13	5		
	27					
	28					

State Michigan

Boring No. MI0282-4

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	No sample taken, cuttings indicate same as above.				
	31					
	32					
	33					
	34					
	35	Sand, light brown, fine-med., dense.	9/15/19	6		
	36					
	37					
	38					
	39					
	40	Same as above, firm.	7/11/13	7		
	41					
	42					
	43					
	44					
	45	Same as above	8/11/13	8		
	46	E.O.B.				
	47					

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-5

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 18, 1986

Completion Date March 19, 1986

Ground El. 60.55'

Top of Inner Casing 62.98'

Groundwater El.

at completion 37.35'

after ____ days ____

Total Depth of Boring 80.5'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 3'	
	1 2 3 4 5 6 7 8 9	Due to the close proximity to monitoring well MI0282-4 (~10 ft.) the bore hole was blind drilled to a depth of 48 ft.			5' protective casing set around monitoring well Well info: Sand: 70.0' to 80.5', gravel pack (3/8-3/16"):52.0' to 70.0'; silica sand: 49.0' to 52.0' bentonite seal: 46.0' to 49.0") grout: surface to 46.0'	

State Michigan

Boring No. MI0282-5

Site Northeast Gravel Company

Page 2 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10				10' screen sch 40 PVC	
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
		Saturated				
	25					
	26					
	27					
	28					

State Michigan

Boring No. MI0282-5

Site Northeast Gravel Company

Page 3 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	36					
	37					
	38					
	39					
	40					
	41					
	42					
	43					
	44					
	45					
	46					
	47					

State Michigan

Boring No. MI0282-5

Site Northeast Gravel Company

Page 4 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	48	Sand and gravel, sand, light brown, fine-med., gravel, med.-coarse, loose.				
	49		7/6/6	1		
	50					
	51					
	52					
	53	Same as above				
	54		9/10/11	2		
	55					
	56					
	57					
	58	Sand, light brown, med., trace of gravel, fine, firm.				
	59		14/15/19	3		
	60					
	61					
	62					
	63	Sand, light brown, fine, grading into med.-coarse, trace of gravel, fine, dense.				
	64		23/20/30	4		
	65					
	66					

State Michigan

Boring No. MI0282-5

Site Northeast Gravel Company

Page 5 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	67					
	68	Sand and gravel, sand, light brown, med.-coarse, gravel, med.- coarse, dense.	53/66	5		
	69					
	70					
	71					
	72					
	73	Sand and gravel, sand, light brown, coarse, gravel, med.- coarse, dense.	49/53	6		
	74					
	75					
	76					
	77					
	78					
	79	Sand, light brown, fine-med., trace of gravel, fine, dense.				
	80		29/42/43	7		
	81	E.O.B.				

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-6

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Kempalski

Geologist Jerry Goode

Start Date March 21, 1986

Completion Date March 21, 1986

Ground El. 41.06'

Top of Inner Casing EL 43.37'

Groundwater El.

at completion 38.49'

after ____ days ____

Total Depth of Boring 18'.5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 3'	
	1	Fill, light brown, sandy.			5' protective casing set around monitoring well	
	2					
	3					
	4	Sand, light brown, fine-med., trace of gravel, med., trace of silt, firm, satuarated.	11/12/11	1	Well info: Sand: 4 to 18.5'; bentonite seal: 1.0' to 4.0', grout: surface to 1.0' 10' screen sch 40 PVC	
	5					
	6					
	7					
	8					
	9	Sand, light brown, fine, well - sorted, firm.	9/6/9	2		

04H:1F

State Michigan

Boring No. MI0282-6

Site Northeast Gravel Company

Page 2 of 2

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10					
	11					
	12					
	13					
	14	Same as above				
	15		6/5/10	3		
	16					
	17	No sample taken, cuttings indicate same as above				
	18					
		F.O.B.				

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-7

Drilling Firm Mateco Drilling Co.

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 24, 1986

Completion Date March 24, 1986

Ground El. 67.02'

Top of inner casing El 69.50'

Groundwater El.

at completion 41.87'

after ____ days ____

Total Depth of Boring 37.5'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 3'	
	1	Fill, dark brown, moist.			5' protective casing set around monitoring well	
	2					
	3					
	4				Well info: Sand:24.0' to 37.5'; gravel pack: (3/8 to 3/16"): 19.0' to 24.0'; bentonite seal: 16.0' to 19.0'; grout: surface to 16.0' 10' screen sch 40 PVC	
	5	Sand and gravel, sand, light brown, med., gravel, med.-coarse, firm, moist.	6/6/8	1		
	6					
	7					
	8					
	9					

04H:1F

State Michigan

Boring No. MI0282-7

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10	Sand, light brown, fine, well-sorted, firm, moist.	8/6/8	2		
	11					
	12					
	13					
	14					
	15	Sand, tan, fine-med., well-sorted, loose, moist.	4/5/6	3		
	16					
	17					
	18					
	19					
	20	Same as above	4/5/6	4		
	21					
	22					
	23					
	24					
	25	Sand, light brown, fine-med., trace of silt, loose, saturated.	5/7/6	5		
	26					
	27					
	28					

State Michigan

Boring No. MI0282-7

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	Sand and gravel, sand, light brown, fine-med. grading into gravel, fine-med., dense.	12/20/25	6		
	31					
	32					
	33					
	34					
	35	Gravel and sand, gravel, fine-med. grading into sand, light brown, fine-med., firm.	- 9/9/9	7		
	36					
	37					
		E.O.B				

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-8

Drilling Firm Mateco Drilling Company

Type of Drill CMD 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 25, 1986

Completion Date March 25, 1986

Ground El. 67.54'

Top of inn casing El. 69.94'

Groundwater El.

at completion 47.92'

after ____ days ____

Total Depth of Boring 33.0'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 3'	
	1	Top Soil, light brown, sandy.			5' protective casing set around monitoring well	
	2					
	3				Well info: Sand: 20.0' to 33.0'; gravel pack (3/8-3/6"): 18.0' to 20.0'; bentonite seal: 14.5' to 17.5'; grout: surface to 14.5' 10' screen sch 40 PVC	
	4					
	5	Sand, light brown, fine-med., very clean, firm, moist.	10/13/20	1		
	6					
	7					
	8					
	9					

04H:1F

State Michigan

Boring No. MI0282-8

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10	Sand, light brown, fine-med., trace of gravel, med., loose, moist.	4/5/5	2		
	11					
	12					
	13					
	14					
	15	Gravel and sand, gravel, med.-coarse grading into sand, light brown, fine-med., firm, moist.	11/12/13	3		
	16					
	17					
	18					
	19					
	20	Sand, light brown, med-coarse grading into fine, dense, saturated.	12/16/27	4		
	21					
	22					
	23					
	24					
	25	Sand, light brown, fine, grading grading into med., dense.	10/15/21	5		
	26					
	27					
	28					

State Michigan

Boring No. MI0282-8

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	Sand, light brown, med.-coarse, trace of gravel, fine-med., dense.		6		
	31					
	32					
	33	E.O.B				

DRILLING LOG

State Michigan

Site Northeast Gravel

Boring No. MI0282-9

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 25, 1986

Completion Date March 25, 1986

Ground El. 97.00'

Top of Inner Casing El. 99.40'

Groundwater El.

at completion 71.80'

after ____ days ____

Total Depth of Boring 39.5'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup =3'	
	1 2 3 4 5 6 7 8 9	Due to the close proximity to monitoring well MI0282-3 (~5ft.) the bore hole was blind drilled to a depth of 29.5 ft.			5' protective casing set around monitoring well Well info: Sand: 22.5' to 39.5'; bentonite seal: 19.5' to 22.5'; grout surface to 19.5' 10' screen sch 40 PVC	

04H:1F

State Michigan

Boring No. MI0282-9

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
		Saturated				
	25					
	26					
	27					
	28					

State Michigan

Boring No. MI0282-9

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	Sand, light brown, fine-med., trace of gravel, fine, firm.	8/12/13	1		
	31					
	32					
	33					
	34					
	35	Same as above	8/15/7	2		
	36					
	37					
	38					
	39					
		E.O.B.				

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-10

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 26, 1986

Completion Date March 26, 1986

Ground El. 68.77'

Top of inner casing 69.15'

Groundwater El.

at completion 43.48'

after ____ days ____

Total Depth of Boring 38.0'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 2'	
	1	Fill, light brown, sandy.			5' protective casing set around monitoring well	
	2					
	3					
	4				Well info: Sand: 24.0' to 38.0'; gravel pack (3/8-3/16"): 21.0' to 24.0'; bentonite seal: 18.0' to 21.0'; grout: surface to 18.0'	
	5	Sand, light brown, fine-med., loose, moist.	8/2/2	1		
	6					
	7					
	8					
	9					

State Michigan

Boring No. MI0282-10

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10	Sand, tan, med.-coarse, well-sorted, firm, moist.	4/6/10	2	10' screen sch 40 PVC	
	11					
	12					
	13					
	14					
	15	Same as above	7/7/9	3		
	16					
	17					
	18					
	19					
	20	Same as above	6/7/8	4		
	21					
	22					
	23					
	24					
	25	Sand, light brown, med.-coarse, trace of gravel, fine, loose, saturated.	5/6/8	5		
	26					
	27					
	28					

State Michigan

Boring No. MI0282-10

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	No sample recovered	5/10/11	6		
	31					
	32					
	33					
	34	Sand and gravel, sand, light brown, med.-coarse, gravel, med.-coarse, firm.	7/8/10	7		
	35					
	36					
	37					
	38	E.O.B.				

DRILLING LOG

State Michigan

Site Northeast Gravel Company

Boring No. MI0282-10

Drilling Firm Mateco Drilling Company

Type of Drill CME 550

Driller Steve Rempalski

Geologist Jerry Goode

Start Date March 26, 1986

Completion Date March 26, 1986

Ground El. 68.77'

Top of inner casing 69.15'

Groundwater El.

at completion 43.48'

after ____ days ____

Total Depth of Boring 38.0'

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			Stickup = 2'	
	1	Fill, light brown, sandy.			5' protective casing set around monitoring well	
	2					
	3					
	4				Well info: Sand: 24.0' to 38.0'; gravel pack (3/8-3/16"): 21.0' to 24.0'; bentonite seal: 18.0' to 21.0'; grout: surface to 18.0'	
	5	Sand, light brown, fine-med., loose, moist.	8/2/2	1		
	6					
	7					
	8					
	9					

State Michigan

Boring No. MI0282-10

Site Northeast Gravel Company

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	10	Sand, tan, med.-coarse, well-sorted, firm, moist.	4/6/10	2	10' screen sch 40 PVC	
	11					
	12					
	13					
	14	Same as above				
	15		7/7/9	3		
	16					
	17					
	18					
	19	Same as above				
	20		6/7/8	4		
	21					
	22					
	23					
	24	Sand, light brown, med.-coarse, trace of gravel, fine, loose, saturated.				
	25		5/6/8	5		
	26					
	27					
	28					

State Michigan

Boring No. MI0282-10

Site Northeast Gravel Company

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	29					
	30	No sample recovered	5/10/11	6		
	31					
	32					
	33					
	34	Sand and gravel, sand, light brown, med.-coarse, gravel, med.-coarse, firm.	7/8/10	7		
	35					
	36					
	37					
	38	E.O.B.				

APPENDIX B
PIEZOMETER TEST ANALYSIS

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICH

Test No. NEG-1

TDD #: R058504-12

Waste Site No.: MI0282

Initial Head: 26.94 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 6.691885E-04 ft/sec

TIME	HEAD	HEAD/HEADO
.6	26.94	1
.8	26.79	.8888892
1	26.58	.733333
1.2	26.41	.607407
1.4	26.28	.5111114
1.6	26.15	.4148143
1.8	26.07	.3555551
2	25.98	.2888884
3	25.78	.1407411
4	25.69	7.407434E-02
5	25.63	2.962889E-02

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICHIGAN

Test No. NEG-4

TDD #: R05-8504-12

Waste Site No.: MI0282

Initial Head: 27.27 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 8.801792E-04 ft/sec

TIME	HEAD	HEAD/HEADO
.8	27.27	1
1	27.26	.9885055
1.2	27.12	.8275868
1.4	26.92	.5977011
1.6	26.75	.4022989
1.8	26.62	.2528747
2	26.43	3.448352E-02
3	26.41	.0114945

PIEZOMETER TEST ANALYSIS

Site: N WE GRAVEL

Location: MICHIGAN

Test No. NEG-5

TDD #: R05-8504-12

Waste Site No.: MI0282

Initial Head: 27.01 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 1.874943E-04 ft/sec

TIME	HEAD	HEAD/HEADO
.8	27.01	1
1	26.96	.9723751
1.2	26.86	.9171272
1.4	26.77	.8674034
1.6	26.69	.8232045
1.8	26.57	.7569057
2	26.55	.7458558
3	26.26	.5856353
4	26.06	.4751376
5	25.9	.3867398
6	25.76	.3093921
7	25.65	.2486182
8	25.56	.1988944
9	25.49	.1602205
10	25.44	.1325966
11	25.39	.1049717
12	25.35	8.287275E-02
13	25.32	6.629777E-02
14	25.3	5.524779E-02
15	25.28	4.419887E-02
16	25.26	3.314889E-02
17	25.25	.0276239
18	25.24	2.209891E-02
19	25.23	1.657392E-02
20	25.22	1.104893E-02
25	25.2	0

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICHIGAN

Test No. NEG-6

TDD #: R05-8504-12

Waste Site No.: MI0282

Initial Head: 6.56 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 5.3863E-04 ft/sec

TIME	HEAD	HEAD/HEADO
0	6.56	1
.2	6.46	.9358975
.4	6.26	.8076925
.6	6.1	.7051282
.8	5.97	.6217948
1	5.86	.5512822
1.2	5.77	.4935898
1.4	5.69	.4423078
1.6	5.47	.3012819
1.8	5.32	.2051283
2	5.23	.1474359
3	5.17	.1089744
4	5.13	8.333341E-02
5	5.1	.0641025
6	5.08	5.128201E-02
7	5.06	.0384615
8	5.05	3.205141E-02
9	5.04	.025641
10	5.03	.0192309

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICHIGAN

Test No. NEG-7

TDD #: R05-8504-12

Waste Site No.: MI0282

Initial Head: 28.89 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 4.834786E-04 ft/sec

TIME	HEAD	HEAD/HEAD0
.6	28.89	1
.8	28.87	.9824574
1	28.68	.8157902
1.2	28.47	.6315787
1.4	28.33	.5087722
1.6	28.21	.4035082
1.8	28.12	.3245623
2	28.05	.2631574
3	27.89	.1228066
4	27.83	7.017541E-02
5	27.79	3.508854E-02
6	27.78	2.631641E-02
7	27.77	1.754427E-02
8	27.76	8.772135E-03
9	27.76	8.772135E-03
10	27.75	0

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICHIGAN

Test No. NEG-8

TDD #: R05-8504-12

Waste Site No.: MI0282

Initial Head: 23.8 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 7.164684E-04 ft/sec

TIME	HEAD	HEAD/HEAD0
0	23.8	1
.2	23.57	.8647061
.4	23.69	.9352949
.6	23.47	.8058823
.8	23.09	.5823532
1	23.05	.5588233
1.2	23.01	.5352945
1.4	22.93	.4882356
1.6	22.88	.4588231
1.8	22.23	7.647015E-02
2	22.26	9.411762E-02
3	22.19	.0529413
4	22.15	2.941134E-02
5	22.12	1.176498E-02
6	22.11	5.882492E-03

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICHIGAN

Test No. NEG-9

TDD #: R05-8504-12

Waste Site No.: MI0282

Initial Head: 28.21 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 3.596762E-04 ft/sec

TIME	HEAD	HEAD/HEADO
1.2	28.21	1
1.4	28.11	.9130448
1.6	27.95	.7739145
1.8	27.82	.66087
2	27.71	.5652173
3	27.44	.3304358
4	27.29	.2000013
5	27.2	.1217403
6	27.15	7.826103E-02
7	27.12	5.217513E-02
8	27.1	3.478342E-02
9	27.09	2.608756E-02
10	27.08	1.739171E-02

PIEZOMETER TEST ANALYSIS

Site: N E GRAVEL

Location: MICHIGAN

Test No. NEG-10

TDD #: R5-8504-12

Waste Site No.: MI0282

Initial Head: 28.03 ft

Radius of Casing: .083 ft

Radius of Screen: .083 ft

Permeability of Aquifer: 4.715697E-04 ft/sec

TIME	HEAD	HEAD/HEADO
1	28.03	1
1.2	28	.9705876
1.4	27.76	.7352938
1.6	27.57	.5490189
1.8	27.44	.4215688
2	27.34	.3235292
3	27.14	.1274501
4	27.07	5.882298E-02
5	27.03	1.960828E-02
6	27.02	9.804142E-03
7	27.01	0
8	27.01	0
9	27	-9.804142E-03

APPENDIX C
GROUNDWATER ANALYSIS

KEY TO SAMPLE DESIGNATION

Sample Location	Organic Traffic Control Number	Inorganic Traffic Control Number
MI0282-1	EH478	MEJ096
MI0282-3	EH479	MEJ097
MI0282-4	EH480	MEJ098
MI0282-4(Matrix spike dup.)	EH480	MEJ098
MI0282-5	EH481	MEJ099
MI0282-6	EH482	MEJ100
MI0282-6(Dup.)	EH483	MEE601
MI0282-7	EH484	MEE602
MI0282-8	EH485	MEE603
MI0282-9	EH486	MEE604
MI0282-10	EH487	MEE605
Blank	EH488	MEE606
Graceland Church Well	CRL#86FG05S74	86FG05S74

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

Date Received for Review: 5/14/86 Date Review Completed: 6/3/86

TO: Jerry Goode

FROM: Suzanne Kozlowski

SUBJECT: Northeast Gravel Michigan R05-8504-12

Sample Description: Case # 5840 residential well and blank
ABN, Pesticide/PCB, CN^-, Hg, Metals

Project Data Status: waiting for monitoring wells organic analyses

FIT Data Review Findings:

Ba, Cu, Fe, Sr, Zn, Ca, K, Mg and Na found in residential sample. Copper is the only toxic metal.

Additional Comments:

Book No. 5
Page No. 128

recycled paper

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U.S. EPA - REGION V, CENTRAL REGIONAL LABORATORY
536 SOUTH CLARK STREET, CHICAGO, ILLINOIS 60605

RECEIVED JAN 1 4 1986

SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL — STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05S74 — ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

RECEIVED MAY 1 4 1986

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05S74

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
39.	86-73-7	FLUORENE	1.0	U
40.	100-02-7	4-NITROPHENOL	1.5	U
41.	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	1.0	U
42.	84-66-2	DIETHYL PHTHALATE	1.0	U
43.	534-52-1	4,6-DINITRO-2-METHYLPHENOL	(15)	U
44.	122-66-7	1,2-DIPHENYLHYDRAZINE	1.0	U
45.	86-30-6	N-NITROSODIPHENYLAMINE *	1.5	U
	122-39-4	DIPHENYLAMINE *		
46.	100-01-6	4-NITROANILINE	3.0	U
47.	101-55-3	4-BROMOPHENYLPHENYL ETHER	1.5	U
48.	118-74-1	HEXACHLOROBENZENE	1.5	U
49.	87-86-5	PENTACHLOROPHENOL	2.0	U
50.	85-01-8	PHENANTHRENE	1.0	U
51.	120-12-7	ANTHRACENE	2.5	U
52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
56.	218-01-9	CHRYSENE **	1.5	U
57.	56-55-3	BENZO(A)ANTHRACENE **		
58.	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	1.0	U
59.	117-84-0	DI-N-OCTYL PHTHALATE	1.5	U
60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
65.	191-24-2	BENZO(GHI)PERYLENE	4.0	U
66.	88-74-4	2-NITROANILINE	1.0	U

CODES: U --- COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT FOR REAGENT WATER.
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

* THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
*** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.

VALUES IN PARENTHESES ARE ESTIMATES. ACTUAL VALUES ARE BEING DETERMINED AT THIS TIME.

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U.S. EPA - REGION V, CENTRAL REGIONAL LABORATORY
536 SOUTH CLARK STREET, CHICAGO, ILLINOIS 60605

RECEIVED MAY 14 1986

BLANK

SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05R07

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05R07

ACTIVITY CODE: C48100

RECEIVED MAY 1 4 1986

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
39.	86-73-7	FLUORENE	1.0	U
40.	100-02-7	4-NITROPHENOL	1.5	U
41.	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	1.0	U
42.	84-66-2	DIETHYL PHTHALATE	1.0	U
43.	534-52-1	4,6-DINITRO-2-METHYLPHENOL	(15)	U
44.	122-66-7	1,2-DIPHENYLHYDRAZINE	1.0	U
45.	86-30-6	N-NITROSODIPHENYLAMINE *	1.5	U
	122-39-4	DIPHENYLAMINE *		
46.	100-01-6	4-NITROANILINE	3.0	U
47.	101-55-3	4-BROMOPHENYLPHENYL ETHER	1.5	U
48.	118-74-1	HEXACHLOROBENZENE	1.5	U
49.	87-86-5	PENTACHLOROPHENOL	2.0	U
50.	85-01-8	PHENANTHRENE	1.0	U
51.	120-12-7	ANTHRACENE	2.5	U
52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
56.	218-01-9	CHRYSENE **	1.5	U
57.	56-55-3	BENZO(A)ANTHRACENE **		
58.	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	1.8	
59.	117-84-0	DI-N-OCTYL PHTHALATE	1.5	U
60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
65.	191-24-2	BENZO(GHI)PERYLENE	4.0	U
66.	88-74-4	2-NITROANILINE	1.0	U

common contaminant rubber gloves usually

CODES: U --- COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT FOR REAGENT WATER.
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

* THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
*** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.

VALUES IN PARENTHESES ARE ESTIMATES. ACTUAL VALUES ARE BEING DETERMINED AT THIS TIME.

Superfund

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

DIVISION/BRANCH: ESD Sampling Date: 4/16/86 (Month Day Year) Arrival Date: 4/7/86 (Month Day Year) Analysis Due Date: 5/7/86 (Month Day Year)

R.U. Number: Y905 Group # : SF 3151 Activity # : C48100 Study: North East Gravel

ALL UNITS ARE MICROGRAMS PER LITER OR MILLIGRAMS PER KILOGRAM.

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Sample # \ Pesticide	Y-BHC Lindane	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	Endrin	Endosulfan II	pp-DDE	Beta-BHC	Delta-BHC	α-BHC	pp-DDD	pp-DDT	Methoxy Chlor	Endosulfan sulfate	Endrin aldehyde	Endrin ketone	Toxaphene	Tech-Chlordane
1 86FG05$74	<.05	<.05	<.05	<.05	<.05	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.5	<.1	<.1	<.1	<.1	<.1	<1.0	<.5
2 86FG05R07	<.05	<.05	<.05	<.05	<.05	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.5	<.1	<.1	<.1	<.1	<.1	<1.0	<.5
3																				
4																	AK	5/13/86		
5																	GF	5-14-86		
6																	LF	5-14-86		
7																				
8																				
9																				
10																				
11																				
12																				

Superfund (117) ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM: Form # 1:

DIVISION/BRANCH: ESD Sampling Date: 4/16/86 (Month Day Year) Arrival Date: 4/17/86 (Month Day Year) Analysis Due Date: 5/7/86 (Month Day Year)

D.U. Number: Y905 Group #: SF3151 Activity #: C48100 Study: North East Gravel

All units are micrograms per liter or milligram per kilograms Sample Type: Water, Sediment, Oil, Sludge

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor	Aroclor	Aroclor	Dibuthyl phthalate	Diethyl Hexyl phthalate	
1	86FG05S74	<.5	<.5	<1.0	<1.0						
2	86FG05R07	<.5	<.5	<1.0	<1.0						
3										AK 5/13/86	
4										C.F 5-14-86	
5										YE 5-16-86	
6											
7											
8											
9											
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
0											
1											
2											

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1

5/6/86
ACTIVITY # C48100
OK-BS
AJ
5/9/86

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS - NUTRIENTS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER PHENOLICS UG PHENOL/L MIN 74818	WATER CYANIDE UG CN/L MIN 74919	WATER GROSS ALPHA P CI/L MIN 75020	WATER CR+6 UG CR+6/L MIN 74816	WATER MERCURY UG HG/L MIN 74717
86F605S74	5-93902 GRACELAND CHURCH	**	✓ K8			
86F605R07	BLANK 5-93911	*	✓ K5			
86F605S74	5-93905 GRACELAND CHURCH					✓ K0.1
86F605R07	BLANK 5-93912					✓ K0.1
			A. Gutub 4-29-86			BG 5/1/86

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* Screening by auto flash Distillation MN # 335.3

** Manual Distillation, Auto spectrophotometric determination MN # 74919

5/19/86

NORTH EAST GRAVEL
C48122 GTFADTWDZZ
SF3151 JR 5-7-86

19 May 86

DL1:[001,054]RUN524.BRN 07-MAY-86 14:38:04 PAGE 3

DATA SET : SF3151

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ELEMENT		BLANK FG05R07		FG05S74
AG	ug/L	< 3.00	<	3.00
AL		< 80.0	<	80.0
B		< 80.0	<	~~80.0~~
BA		< 5.0		13.7
BE		< 1.00	<	1.00
CD		< 2.00	<	2.00
CO		< 6.00	<	6.00
CR		< 8.00	<	8.00
CU		< 6.0		36.2
FE		< 80.		135.
LI		< 10.0	<	10.0
MN		< 5.00	<	5.00
MO		< 10.0	<	10.0
NI		< 15.0	<	15.0
SN		< 40.0	<	40.0
SR		< 10.0		41.8
TI		< 25.0	<	25.0
V		< 5.00	<	5.00
Y		< 5.00	<	5.00
ZN		< 40.		343.
CA	mg/L	< 0.5		56.6
K		~~0.01 Hw~~ <0.2		0.84 Hw
MG		< 0.1		20.2
NA		< 1.00		1.71

POTASSIUM DATA IS FROM STD CURVE FLAME AA

5-20-86

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL 312-663 9415

International Specialists in the Environment

Date Received for Review: 5/14/86 Date Review Completed: 6/3/86

TO: Jerry Goode

FROM: Suzanne Kozlowski

SUBJECT: Northeast Gravel Michigan R05-8504-12

Sample Description: Case # 5840 eleven (11) low water metals and cyanide analyses

Project Data Status: waiting for monitoring well organics

FIT Data Review Findings:

Copper, sodium and zinc were detected in the blank MEE606. Do not use copper. [ ] mean above instrument detection but below contract required detection limit. Cyanide was found in the duplicate MEE601 but not in sample MEJ100. A good chromium hit was found in MEJ100 and the duplicate MEE601.

Additional Comments:

Book No. 5

Page No. 128

recycled paper

5-14-86

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

A: 5-9-86

ECT: Review of Region V CLP Data
Received for Review on 5/6/86

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TO: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thakker

Data User: Jit

We have reviewed the data for the following case(s).

SITE NAME: Northeast Gravel SMO Case No. 5840

EPA Data Set No. SE3171 No. of Samples: 11 D.U./Activity Numbers 4905/C48500

CRL No. 86FG06508 - 86FG06R03

SMO Traffic No. MEJ096-100 ; MEE601-606

CLP Laboratory: RMAL Hrs. Required for Review: 2

Following are our findings. This review covers 11 low water samples analysed for metals and cyanide.
Duplicate analysis for Zn showed RPD 23%, a control limit of ±CRDL should be used for samples values less than 5 times CRDL, that is why Zn data is not marked with * all QC audits are acceptable.

Ada Leon
5.8.86

(X) Data are acceptable for use.
( ) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

EPA FORM 1320-6 (REV. 3-76)

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00002

Form I

86F606508

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703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEJ096

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	22700	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[7.4]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[26]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2090]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	67900	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	9740	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[6.7]	P	22.	TIN	16U	P
11.	IRON	16U	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	23	P
	Cyanide	10U	AS		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ indicate toxic metals
E are hits

CV - Inductively Coupled Plasma
AS - Inductively Coupled Plasma

Lab Manager [signature]

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86F606509
EPA Sample No.
MEJ097

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	24900	P
2.	ANTIMONY	26U	P	14.	MANGANESE	63	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[64]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[987]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	68500	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	9940	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[7.1]	P	22.	TIN	16U	P
11.	IRON	104	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[15]	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ indicate toxic metals
○ are hits

Lab Manager [signature]

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86F606510
EPA Sample No.
MEJ098

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	25200	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	[6.6]	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[35]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2010]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	78900	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	5U	P	20.	SODIUM	22500	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[8.6]	P	✓22.	TIN	16U	P
11.	IRON	[20]	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	[14]	P
✓Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ indicate toxic metals
○ are hits

Lab Manager [signature]

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Form I

86FG06511

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EPA Sample No.
MEJ099

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	[20]	P	13.	MAGNESIUM	25400	P
2.	ANTIMONY	26U	P	14.	MANGANESE	240	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[63]	P	16.	NICKEL	[9.3]	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2440]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	80500	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	25400	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[11]	P	22.	TIN	16U	P
11.	IRON	[17]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	30	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: toxic metals are hits

Lab Manager

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86FG06512
EPA Sample No.
MEJ100

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	27300	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[8.6]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[41]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2490]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	86100	P	19.	SILVER	3U	P
8.	CHROMIUM	43	P	20.	SODIUM	9710	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[7.9]	P	22.	TIN	16U	P
11.	IRON	16U	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[11]	P

Cyanide 10U AS Percent Solids (%) ____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ are toxic metals
O are hits

Lab Manager

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U.S. EPA Contract Laboratory Program
Sample Management Office
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703/557-2490 FTS: 8-557-2490

86FG06012
EPA Sample No.
MEE601

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Duplicate of MEJ100

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	28000	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[4.8]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[36]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2490]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	88200	P	19.	SILVER	3U	P
8.	CHROMIUM	43	P	20.	SODIUM	9740	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[7.3]	P	22.	TIN	16U	P
11.	IRON	[32]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[13]	P
Cyanide		11	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ are toxic metals
○ are hits

Lab Manager [signature]

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86FG06513

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703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEE602

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	[46]	P	13.	MAGNESIUM	24600	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[13]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[23]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[971]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	84000	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	7550	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[9.4]	P	22.	TIN	16U	P
11.	IRON	[87]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[20]	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: toxic metals are hots

Lab Manager D Pratt

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86FG06514
EPA Sample No.
MEE603

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	24500	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[7.8]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[24]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[1100]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	72300	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	11400	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[9.6]	P	22.	TIN	16U	P
11.	IRON	[20]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	22	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ are toxic metals
○ are hits

Lab Manager [signature]

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00010

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
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86FG06515
EPA Sample No.
MEE604

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	21800	P
2.	ANTIMONY	26U	P	14.	MANGANESE	4U	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[21]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[1320]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	57800	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	7170	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[9.2]	P	22.	TIN	16U	P
11.	IRON	[20]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[18]	P

Cyanide 10U AS Percent Solids (%) ____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: 8 are toxic metals
are hits

Lab Manager D. Hatt

RECEIVED MAY 14 1986

00011

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

86FG06316
EPA Sample No.
MEE605

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	25600	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[8.7]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[72]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2020]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	75700	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	33200	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[5.1]	P	22.	TIN	16U	P
11.	IRON	[32]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[15]	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: toxic metals are hits

Lab Manager [signature]

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00012

Form I

86FG06R03

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEE606

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

BLANK

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	295U	P
2.	ANTIMONY	26U	P	14.	MANGANESE	4U	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	11U	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	542U	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	352U	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	[1030]	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[4]	P	22.	TIN	16U	P
11.	IRON	16U	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[6.3]	P

Cyanide 10U AS Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: FIELD BLANK

Lab Manager [signature]

ecology and environment, inc.
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International Specialists in the Environment

Date Received for Review: 4/29/86 Date Review Completed: 5/7/86

TO: Jerry Goode

FROM: Suzanne Kozlowski

SUBJECT: NE Gravel Michigan R05-8504-12

Sample Description: Case # CRL one residental water and blank As, Sb, Se, Pb and Tl and VOA data

Project Data Status: waiting for rest of metals, CN^-, Hg^{+2}, ABN, Pest/PCB data for residential well AND Monitor Well Data

FIT Data Review Findings: for 574
The VOA TIC page is missing. No organics detected in sample. Pb was detected in sample 574.

Additional Comments:

Book No. 5
Page No. 128, 130

recycled paper

$1+.25^{\%}$ 4/21/86 AS

ACTIVITY # C48722

GTFA05WUZZ

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

RECEIVED APR 29 1986

CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET161	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
86FG05S74	5-93401 GRACELAND CHURCH	✓	✓ <2	✓ 2.7	✓ <2	✓ <2	
86FG05R07	BLANK 5-93910	✓	✓ <2.	✓ <2	✓ <2	✓ <2	
			I.L	I.L	I.L	I.L	
			4.18.86	4.18.86.	4.18.86	4.18.86.	

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05#74

Data Set #: SF-3151
Matrix : WATER

	CAS #	Compounds	Concentration (PPB)	
1.	74-87-3	Chloromethane	10	U
2.	74-83-9	Bromomethane	10	U
3.	75-01-4	Vinyl Chloride	10	U
4.	75-00-3	Chloroethane	1.5	U
5.	75-09-2	Methylene Chloride	1.0	U
6.	107-02-8	Acrolein	100	U
7.	67-64-1	Acetone	75	U
8.	107-37-1	Acrylonitrile	50	U
9.	75-15-0	Carbon Disulfide	3.0	U
10.	75-35-4	1,1-Dichloroethene	1.5	U
11.	75-35-3	1,1-Dichloroethane	1.5	U
12.	156-60-5	trans-1,2-Dichloroethene	1.5	U
13.	67-66-3	Chloroform	1.5	U
14.	78-93-3	2-Butanone	50	U
15.	107-06-2	1,2-Dichloroethane	1.5	U
16.	71-55-6	1,1,1-Trichloroethane	1.5	U
17.	56-23-5	Carbon Tetrachloride	1.5	U
18.	108-05-4	Vinyl Acetate	15	U
19.	75-27-4	Bromodichloromethane	1.5	U
20.	78-87-5	1,2-Dichloropropane	1.5	U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0	U
22.	79-01-6	Trichloroethene	1.5	U
23.	71-43-2	Benzene	1.5	U
24.	124-48-1	Dibromochloromethane	1.5	U
25.	79-00-5	1,1,2-Trichloroethane	1.5	U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0	U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5	U
28.	75-25-2	Bromoform	1.5	U
29.	108-10-1	4-Methyl-2-pentanone	2.5	U
30.	519-78-6	2-Hexanone	3.6	U
31.	127-18-4	Tetrachloroethene	1.5	U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5	U
33.	108-88-3	Toluene	1.5	U
34.	108-90-7	Chlorobenzene	1.5	U
35.	100-41-4	Ethylbenzene	1.5	U
36.	100-42-5	Styrene	1.0	U
37.	108-38-3	m-Xylene	2.0	U
38.		o,p-Xylene (total)	2.5	U

RECEIVED APR 2 9 1986

Data Qualifiers:

U -Compound was analyzed for but not detected. The value reported is the method detection limit for reagent water.

SLC -Suspected Laboratory Contaminant.

SFC -Suspected Field Contaminant.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05P07

Data Set #: SF-3151
Matrix : WATER

BLANK

RECEIVED AUG 2 9 1986

	CAS #	Compounds	Concentration (PPB)	
1.	74-87-3	Chloromethane	10	U
2.	74-83-9	Bromomethane	10	U
3.	75-01-4	Vinyl Chloride	10	U
4.	75-00-3	Chloroethane	1.5	U
5.	75-09-2	Methylene Chloride	1.0	U
6.	107-02-8	Acrolein	100	U
7.	67-64-1	Acetone	75	U
8.	107-37-1	Acrylonitrile	50	U
9.	75-15-0	Carbon Disulfide	3.0	U
10.	75-35-4	1,1-Dichloroethene	1.5	U
11.	75-35-3	1,1-Dichloroethane	1.5	U
12.	156-60-5	trans-1,2-Dichloroethene	1.5	U
13.	67-66-3	Chloroform	1.5	U
14.	78-93-3	2-Butanone	50	U
15.	107-06-2	1,2-Dichloroethane	1.5	U
16.	71-55-6	1,1,1-Trichloroethane	1.5	U
17.	56-23-5	Carbon Tetrachloride	1.5	U
18.	108-05-4	Vinyl Acetate	15	U
19.	75-27-4	Bromodichloromethane	1.5	U
20.	78-87-5	1,2-Dichloropropane	1.5	U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0	U
22.	79-01-6	Trichloroethene	1.5	U
23.	71-43-2	Benzene	1.5	U
24.	124-48-1	Dibromochloromethane	1.5	U
25.	79-00-5	1,1,2-Trichloroethane	1.5	U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0	U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5	U
28.	75-25-2	Bromoform	1.5	U
29.	108-10-1	4-Methyl-2-pentanone	2.5	U
30.	519-78-6	2-Hexanone	3.6	U
31.	127-18-4	Tetrachloroethene	1.5	U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5	U
33.	108-88-3	Toluene	1.5	U
34.	108-90-7	Chlorobenzene	1.5	U
35.	100-41-4	Ethylbenzene	1.5	U
36.	100-42-5	Styrene	1.0	U
37.	108-38-3	m-Xylene	2.0	U
38.		o,p-Xylene (total)	2.5	U

Data Qualifiers:

U -Compound was analyzed for but not detected. The value reported is the method detection limit for reagent water.

SLC -Suspected Laboratory Contaminant.

SFC -Suspected Field Contaminant.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05P07

Data Set #: SF-3151
Matrix : WATER

BLANK

TENTATIVELY IDENTIFIED COMPOUNDS	ESTIMATED CONC. (PPB)
UNKNOWN#1	7.9

RECEIVED APR 2 9 1986

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International Specialists in the Environment

Date Received for Review: 6/24/86 Date Review Completed: 7/2/86

TO: Jerry Goode

FROM: Renee Hix Mays

SUBJECT: Northeast Gravel, MI
RS-8504-12

Sample Description: Case # 5840 Low Water Organics

Project Data Status: Complete for all data.

FIT Data Review Findings:

See Tom Clyne's review; pg 3 of package.

Additional Comments:

Book No. 5
Page No. 128

recycled paper

v 24 June 86

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 6/18/86

RECEIVED JUN 24 1986

SUBJECT: Review of Region V CLP Data
Received for Review on _____19 MAY 86_____

FROM: Curtis Ross, Director (5SCRL) Francis Thomas
Central Regional Laboratory

TO; Data User:_____FIT_____

_____

We hve reviewed the data for the following case(s).

SITE NAME_____NORTHEAST GRAVEL_____SMO Case No. _5840_____

EPA DATA SET NO__SF_3171___NO. OF SAMPLES_11____D.U./ACTIVITY NUMBERS__Y905/C48500___

CRL No:___86FG06S08 TO 86FG06R03_____

SMO Traffic No._____EH 478 TO EH 488_____

CLP Laboratory:_____IT CALIF_____ Hrs. Required for Review:____4_____

Following are our findings.

A TIMES ACCEPTABLE

B SURROGATES ACCEPTABLES

C MS/MSD ACCEPTABLE

D LAB BLANK ACCEPTABLE

E TUNING ACCEPTABLE

F CALIBRATION INITIAL
FOR VOA; THE RUN ON 86-03-25 HAD SEVEN RF-AVE <0/30 AND TWO > 30 %RSD.
FOR SV; ALL OF THE RF-AVE ARE ACCEPTABLE, BUT FOUR > 30 %RSD ON 86-05-05. ON 86-05-09, THREE >30 %RSD.

Reviewed 17 June 86

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by contractor lab.
( ) Data are unacceptable.

cc: Dr. Alfred Haeber/ Joan Fisk/Gary Ward. EPA Support Services.
Ross K. Robeson, EMSL-LasVegas
Don Trees, CLP/Sample Management Office

RECEIVED JUN 2 4 1986

SITE NAME_____NORTHEAST GRAVEL_____SMO Case No. _5840_____

CONTINUOUS
FOR VOA; THE RUN ON 86-04-23 HAD 5 RF < 0.30 AND 8 > 25 %D. ON 86-04-24, HAD 6 RF < 0.30 AND 7 > 25 %D.
NO SPCC OR CCC INVOLVED.

G PESTICIDES ACCEPTABLE. SEE LAB NARRATIVE FOR PROBLEMS.

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Screening Results

The above samples were not screened by GC. For the analyses each sample was assumed to be Low concentration unless observation indicated the presence of compounds at Medium concentration. A sample which was initially analyzed as Low and found to contain compounds at Medium concentration was re-analyzed as a Medium level sample.

All of the above samples were analyzed as Low concentration samples in all fractions.

Surrogate Recoveries - BNA's

Sample EH486RI had a recovery of 2-Fluorobiphenyl (a Base/Neutral surrogate) which were outside the acceptance windows. The recovery was greater than the 10% minimum required. Re-extraction/analysis is not required under these circumstances.

Spike Recoveries - Acids

In the spiked samples, EH480MS and EH480MSD, one out of ten spiked Acid compounds had recoveries outside the acceptance windows.

These samples were not re-extracted/analyzed because it is not contractually required.

Spike Recoveries - Base/Neutral's

In the spiked samples, EH480MSRI and EH480MSDRI, one out of twelve spiked Base/Neutral compounds had recoveries outside the acceptance windows.

These samples were not re-extracted/analyzed because it is not contractually required.

RECEIVED JUN 2 4 1986

Case #/SAS #: 5840
JN: 36569
Contract #: 68-01-7262

May 16, 1986

Analtyical Results - BNA

Samples EH480, EH480MSRI, EH480MSDRI, EH481RI and EH486RI were injected a second time as a dilution was required to bring Phenol-d5 within 30 scans units of the standard. There were considerable amounts of Caprolactam detected in these samples which were re-run diluted. The large amounts of Caprolactam caused matrix effects in the samples resulting in retention times being off from the times expected from the standards.

Both sets of data for the re-injected samples are being submitted for comparison.

Analytical Results - Pesticides

Sample EH486 was not spiked with Dibutyl chlorendate in the original extraction. This sample was re-extracted outside of holdinjg times, therefore, both data shets are being submitted.

The %D for Dibutyl chlorendate in the original analysis of sample EH486 could not be quantitated since no Dibutyl chlorendate was detected.

The %RSD of 4,4'-DDT is greater than 10% for the Mixed Phase data with Lab ID # B11-PM-111-1. This data was not used for DDD, DDE or DDT quantitation.

RECEIVED JUN 24 1986

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Surrogate Recovery (%)

Contract #: 68-01-7262

Job #: 36569

SMO TR # (Sample #)	Volatile			Semi-volatile						Pesticide
	T-d8 88-110	BFB 86-115	DCE-d4 76-114	N-d5 35-114	2-Fb 43-116	Tp-d14 33-141	P-d5 10- 94	2-FP 21-100	TBrP 10-123	DiBuCl** 24-154
EH478	90	100	102	82	78	63	44	62	61	62
EH479	90	100	100	73	86	51	54	47	45	110
EH479MS	102	106	96	NA	→	→	NA	→	→	NA
EH479MSD	102	106	98	NA	→	→	NA	→	→	NA
EH480	90	102	98	76	81	55	43	61	58	110
EH480RI	NA	→	→	80	110	50	84	72	49	NA
EH480MS	NA	→	→	90	86	51	33	64	62	NA
EH480MSD	NA	→	→	108	85	54	16	58	60	NA
EH480MSRI	NA	→	→	78	113	46	90	69	51	NA
EH480MSDRI	NA	→	→	74	109	49	74	59	44	NA
EH481	91	101	101	68	80	55	59	58	46	100
EH481RI	NA	→	→	56	102	38	63	52	23	NA
EH482	90	102	100	91	90	45	73	63	72	66
EH483	90	104	102	59	56	44	48	55	51	65
EH484	90	102	102	85	84	71	20	73	61	68
EH485	90	100	102	81	90	60	69	64	48	61
EH485RI	NA	→	→	44	71	45	33	49	38	NA
EH486	90	100	100	87	84	61	10	74	71	NS
EH486RI	NA	→	→	85	122*	47	94	83	54	NA
EH486RE	NA	→	→	NA	→	→	NA	→	→	78
EH487	90	100	100	89	87	50	86	77	79	100
EH487MS	NA	→	→	NA	→	→	NA	→	→	90
EH487MSD	NA	→	→	NA	→	→	NA	→	→	91
EH488	90	102	104	89	84	54	72	69	68	98
Recovery Summary	0/13	0/13	0/13	0/19	1/19	0/19	0/19	0/19	0/19	0/13

Comments:

* Values outside QC Limits.
** Advisory Limits Only.
NA - Not Analyzed
NS - Not Spiked
NR - Not Reported
-- Analyzed under another QC Report

Volatiles: 0 out of 45 outside QC Limits
Semi-volatiles: 1 out of 120 outside QC Limits
Pesticides: 0 out of 16 outside QC Limits

Recovery Summary = #'s Outside QC Limits / Total #'s Reported
(Does not include Method Blanks)

Rev 8/85

RECEIVED JUN 24 1986

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Surrogate Recovery (%)

Contract #: 68-01-7262

Job #: 36569

SMO TR # (Sample #)	Volatile			Semi-volatile						Pesticide
	T-d8 88-110	BFB 86-115	DCE-d4 76-114	N-d5 35-114	2-Fb 43-116	Tp-d14 33-141	P-d5 10- 94	2-FP 21-100	TBrP 10-123	DiBuCl** 24-154
MB LWBE0031 LW	90	98	98	87	85	45	75	68	70	78
MB LWBE0034 LW	104	110	100	NA	→	→	NA	→	→	99
MB N2-1105 LW	NA	→	→	NA	→	→	NA	→	→	72
Recovery Summary										

Comments:

* Values outside QC Limits.
** Advisory Limits Only.
NA - Not Analyzed
NS - Not Spiked
NR - Not Reported
-- Analyzed under another QC Report

Volatiles: ___ out of ___ outside QC Limits
Semi-volatiles: ___ out of ___ outside QC Limits
Pesticides: ___ out of ___ outside QC Limits

Recovery Summary = #'s Outside QC Limits / Total #'s Reported
(Does not include Method Blanks)

Rev 8/85

WATER MS/MSD RECOVERY

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec MS	Conc. MSD	% Rec MSD	RPD	QC Limits * RPD	QC Limits * Recovery
VOA	1,1-Dichloroethene	50.	5u	55	110	57	114	4	<14	61-145
SMO	Trichloroethene			49	98	49	98	Ø	<14	71-120
Sample #	Chlorobenzene			52	104	54	108	4	<13	75-130
EH479	Toluene			51	102	52	104	2	<13	76-125
	Benzene			51	102	53	106	4	<11	76-127
	1,2,4-Trichlorobenzene	103.	20u	91	88	86	83	6	<28	39- 98
B/N	Acenaphthene	100.	20u	87	87	91	91	4	<31	46-118
SMO	2,4-Dinitrotoluene	101.	20u	87	86	84	83	4	<38	24- 96
Sample #	Pyrene	103.	20u	74	72	75	73	1	<31	26-127
EH480	N-Nitroso-di-n-propylamine	102.	20u	85	83	79	77	7	<38	41-116
	1,4-Dichlorobenzene	101.	20u	70	69	69	68	2	<28	36- 97
Acid	Pentachlorophenol	207.	100u	110	53	100J	48	10	<50	9-103
SMO	Phenol	203.	20u	59	29	29	14	68*	<42	12- 89
Sample #	2-Chlorophenol	213.	20u	170	80	120	56	35	<40	27-123
EH480	4-Chloro-3-methylphenol	205.	20u	200	97	230	112*	14	<42	23- 97
	4-Nitrophenol	215.	100u	150	70	140	65	7	<50	10- 80
Pest.	Lindane (gamma-BHC)	0.200	Ø (0.05u)	0.22	110	0.22	110	Ø	<15	56-123
SMO	Heptachlor	0.205		0.17	83	0.17	83	Ø	<20	40-131
Sample #	Aldrin	0.204		0.15	74	0.15	74	Ø	<22	40-120
EH487	Dieldrin	0.509	Ø (0.14)	0.38	75	0.41	81	8	<18	52-126
	Endrin	0.523		0.47	90	0.50	96	6	<21	56-121
	4,4'-DDT	0.504		0.54	107	0.55	109	2	<27	38-127

* Asterisked Values are outside QC Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: VOA's Ø out of 5 outside QC Limits
B/N's Ø out of 6 outside QC Limits
Acids 1 out of 5 outside QC Limits
Pests Ø out of 6 outside QC Limits

Recovery: VOA's Ø out of 10 outside QC Limits
B/N's Ø out of 12 outside QC Limits
Acids 1 out of 10 outside QC Limits
Pests Ø out of 12 outside QC Limits

Comments: _____

Rev 8/85

RECEIVED JUN 24 1986

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/CERR

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH479
CONTRACT #: 68-01-7262
UNITS: UG/L

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
DICHLOROETHYLENE	50.	5. U	55.	110	57.	114	-4
RICHLOROETHYLENE	50.	5. U	49.	98	49.	98	0
HLOROBENZENE	50.	5. U	52.	104	54.	108	-4
TOLUENE	50.	5. U	51.	102	52.	104	-2
ENZENE	50.	5. U	51.	102	53.	106	-4
OLUENE-D8	50.	45.	51.	102	51.	102	0
BROMOFLUOROBENZENE	50.	50.	53.	106	53.	106	0
ICHLOROETHANE-D4	50.	50.	48.	96	49.	98	-2

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: VOA'S 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: VOA'S 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Methylene Chloride	10 B	14 B	17 B	19
Acetone	31 B	26	31	18

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103.	20. U	91.	88	86.	83	6
ACENAPHTHENE	100.	20. U	87.	87	91.	91	-4
2,4-DINITROTOLUENE	101.	20. U	87	86	84.	83	4
PYRENE	103.	20. U	74.	72	75.	73	-1
NITROSOPROPYLAMINE	102.	20. U	85.	83	79.	77	7
1,4-DICHLOROBENZENE	101.	20. U	70.	69	69.	68	2
PENTACHLOROPHENOL	207.	100. U	110.	53	100. J	48	10
PHENOL	203.	20. U	59.	29	29.	14	68*
2-CHLOROPHENOL	213.	20. U	170.	80	120.	56	35
P-CHLORO-M-CRESOL	205.	20. U	200.	97	230.	112*	-14
4-NITROPHENOL	215.	100. U	150.	70	140.	65	7
NITROBENZENE-D5	102.	78.	92.	90	110.	108	-18
2-FLUOROBIPHENYL	100.	81	86.	86	85.	85	1
P-TERPHENYL-D14	103.	57.	53.	51	56.	54	-5
PHENOL-D5	206.	89	69.	33	33.	16	70
2-FLUOROPHENOL	203.	123.	129.	63	118.	58	9
TRIBROMOPHENOL	205.	118.	128.	62	122.	59	5

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 0 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	20U	38	25	41

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Sample #: EH487
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec. MS	Conc. MSD	% Rec. MSD	RPD	QC Limits * RPD	QC Limits * Recovery
Pest.	Lindane (gamma-BHC)	0.200	0 (0.054)	0.22	110	0.22	110	0	<15	56-123
SMO	Heptachlor	0.205	↓ ↓	0.17	83	0.17	83	0	<20	40-131
Sample #	Aldrin	0.201	↓ ↓	0.15	74	0.15	74	0	<22	40-120
	Dieldrin	0.509	0 (0.14)	0.38	75	0.41	81	8	<18	52-126
EH487	Endrin	0.523	↓ ↓	0.47	90	0.50	96	6	<21	56-121
	4,4'-DDT	0.504	↓ ↓	0.54	107	0.55	109	2	<27	38-127
	Dibutyl chlorendate **	1.0	1.0	0.90	90	0.91	91	1	—	24-154

* Asterisked Values are outside QC Limits.
** Advisory Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: Pests 0 out of 7 outside QC Limits

Recovery: Pests 0 out of 14 outside QC Limits

Comments: _____

Summary of Unspiked HSL's

Fraction	Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Pest.	None found	0 (0.054)	0 (0.24)	0 (0.24)	0

Note: This section lists compounds on the HSL which were found in the Sample, MS, and/or MSD. It does not include Tentatively Identified compounds which may have been found in the Sample.

Rev 8/85

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WATER MS/MSD RECOVER.

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262

Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec MS	Conc. MSD	% Rec MSD	RPD	QC Limits * RPD	QC Limits * Recovery
VOA	1,1-Dichloroethene								<14	61-145
SMO	Trichloroethene								<14	71-120
Sample #	Chlorobenzene								<13	75-130
	Toluene								<13	76-125
	Benzene								<11	76-127
	1,2,4-Trichlorobenzene	103.	200u	110J	107*	98J	95	12	<28	39- 98
B/N	Acenaphthene	100.	200u	100J	100	100J	100	Ø	<31	46-118
SMO	2,4-Dinitrotoluene	101.	200u	58J	57	66J	65	13	<38	24- 96
Sample #	Pyrene	103.	200u	79J	77	78J	76	1	<31	26-127
EH480RI	N-Nitroso-di-n-propylamine	102.	200u	71J	70	72J	70	1	<38	41-116
	1,4-Dichlorobenzene	101.	200u	85J	84	84J	83	1	<28	36- 97
Acid	Pentachlorophenol	206.	1000u	66J	32	62J	30	7	<50	9-103
SMO	Phenol	202.	200u	180J	89	160J	79	12	<42	12- 89
Sample #	2-Chlorophenol	212.	200u	170J	80	120J	57	35	<40	27-123
EH480RI	4-Chloro-3-methylphenol	205.	200u	170J	83	140J	68	19	<42	23- 97
	4-Nitrophenol	215.	1000u	32J	15	38J	18	16	<50	10- 80
Pest.	Lindane (gamma-BHC)								<15	56-123
SMO	Heptachlor								<20	40-131
Sample #	Aldrin								<22	40-120
	Dieldrin								<18	52-126
	Endrin								<21	56-121
	4,4'-DDT								<27	38-127

* Asterisked Values are outside QC Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: VOA's — out of — outside QC Limits
B/N's Ø out of 6 outside QC Limits
Acids Ø out of 5 outside QC Limits
Pests — out of — outside QC Limits

Recovery: VOA's — out of — outside QC Limits
B/N's 1 out of 12 outside QC Limits
Acids Ø out of 10 outside QC Limits
Pests — out of — outside QC Limits

Comments: _____

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QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

RECEIVED JUN 2 4 1986

CASE #/SAS #. 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480RI
CONTRACT #: 68-01-7262
UNITS. UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103	200. U	110. J	107*	98. J	95	12
ACENAPHTHENE	100.	200. U	100. J	100	100. J	100	0
2,4-DINITROTOLUENE	101.	200 U	58. J	57	66. J	65	-13
PYRENE	103.	200. U	79. J	77	78. J	76	1
NITROSOPROPYLAMINE	102.	200. U	71. J	70	72. J	70	-1
1,4-DICHLOROBENZENE	101.	200 U	85. J	84	84. J	83	1
PENTACHLOROPHENOL	206.	1000 U	66. J	32	62. J	30	7
PHENOL	202.	200 U	180. J	89	160. J	79	12
2-CHLOROPHENOL	212.	200. U	170. J	80	120. J	57	35
P-CHLORO-M-CRESOL	205.	200. U	170. J	83	140. J	68	19
4-NITROPHENOL	215.	1000. U	32. J	15	38. J	18	-16
NITROBENZENE-D5	102.	82. J	80. J	78	75. J	73	7
2-FLUOROBIPHENYL	100.	110. J	113. J	113	109. J	109	4
P-TERPHENYL-D14	103.	51. J	47. J	46	50. J	48	-6
PHENOL-D5	206.	174. J	185. J	90	153. J	74	19
2-FLUOROPHENOL	203.	146. J	140. J	69	119. J	59	16
TRIBROMOPHENOL	205.	101. J	104. J	51	90. J	44	15

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 1 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	200u	21 J	8 J	90

METHOD BLANK SUMMARY

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report

Contract #: 68-01-7262
Job Number: 36569

Circle Units: ug/Kg, ug/L

Sample # (MB #)	Lab ID (Run #)	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRQL
METHOD BLANK	LWBEC 031	4/23/86	VOA	Water	Low	GCMSC	75-09-2	Methylene Chloride	3 J	ug/L	5u
"	"	"	"	"	"	"	67-64-1	Acetone	5 J	"	10u
"	"	"	"	"	"	"	108-88-3	Toluene	2 J	"	5u
"	LWBEC 034	4/24/86	"	"	"	"	75-09-2	Methylene Chloride	6	"	5u
"	"	"	"	"	"	"	108-88-3	Toluene	2 J	"	5u
MB0417P1	112-1070	4/22/86	Pest	"	"	GC#5A	—	NONE FOUND	0.05u	"	—
"	111-1023	"	"	"	"	GC#11B	—	" "	0.05u	"	—
MB0423P3	112-1105	4/25/86	"	"	"	"	—	" "	0.05u	"	—

Comments:

Footnotes: For all GCMS analyses the Instrument ID Code is included in the Lab ID (Run #).
Inst. ID Code is character 5 for Tune, Standards, and Blanks, character 7 for Samples.

Instrument Manuf.	Finn.	Finn.	Finn.	HP	Finn.	Finn.
Instrument Model	OWA-1	OWA-2 1020A	OWA-3 1020B	5988A	4021	4500
Inst. ID Code	A	B	C	H	I	J

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Rev 4/86

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: OWA1
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Lusuhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5 ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	20 U
75-01-4	Vinyl Chloride	5 U
75-00-3	Chloroethane	20 U
75-09-2	Methylene Chloride	2 U
67-64-1	Acetone	20 U
75-15-0	Carbon Disulfide	20 U
75-35-4	1,1-Dichloroethene	20 U
75-34-3	1,1-Dichloroethane	10 U
156-60-5	trans-1,2-Dichloroethene	9 U
67-66-3	Chloroform	20 U
107-06-2	1,2-Dichloroethane	10 U
78-93-3	2-Butanone	20 U
71-55-6	1,1,1-Trichloroethane	20 U
56-23-5	Carbon Tetrachloride	10 U
108-05-4	Vinyl Acetate	20 U
75-27-4	Bromodichloromethane	9 U
79-34-5	1,1,2,2-Tetrachloroethane	10 U
78-87-5	1,2-Dichloropropane	6 U
10061-02-6	trans-1,3-Dichloropropene	9 U
79-01-6	Trichloroethene	20 U
124-48-1	Dibromochloromethane	20 U
79-00-5	1,1,2-Trichloroethane	20 U
71-43-2	Benzene	10 U
10061-01-5	cis-1,3-Dichloropropene	9 U
110-75-8	2-Chloroethylvinylether	20 U
75-25-2	Bromoform	30 U
591-78-6	2-Hexanone	20 U
108-10-1	4-Methyl-2-Pentanone	20 U
127-18-4	Tetrachloroethene	30 U
108-88-3	Toluene	20 U
108-90-7	Chlorobenzene	10 U
100-41-4	Ethylbenzene	9 U
100-42-5	Styrene	20 U
	Total Xylenes	3 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: OWA2
Lab ID for Dil:
Sample Matrix:
Data Release Authorized by: Cheryl Weirich

Case #/SAS #:
QC Report #: DL
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Volatile Compounds

Sample Level:
Date Extracted:
Date Analyzed:
Spl->Extract: 5ml
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	20	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	8	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	20	U
108-05-4	Vinyl Acetate	2	U
75-27-4	Bromodichloromethane	2	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
78-87-5	1,2-Dichloropropane	8	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	3	U
71-43-2	Benzene	10	U
10061-01-5	cis-1,3-Dichloropropene	0	U
110-75-8	2-Chloroethylvinylether	20	U
75-25-2	Bromoform	20	U
591-78-6	2-Hexanone	20	U
108-10-1	4-Methyl-2-Pentanone	7	U
127-18-4	Tetrachloroethene	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	8	U
	Total Xylenes	6	U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: 4021
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wesche

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1µl injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	1 U
62-53-3	Aniline	NA
111-44-4	bis(2-Chloroethyl)ether	1 U
95-57-8	2-Chlorophenol	2 U
541-73-1	1,3-Dichlorobenzene	1 U
106-46-7	1,4-Dichlorobenzene	1 U
100-51-6	Benzyl Alcohol	3 U
95-50-1	1,2-Dichlorobenzene	3 U
95-48-7	2-Methylphenol	5 U
39638-32-9	bis(2-Chloroisopropyl)ether	1 U
106-44-5	4-Methylphenol	6 U
621-64-7	N-Nitroso-di-n-propylamine	2 U
67-72-1	Hexachloroethane	1 U
98-95-3	Nitrobenzene	1 U
78-59-1	Isophorone	6 U
88-75-5	2-Nitrophenol	4 U
105-67-9	2,4-Dimethylphenol	4 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy)methane	5 U
120-83-2	2,4-Dichlorophenol	3 U
120-82-1	1,2,4-Trichlorobenzene	2 U
91-20-3	Naphthalene	2 U
106-47-8	4-Chloroaniline	6 U
87-68-3	Hexachlorobutadiene	2 U
59-50-7	4-Chloro-3-methylphenol	2 U
91-57-6	2-Methylnaphthalene	4 U
77-47-4	Hexachlorocyclopentadiene	4 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	2 U
91-58-7	2-Chloronaphthalene	2 U
88-74-4	2-Nitroaniline	4 U
131-11-3	Dimethyl phthalate	2 U
208-96-8	Acenaphthylene	8 U
99-09-2	3-Nitroaniline	30 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED Jun 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: 4021
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wirsuhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1 µl injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, (ng)

83-32-9	Acenaphthene	1 U
51-28-5	2,4-Dinitrophenol	20 U
100-01-7	4-Nitrophenol	20 U
132-64-9	Dibenzofuran	5 U
121-14-2	2,4-Dinitrotoluene	1 U
606-20-2	2,6-Dinitrotoluene	3 U
84-66-2	Diethyl phthalate	2 U
7005-72-3	4-Chlorophenyl phenyl ether	6 U
86-73-7	Fluorene	2 U
100-01-6	4-Nitroaniline	40 U
534-52-1	4,6-Dinitro-2-methylphenol	20 U
86-30-6	N-Nitrosodiphenylamine (1)	10 U
101-55-3	4-Bromophenyl phenyl ether	3 U
118-74-1	Hexachlorobenzene	3 U
87-86-5	Pentachlorophenol	20 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-butyl phthalate	4 U
206-44-0	Fluoranthene	4 U
92-87-5	Benzidine	NA
129-00-0	Pyrene	3 U
85-68-7	Butyl benzyl phthalate	5 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)anthracene	4 U
117-81-7	bis(2-Ethylhexyl)phthalate	4 U
218-01-9	Chrysene	4 U
117-84-0	Di-n-octyl phthalate	2 U
205-99-2	Benzo(b)fluoranthene	5 U
207-08-9	Benzo(k)fluoranthene	5 U
50-32-8	Benzo(a)pyrene	5 U
193-39-5	Indeno(1,2,3-cd)pyrene	4 U
53-70-3	Dibenzo(a,h)anthracene	6 U
191-24-2	Benzo(g,h,i)perylene	10 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: QWA 3
Lab ID for Dil: ———
Sample Matrix: ———
Data Release Authorized by: Chuyl M Suhl

Case #/SAS #: ———
QC Report #: DL
Contract #: ———
Date Rec'd: ———

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: ———
Date Extracted: ———
Date Analyzed: ———
Spl->Extract: 5 mL
For Dilution: ———
pH: ———
% Moisture: ———
% Moisture (Decanted): ———
Lab Std ID: ———

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	30	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	30	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	10	U
108-05-4	Vinyl Acetate	20	U
75-27-4	Bromodichloromethane	10	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
78-87-5	1,2-Dichloropropane	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	20	U
10061-01-5	cis-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	20	U
108-10-1	4-Methyl-2-Pentanone	3	U
127-18-4	Tetrachloroethene	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
	Total Xylenes	10	U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

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GC #5A
Instrument
Sample #: Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC / EC GC#5A
Lab ID for Dil: ———
Sample Matrix: ———
Data Release Authorized by: Cheryl Wesuhl

Case #/SAS #: ———
QC Report #: Detection Limit
Contract #: ———
Date Rec'd: ———

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ———
Date Extracted: ———
Date Analyzed: ———
Spl->Extract: 5ul injected
For Dilution: ———
pH: ———
% Moisture: ———
% Moisture (Decanted): ———
Lab Std ID: ———

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.0002 U
319-85-7	beta-BHC	0.001 U
319-86-8	delta-BHC	0.1 U
58-89-9	gamma-BHC (Lindane)	0.0007 U
76-44-8	Heptachlor	0.0001 U
309-00-2	Aldrin	0.001 U
1024-57-3	Heptachlor Epoxide	0.002 U
959-98-8	Endosulfan I	0.002 U
60-57-1	Dieldrin	0.009 U
72-55-9	4,4'-DDE	0.002 U
72-20-8	Endrin	0.002 U
33213-65-9	Endosulfan II	0.005 U
72-54-8	4,4'-DDD	0.006 U
1031-07-8	Endosulfan Sulfate	0.02 U
50-29-3	4,4'-DDT	0.02 U
72-43-5	Methoxychlor	0.03 U
53494-70-5	Endrin Ketone	0.0009 U
57-74-9	Chlordane	0.004 U
8001-35-2	Toxaphene	0.03 U
12674-11-2	Arochlor-1016	0.01 U
11104-28-2	Arochlor-1221	0.2 U
11141-16-5	Arochlor-1232	0.2 U
53469-21-9	Arochlor-1242	0.05 U
12672-29-6	Arochlor-1248	0.2 U
11097-69-1	Arochlor-1254	0.2 U
11096-82-5	Arochlor-1260	0.02 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ——— ml or
W_s ——— g
V_t ———,000 ul
V_i ——— ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
———	Pest.	Dibutyl Chlorendate	0.003 U	———	———

* - Asterisked Values are outside QC Limits.
\# - ——— Recoveries due to Dilution.
S - ——— Recoveries due to Matrix Effects.

NS - Not Spiked

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GC #6B

Instrument Detection Limits

Sample #:

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#6B
Lab ID for Dil:
Sample Matrix:
Data Release Authorized by: Cheryl Wesuhl

Case #/SAS #:
QC Report #: Detection Limit
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level:
Date Extracted:
Date Analyzed:
Spl->Extract: 5ul injected
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

319-84-6	alpha-BHC	0.0009 U
319-85-7	beta-BHC	0.002 U
319-86-8	delta-BHC	0.02 U
58-89-9	gamma-BHC (Lindane)	0.0005 U
76-44-8	Heptachlor	0.001 U
309-00-2	Aldrin	0.002 U
1024-57-3	Heptachlor Epoxide	0.002 U
959-98-8	Endosulfan I	0.02 U
60-57-1	Dieldrin	0.001 U
72-55-9	4,4'-DDE	0.002 U
72-20-8	Endrin	0.01 U
33213-65-9	Endosulfan II	0.001 U
72-54-8	4,4'-DDD	0.002 U
1031-07-8	Endosulfan Sulfate	0.004 U
50-29-3	4,4'-DDT	0.004 U
72-43-5	Methoxychlor	0.02 U
53494-70-5	Endrin Ketone	0.004 U
57-74-9	Chlordane	0.02 U
8001-35-2	Toxaphene	0.06 U
12674-11-2	Arochlor-1016	0.03 U
11104-28-2	Arochlor-1221	0.3 U
11141-16-5	Arochlor-1232	0.009 U
53469-21-9	Arochlor-1242	0.009 U
12672-29-6	Arochlor-1248	0.02 U
11097-69-1	Arochlor-1254	0.02 U
11096-82-5	Arochlor-1260	0.04 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ml or
W_s g
V_t ,000 ul
V_i ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L (ng)

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Peat.	Dibutyl Chlorendate	0.009 U		

* - Asterisked Values are outside QC Limits.
# - Recoveries due to Dilution.
$ - Recoveries due to Matrix Effects.

NS - Not Spiked

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Sample #: GC#7A Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#7A
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wirsuhl

Case #/SAS #: ——
QC Report #: Detection Limit
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5ul Injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.001 U
319-85-7	beta-BHC	0.002 U
319-86-8	delta-BHC	0.002 U
58-89-9	gamma-BHC (Lindane)	0.002 U
76-44-8	Heptachlor	0.002 U
309-00-2	Aldrin	0.002 U
1024-57-3	Heptachlor Epoxide	0.001 U
959-98-8	Endosulfan I	0.01 U
60-57-1	Dieldrin	0.002 U
72-55-9	4,4'-DDE	0.002 U
72-20-8	Endrin	0.004 U
33213-65-9	Endosulfan II	0.004 U
72-54-8	4,4'-DDD	0.006 U
1031-07-8	Endosulfan Sulfate	0.03 U
50-29-3	4,4'-DDT	0.03 U
72-43-5	Methoxychlor	0.1 U
53494-70-5	Endrin Ketone	0.02 U
57-74-9	Chlordane	0.03 U
8001-35-2	Toxaphene	0.5 U
12674-11-2	Arochlor-1016	0.03 U
11104-28-2	Arochlor-1221	0.04 U
11141-16-5	Arochlor-1232	0.3 U
53469-21-9	Arochlor-1242	0.2 U
12672-29-6	Arochlor-1248	0.09 U
11097-69-1	Arochlor-1254	0.06 U
11096-82-5	Arochlor-1260	0.06 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ____ ml or
W_s ____ g
V_t ____,000 ul
V_i ____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
——	Pest.	Dibutyl Chlorendate	0.004 U	——	——

* - Asterisked Values are outside QC Limits.
\# - ____ Recoveries due to Dilution.
S - ____ Recoveries due to Matrix Effects.

NS - Not Spiked

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GC#8B
Instrument
Detection Limits

Sample #:

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#8B
Lab ID for Dil:
Sample Matrix:
Data Release Authorized by: Chris Kuhl

Case #/SAS #:
QC Report #: Detection Limit
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level:
Date Extracted:
Date Analyzed:
Spl->Extract: 5 ul injected
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.004 U
319-85-7	beta-BHC	0.03 U
319-86-8	delta-BHC	0.01 U
58-89-9	gamma-BHC (Lindane)	0.002 U
76-44-8	Heptachlor	0.002 U
309-00-2	Aldrin	0.004 U
1024-57-3	Heptachlor Epoxide	0.01 U
959-98-8	Endosulfan I	0.002 U
60-57-1	Dieldrin	0.008 U
72-55-9	4,4'-DDE	0.02 U
72-20-8	Endrin	0.003 U
33213-65-9	Endosulfan II	0.005 U
72-54-8	4,4'-DDD	0.01 U
1031-07-8	Endosulfan Sulfate	0.02 U
50-29-3	4,4'-DDT	0.01 U
72-43-5	Methoxychlor	0.1 U
53494-70-5	Endrin Ketone	0.02 U
57-74-9	Chlordane	0.04 U
8001-35-2	Toxaphene	0.4 U
12674-11-2	Arochlor-1016	0.09 U
11104-28-2	Arochlor-1221	0.04 U
11141-16-5	Arochlor-1232	0.04 U
53469-21-9	Arochlor-1242	0.02 U
12672-29-6	Arochlor-1248	0.2 U
11097-69-1	Arochlor-1254	0.07 U
11096-82-5	Arochlor-1260	0.08 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ml or
W_s g
V_t ,000 ul
V_i ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate	0.05 U		

* - Asterisked Values are outside QC Limits.
# - Recoveries due to Dilution.
S - Recoveries due to Matrix Effects.
NS - Not Spiked

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Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#11 B
Lab ID for Dil: ———
Sample Matrix: ———
Data Release Authorized by: Cheryl Lusink

Case #/SAS #: ———
QC Report #: Detection Limit
Contract #: ———
Date Rec'd: ———

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ———
Date Extracted: ———
Date Analyzed: ———
Spl->Extract: 5ul injected
For Dilution: ———
pH: ———
% Moisture: ———
% Moisture (Decanted): ———
Lab Std ID: ———

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, (ng)

319-84-6	alpha-BHC	0.001 U
319-85-7	beta-BHC	0.002 U
319-86-8	delta-BHC	0.002 U
58-89-9	gamma-BHC (Lindane)	0.004 U
76-44-8	Heptachlor	0.004 U
309-00-2	Aldrin	0.01 U
1024-57-3	Heptachlor Epoxide	0.0005 U
959-98-8	Endosulfan I	0.03 U
60-57-1	Dieldrin	0.008 U
72-55-9	4,4'-DDE	0.001 U
72-20-8	Endrin	0.04 U
33213-65-9	Endosulfan II	0.002 U
72-54-8	4,4'-DDD	0.007 U
1031-07-8	Endosulfan Sulfate	0.02 U
50-29-3	4,4'-DDT	0.04 U
72-43-5	Methoxychlor	0.07 U
53494-70-5	Endrin Ketone	0.02 U
57-74-9	Chlordane	0.04 U
8001-35-2	Toxaphene	0.6 U
12674-11-2	Arochlor-1016	0.2 U
11104-28-2	Arochlor-1221	0.09 U
11141-16-5	Arochlor-1232	0.03 U
53469-21-9	Arochlor-1242	0.1 U
12672-29-6	Arochlor-1248	0.04 U
11097-69-1	Arochlor-1254	0.1 U
11096-82-5	Arochlor-1260	0.1 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ——— ml or
W_s ——— g
V_t ———,000 ul
V_i ——— ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, (ng)

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
———	Pest.	Dibutyl Chlorendate	0.03 U	———	———

* - Asterisked Values are outside QC Limits.
# - ——— Recoveries due to Dilution.
@ - ——— Recoveries due to Matrix Effects.

NS - Not Spiked

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Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kuhlenberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1L → 2mL
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

62-75-9	N-Nitrosodimethylamine	10U
108-95-2	Phenol	↓
62-53-3	Aniline	↓
111-44-4	bis(2-Chloroethyl)ether	↓
95-57-8	2-Chlorophenol	↓
541-73-1	1,3-Dichlorobenzene	↓
106-46-7	1,4-Dichlorobenzene	↓
100-51-6	Benzyl Alcohol	↓
95-50-1	1,2-Dichlorobenzene	↓
95-48-7	2-Methylphenol	↓
39638-32-9	bis(2-Chloroisopropyl)ether	↓
106-44-5	4-Methylphenol	↓
621-64-7	N-Nitroso-di-n-propylamine	↓
67-72-1	Hexachloroethane	↓
98-95-3	Nitrobenzene	↓
78-59-1	Isophorone	↓
88-75-5	2-Nitrophenol	↓
105-67-9	2,4-Dimethylphenol	↓
65-85-0	Benzoic Acid	50U
111-91-1	bis(2-Chloroethoxy)methane	10U
120-83-2	2,4-Dichlorophenol	↓
120-82-1	1,2,4-Trichlorobenzene	↓
91-20-3	Naphthalene	↓
106-47-8	4-Chloroaniline	↓
87-68-3	Hexachlorobutadiene	↓
59-50-7	4-Chloro-3-methylphenol	↓
91-57-6	2-Methylnaphthalene	↓
77-47-4	Hexachlorocyclopentadiene	↓
88-06-2	2,4,6-Trichlorophenol	↓
95-95-4	2,4,5-Trichlorophenol	50U
91-58-7	2-Chloronaphthalene	10U
88-74-4	2-Nitroaniline	50U
131-11-3	Dimethyl phthalate	10U
208-96-8	Acenaphthylene	↓
99-09-2	3-Nitroaniline	50U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021, 4500
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kokalaya

Case #/SAS #: ——
QC Report #: —— CRDL - QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1l → 2ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

83-32-9	Acenaphthene	10U
51-28-5	2,4-Dinitrophenol	50U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	10U
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	50U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	10U
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	50U
85-01-8	Phenanthrene	10U
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	50U
129-00-0	Pyrene	10U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	20U
56-55-3	Benzo(a)anthracene	10U
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

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Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirkenby

Case #/SAS #: ——
QC Report #: —— CRDL-DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1l → 10ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

319-84-6	alpha-BHC	0.05U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	0.1U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1 U
12674-11-2	Arochlor-1016	0.5U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	1U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
# - _____ Recoveries due to Dilution.
@ - _____ Recoveries due to Matrix Effects.

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirkenberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 50ul Sample + 5ml Water
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

74-87-3	Chloromethane	10000U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	500U
67-64-1	Acetone	10000U
75-15-0	Carbon Disulfide	500U
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	10000U
71-55-6	1,1,1-Trichloroethane	500U
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	10000U
75-27-4	Bromodichloromethane	500U
79-34-5	1,1,2,2-Tetrachloroethane	
78-87-5	1,2-Dichloropropane	
10061-02-6	trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	10000U
75-25-2	Bromoform	500U
591-78-6	2-Hexanone	10000U
108-10-1	4-Methyl-2-Pentanone	10000U
127-18-4	Tetrachloroethene	500U
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021, 4500
Lab ID for Dil: —
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirkenberger

Case #/SAS #: —
QC Report #: — CRDL-QL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 10 ml → 2 ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

62-75-9	N-Nitrosodimethylamine	10000U
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	50000U
111-91-1	bis(2-Chloroethoxy)methane	10000U
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	50000U
91-58-7	2-Chloronaphthalene	10000U
88-74-4	2-Nitroaniline	50000U
131-11-3	Dimethyl phthalate	10000U
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	50000U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: —
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kolesnezi

Case #/SAS #: —
QC Report #: — CRDL - QL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 2 of 2

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 10ml → 2ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

83-32-9	Acenaphthene	1000U
51-28-5	2,4-Dinitrophenol	5000U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	1000U
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	5000U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	1000U
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	5000U
85-01-8	Phenanthrene	1000U
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	5000U
129-00-0	Pyrene	1000U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	2000U
56-55-3	Benzo(a)anthracene	1000U
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: —
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirkenberger

Case #/SAS #: —
QC Report #: — CRDL-DL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 10ml → 10ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

319-84-6	alpha-BHC	5U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	10U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	50U
53494-70-5	Endrin Ketone	10U
57-74-9	Chlordane	50U
8001-35-2	Toxaphene	100U
12674-11-2	Arochlor-1016	50U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	100U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: —
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kolenberger

Case #/SAS #: —
QC Report #: — CRDL - DL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: low
Date Extracted: —
Date Analyzed: —
Spl->Extract: 1g Sample + 5ml Water
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	↓
75-34-3	1,1-Dichloroethane	↓
156-60-5	trans-1,2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1,2-Dichloroethane	↓
78-93-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U
79-34-5	1,1,2,2-Tetrachloroethane	↓
78-87-5	1,2-Dichloropropane	↓
10061-02-6	trans-1,3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1,1,2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1,3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	↓
108-90-7	Chlorobenzene	↓
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1988

Sample #: Method Detection Limits

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil:
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kuhlmann

Case #/SAS #:
QC Report #: QL
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: low
Date Extracted:
Date Analyzed:
Spl->Extract: 50g → 1 ml
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

62-75-9	N-Nitrosodimethylamine	200 u
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	1000 u
111-91-1	bis(2-Chloroethoxy)methane	200 u
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	1000 u
91-58-7	2-Chloronaphthalene	200 u
88-74-4	2-Nitroaniline	1000 u
131-11-3	Dimethyl phthalate	200 u
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	1000 u

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: ——
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kobayashi

Case #/SAS #: ——
QC Report #: —— QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 50g → 1ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

83-32-9	Acenaphthene	200U
51-28-5	2,4-Dinitrophenol	1000U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	200U
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	1000U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	200U
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	1000U
85-01-8	Phenanthrene	200U
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	1000U
129-00-0	Pyrene	200U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	400U
56-55-3	Benzo(a)anthracene	200U
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil:
Sample Matrix: SOIL
Date Release Authorized by: Linda R. Kirkenberger

Case #/SAS #:
QC Report #: DL
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: low
Date Extracted:
Date Analyzed:
Spl->Extract: 50g → 10ml
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

319-84-6	alpha-BHC	1U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	2U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	10U
53494-70-5	Endrin Ketone	2U
57-74-9	Chlordane	10U
8001-35-2	Toxaphene	20U
12674-11-2	Arochlor-1016	10U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	20U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: ——
Sample Matrix: SOIL
Data Release Authorized by: Linda R. Kokalenger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 4g Sample + 10ml Methanol
For Dilution: 100µl Methanol + 5ml Water
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

74-87-3	Chloromethane	1000U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	500U
67-64-1	Acetone	1000U
75-15-0	Carbon Disulfide	500U
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	1000U
71-55-6	1,1,1-Trichloroethane	500U
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	1000U
75-27-4	Bromodichloromethane	500U
79-34-5	1,1,2,2-Tetrachloroethane	
78-87-5	1,2-Dichloropropane	
10061-02-6	trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	1000U
75-25-2	Bromoform	500U
591-78-6	2-Hexanone	1000U
108-10-1	4-Methyl-2-Pentanone	1000U
127-18-4	Tetrachloroethene	500U
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil:
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kirkeberger

Case #/SAS #:
QC Report #: CRDL-QL
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: MEDIUM
Date Extracted:
Date Analyzed:
Spl->Extract: 1g → 2ml
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg ug/L

62-75-9	N-Nitrosodimethylamine	20,000U
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	100,000U
111-91-1	bis(2-Chloroethoxy)methane	20,000U
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	100,000U
91-58-7	2-Chloronaphthalene	20,000U
88-74-4	2-Nitroaniline	100,000U
131-11-3	Dimethyl phthalate	20,000U
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	100,000U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMIT

Laboratory: IT/Cerritos
Lab ID: 4021, 4500
Lab ID for Dil: —
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kalenlangi

Case #/SAS #: —
QC Report #: — CRDL - QL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 2 of 2

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 1g → 2ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

83-32-9	Acenaphthene	20,000U
51-28-5	2,4-Dinitrophenol	100,000U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	20,000U
121-14-2	2,4-Dinitrotoluene	↓
606-20-2	2,6-Dinitrotoluene	↓
84-66-2	Diethyl phthalate	↓
7005-72-3	4-Chlorophenyl phenyl ether	↓
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	100,000U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	20,000U
101-55-3	4-Bromophenyl phenyl ether	↓
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	100,000U
85-01-8	Phenanthrene	20,000U
120-12-7	Anthracene	↓
84-74-2	Di-n-butyl phthalate	↓
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	100,000U
129-00-0	Pyrene	20,000U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	40,000U
56-55-3	Benzo(a)anthracene	20,000U
117-81-7	bis(2-Ethylhexyl)phthalate	↓
218-01-9	Chrysene	↓
117-84-0	Di-n-octyl phthalate	↓
205-99-2	Benzo(b)fluoranthene	↓
207-08-9	Benzo(k)fluoranthene	↓
50-32-8	Benzo(a)pyrene	↓
193-39-5	Indeno(1,2,3-cd)pyrene	↓
53-70-3	Dibenzo(a,h)anthracene	↓
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: —
Sample Matrix: SOIL
Data Release Authorized by: Linda R. Kirkenberger

Case #/SAS #: —
QC Report #: — DL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 1g → 10ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

319-84-6	alpha-BHC	50U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	100U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	500U
53494-70-5	Endrin Ketone	100U
57-74-9	Chlordane	500U
8001-35-2	Toxaphene	1000U
12674-11-2	Arochlor-1016	500U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	1000U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
# - _____ Recoveries due to Dilution.
@ - _____ Recoveries due to Matrix Effects.

86FG06S08

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH478

.ABORATORY: IT/CERR
LABORATORY ID: 36569EC1
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

)ATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID.	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
38V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	10. U
44V	75-09-2	METHYLENE CHLORIDE	14. B
13H	67-64-1	ACETONE	110. B
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	5. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5 U
14H	78-93-3	2-BUTANONE	10 UJ
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
37V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. UJ
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. UJ
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. UJ
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. UJ
47V	75-25-2	BROMOFORM	5. U TC
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	2. JB
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5 U

22 May 86

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH478

RECEIVED JUN 24 1986

ABORATORY: IT/CERR
ABORATORY ID: 36569EI02
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

ATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI07B		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH478

LABORATORY: IT/CERR
LABORATORY ID: 36569EI02
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

CP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20 U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100 U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20 U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH478

Laboratory: IT/Cerritos
Lab Sample ID: EH478
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1L → 10mL; 10mL → 10mL
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-111-1024
1° Std File ID: B11-PM-111-1005, 1006

2° Sample File ID: N/A
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.62	1°	1.0	62

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH478

ORATORY: IT/CERR
ABORATORY ID: 36569EC1
TRIX: WATER

CASE #/SAS #. 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

TA RELEASE AUTHORIZED BY. Tod Bechares

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP.	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT.	5ML
PH:	NA
% MOISTURE (NOT DEC.).	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID.	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC1	4-BROMOFLUOROBENZENE	50.	50.	100
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET SAMPLE # [illegible]

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
ABORATORY ID: 36569EI02
ATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	84.	102.	82
	2-FLUOROBIPHENYL	78.	100.	78
36569EI02	P-TERPHENYL-D14	65.	103.	63
	PHENOL-D5	90.	206.	44
	2-FLUOROPHENOL	126.	203.	62
	2,4,6-TRIBROMOPHENOL	125.	205.	61

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	CAPROLACTAM	655	1000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
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RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86 FG06509

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH479

.ABORATORY: IT/CERR
LABORATORY ID: 36569EC2
1ATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

RECEIVED JUN 2 4 1986

DATA RELEASE AUTHORIZED BY: Tod Bocheer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT.	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.).	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	10. U
44V	75-09-2	METHYLENE CHLORIDE	10. B
13H	67-64-1	ACETONE	31. B
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	5. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U J
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U J
47V	75-25-2	BROMOFORM	5. U TL
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5 U
86V	108-88-3	TOLUENE	5. U
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5. U

27 May 86

RECEIVED JUN 2 4 1986

Sample #: EH479

Laboratory: IT/Cerritos
Lab Sample ID: EH479
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5940 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1g → 10ml ; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: BIL.PA.111.1025
1° Std File ID: BIL.PA.111.1005, 1006
2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	1.1	1°	1.0	110

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
§ - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH479

RECEIVED JUN 2 4 1986

.ABORATORY: IT/CERR
.ABORATORY ID: 36569EI04
MATRIX: WATER

CASE #/SAS # 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

)ATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	80. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	80. U
24A	95-57-8	2-CHLOROPHENOL	80. U
26B	541-73-1	1,3-DICHLOROBENZENE	80. U
27B	106-46-7	1,4-DICHLOROBENZENE	80. U
6H	100-51-6	BENZYL ALCOHOL	80. U
25B	95-50-1	1,2-DICHLOROBENZENE	80. U
2H	95-48-7	2-METHYLPHENOL	80. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	80. U
3H	106-44-5	4-METHYLPHENOL	80. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	80. U
12B	67-72-1	HEXACHLOROETHANE	80. U
56B	98-95-3	NITROBENZENE	80. U
54B	78-59-1	ISOPHORONE	80. U
57A	88-75-5	2-NITROPHENOL	80. U
34A	105-67-9	2,4-DIMETHYLPHENOL	80. U
1H	65-85-0	BENZOIC ACID	400. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	80. U
31A	120-33-2	2,4-DICHLOROPHENOL	80. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	80. U
55B	91-20-3	NAPHTHALENE	80. U
7H	106-47-8	4-CHLOROANILINE	80. U
52B	87-68-3	HEXACHLOROBUTADIENE	80 U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	80. U
9H	91-57-6	2-METHYLNAPHTHALENE	80. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	80. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	80. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	400. U
20B	91-58-7	2-CHLORONAPHTHALENE	80. U
10H	88-74-4	2-NITROANILINE	400. U
71B	131-11-3	DIMETHYLPHTHALATE	80. U
77B	208-96-8	ACENAPHTHALENE	80. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH479

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID. 36569EI04
MATRIX: WATER

CASE #/SAS #. 5840
QC REPORT #: 7282-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI687		
SENSITIVITY ID:	DFTEI078		
UNITS.	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	400. U
1B	83-32-9	ACENAPHTHENE	80. U
59A	51-28-5	2,4-DINITROPHENOL	400. U
58A	100-02-7	4-NITROPHENOL	400. U
8H	132-64-9	DIBENZOFURAN	80. U
35B	121-14-2	2,4-DINITROTOLUENE	80 U
36B	606-20-2	2,6-DINITROTOLUENE	80. U
70B	84-66-2	DIETHYLPHTHALATE	80. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	80. U
80B	86-73-7	FLUORENE	80. U
12H	100-01-6	4-NITROANILINE	400. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	400. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	80. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	80 U
9B	118-74-1	HEXACHLOROBENZENE	80. U
64A	87-86-5	PENTACHLOROPHENOL	400. U
81B	85-01-8	PHENANTHRENE	80. U
78B	120-12-7	ANTHRACENE	80. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	80. U
39B	206-44-0	FLUORANTHENE	80. U
84B	129-00-0	PYRENE	80. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	80. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	200. U
72B	56-55-3	BENZO (A) ANTHRACENE	80. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	80. U
76B	218-01-9	CHRYSENE	80. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	80. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	80. U
73B	50-32-8	BENZO (A) PYRENE	80. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	80. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	80. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	80. U

ORGANICS ANALYSIS DATA SHEET

SAMPLE #. EH4[illegible] RECEIVED JUN 2 4 1986

LABORATORY. IT/CERR
LABORATORY ID: 36569EC2
MATRIX: WATER

CASE #/SAS # 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC2	4-BROMOFLUOROBENZENE	50.	50	100
	1,2-DICHLOROETHANE-D4	50	50.	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

LABORATORY: IT/CERR
LABORATORY ID: 36569EI04
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID.	DFTEI078		
UNITS.	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	74. J	102.	73
	2-FLUOROBIPHENYL	86.	100.	86
36569EI04	P-TERPHENYL-D14	53. J	103.	51
	PHENOL-D5	112.	206.	54
	2-FLUOROPHENOL	95.	203.	47
	2,4,6-TRIBROMOPHENOL	92.	205.	45

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	CAPROLACTAM	652	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
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17				
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19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match
Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/CERR

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH479
CONTRACT #: 68-01-7262
UNITS: UG/L

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
DICHLOROETHYLENE	50.	5.U	55.	110	57.	114	-4
TRICHLOROETHYLENE	50.	5.U	49.	98	49.	98	0
HLOROBENZENE	50.	5.U	52.	104	54.	108	-4
.OLUENE	50.	5.U	51.	102	52.	104	-2
BENZENE	50.	5.U	51.	102	53.	106	-4
OLUENE-D8	50.	45.	51.	102	51.	102	0
BROMOFLUOROBENZENE	50.	50.	53.	106	53.	106	0
ICHLOROETHANE-D4	50.	50.	48.	96	49.	98	-2

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: VOA'S 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: VOA'S 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample		Conc. MS		Conc. MSD		RPD
Methylene Chloride	10	B	14	B	17	B	19
Acetone	31	B	26		31		18

86FG06S10

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EC3
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Bechesser

RECEIVED JUN 24 1986

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	6 J
44V	75-09-2	METHYLENE CHLORIDE	11. B
13H	67-64-1	ACETONE	19. B
15H	75-15-0	CARBON DISULFIDE	5 U
29V	75-35-4	1,1-DICHLOROETHENE	5 U
13V	75-34-3	1,1-DICHLOROETHANE	8. HRS
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5 U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U J
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10 U J
47V	75-25-2	BROMOFORM	5. U
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5 U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	2. J B
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5 U

22 May 86 TC

TC

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EI05
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EI05
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID.	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20 U
78B	120-12-7	ANTHRACENE	20 U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40 U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH490

Laboratory: IT/Cerritos
Lab Sample ID: EH490
Sample Matrix: Water
Data Release Authorized by: PH/MB

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1L → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-111-1026
1° Std File ID: B11-PM-111-1005, 1006
2° Sample File ID:
2° Std File ID:

GPC Clean-up — Y ✓ N
Sep. Funnel Ext. ✓ Y — N
Cont. L-L Ext. — Y ✓ N
Sonication Ext. — Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 2 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	1.1	1°	1.0	110

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH480

ABORATORY: IT/CERR
ABORATORY ID: 36569EC3
ATRIX: WATER

CASE #/SAS #. 5840
QC REPORT #: 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

ATA RELEASE AUTHORIZED BY: Tod Becherer

RECEIVED JUN 2 4 1986

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45	50	90
36569EC3	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	49.	50.	98

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EI05
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT # 7262-3
CONTRACT # 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS.	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	78.	102.	76
	2-FLUOROBIPHENYL	81.	100.	81
36569EI05	P-TERPHENYL-D14	57	103.	55
	PHENOL-D5	89.	206.	43
	2-FLUOROPHENOL	123.	203.	61
	2,4,6-TRIBROMOPHENOL	118.	205.	58

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	678	1,000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C REPORT #: 7262-3

SAMPLE #: EH480
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
'RICHLOROBENZENE	103.	20. U	91.	88	86.	83	6
ıCENAPHTHENE	100.	20. U	87.	87	91.	91	-4
2,4-DINITROTOLUENE	101.	20. U	87.	86	84.	83	4
'YRENE	103.	20. U	74.	72	75.	73	-1
ıITROSOPROPYLAMINE	102.	20. U	85.	83	79.	77	7
1,4-DICHLOROBENZENE	101.	20. U	70.	69	69.	68	2
'ENTACHLOROPHENOL	207.	100. U	110.	53	100. J	48	10
'HENOL	203.	20. U	59.	29	29.	14	68*
2-CHLOROPHENOL	213.	20. U	170.	80	120.	56	35
P-CHLORO-M-CRESOL	205.	20. U	200.	97	230.	112*	-14
4-NITROPHENOL	215.	100. U	150.	70	140.	65	7
NITROBENZENE-D5	102.	78.	92.	90	110.	108	-18
2-FLUOROBIPHENYL	100.	81.	86	86	85.	85	1
P-TERPHENYL-D14	103.	57.	53.	51	56.	54	-5
PHENOL-D5	206.	89.	69.	33	33.	16	70
2-FLUOROPHENOL	203.	123.	129.	63	118.	58	9
TRIBROMOPHENOL	205.	118.	128.	62	122.	59	5

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 0 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	20u	38	25	41

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH480RI

LABORATORY: IT/CERR
LABORATORY ID. 36569EI22
MATRIX: WATER

CASE #/SAS #. 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED 04/17/86

DATA RELEASE AUTHORIZED BY

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_ N_
DATE ANALYZED.	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--100UL 1ML		
PH.	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS.	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200 U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200. U
54B	78-59-1	ISOPHORONE	200 U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200 U
1H	65-85-0	BENZOIC ACID	1000 U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200. U
7H	106-47-8	4-CHLOROANILINE	200 U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH48DM

RECEIVED JUL 24 1986

LABORATORY.	IT/CERR	CASE #/SAS #	5840
LABORATORY ID	36569EI22	QC REPORT #:	7262-3
MATRIX	WATER	CONTRACT #:	68-01-7262
		DATE RECEIVED:	04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL	LOW	GPC	Y_ N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L·2ML--100UL. 1ML		
PH	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC):	N/A		
STANDARD ID.	BDCEI674		
SENSITIVITY ID	DFTEI092		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200. U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200. U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200 U
39B	206-44-0	FLUORANTHENE	200. U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200 U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH480R

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI22
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC):	N/A		
% MOISTURE (DEC):	N/A		
STANDARD ID	BDCEI674		
SENSITIVITY ID	DFTEI092		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	82. J	102.	80
	2-FLUOROBIPHENYL	110. J	100.	110
36569EI22	P-TERPHENYL-D14	51. J	103.	50
	PHENOL-D5	174. J	206.	84
	2-FLUOROPHENOL	146. J	203.	72
	2,4,6-TRIBROMOPHENOL	101. J	205.	49

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	609	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

CASE #/SAS #. 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480RI
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103	200. U	110. J	107*	98. J	95	12
ACENAPHTHENE	100.	200. U	100. J	100	100. J	100	0
2,4-DINITROTOLUENE	101.	200. U	58. J	57	66. J	65	-13
PYRENE	103.	200. U	79. J	77	78. J	76	1
NITROSOPROPYLAMINE	102.	200 U	71. J	70	72. J	70	-1
1,4-DICHLOROBENZENE	101.	200 U	85 J	84	84. J	83	1
PENTACHLOROPHENOL	206.	1000 U	66. J	32	62. J	30	7
PHENOL	202.	200 U	180. J	89	160. J	79	12
2-CHLOROPHENOL	212.	200. U	170. J	80	120. J	57	35
P-CHLORO-M-CRESOL	205.	200. U	170. J	83	140. J	68	19
4-NITROPHENOL	215.	1000. U	32. J	15	38. J	18	-16
NITROBENZENE-D5	102.	82. J	80. J	78	75. J	73	7
2-FLUOROBIPHENYL	100.	110. J	113. J	113	109. J	109	4
P-TERPHENYL-D14	103.	51. J	47. J	46	50. J	48	-6
PHENOL-D5	206.	174. J	185. J	90	153. J	74	19
2-FLUOROPHENOL	203.	146. J	140. J	69	119. J	59	16
TRIBROMOPHENOL	205.	101. J	104. J	51	90. J	44	15

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 1 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	200u	21 J	8 J	90

86FG06511

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH481

RECEIVED JUN 24

BORATORY: IT/CERR
ORATORY ID: 36569EC13
RIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

TA RELEASE AUTHORIZED BY: Todd Bechesse

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED.	04/23/86
SPL-->EXTRACT:	2.5ML:5MLS
PH.	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID.	LWVEC014
SENSITIVITY ID	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

P #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	20. U	
46V	74-83-9	BROMOMETHANE	20. U	
88V	75-01-4	VINYL CHLORIDE	20. U	
16V	75-00-3	CHLOROETHANE	20. U	
44V	75-09-2	METHYLENE CHLORIDE	33.	B
13H	67-64-1	ACETONE	250.	B
15H	75-15-0	CARBON DISULFIDE	10. U	
29V	75-35-4	1,1-DICHLOROETHENE	10. U	
13V	75-34-3	1,1-DICHLOROETHANE	15.	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	10. U	
23V	67-66-3	CHLOROFORM	10. U	
10V	107-06-2	1,2-DICHLOROETHANE	10. U	
14H	78-93-3	2-BUTANONE	20. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	10. U	
6V	56-23-5	CARBON TETRACHLORIDE	10. U	
19H	108-05-4	VINYL ACETATE	20. U	
48V	75-27-4	BROMODICHLOROMETHANE	10. U	
32V	78-87-5	1,2-DICHLOROPROPANE	10. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	10. U	
87V	79-01-6	TRICHLOROETHENE	10. U	
51V	124-48-1	CHLORODIBROMOMETHANE	10. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	10. U	J
4V	71-43-2	BENZENE	10 U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	10. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	20. U	J
47V	75-25-2	BROMOFORM	10. U	
16H	519-78-6	2-HEXANONE	20. U	
17H	108-10-1	4-METHYL-2-PENTANONE	20. U	
85V	127-18-4	TETRACHLOROETHENE	10. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	10. U	
86V	108-88-3	TOLUENE	10. U	
7V	108-90-7	CHLOROBENZENE	10. U	
38V	100-41-4	ETHYLBENZENE	10. U	
18H	100-42-5	STYRENE	10. U	
20H	95-47-6	TOTAL XYLENES	10 U	

22 May 86

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH481

LABORATORY:	IT/CERR	CASE #/SAS #:	5840
LABORATORY ID:	36569EI10	QC REPORT #:	7262-3
MATRIX:	WATER	CONTRACT #:	68-01-7262
		DATE RECEIVED:	04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	80. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	80. U
24A	95-57-8	2-CHLOROPHENOL	80. U
26B	541-73-1	1,3-DICHLOROBENZENE	80. U
27B	106-46-7	1,4-DICHLOROBENZENE	80. U
6H	100-51-6	BENZYL ALCOHOL	80. U
25B	95-50-1	1,2-DICHLOROBENZENE	80. U
2H	95-48-7	2-METHYLPHENOL	80. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	80. U
3H	106-44-5	4-METHYLPHENOL	80. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	80. U
12B	67-72-1	HEXACHLOROETHANE	80. U
56B	98-95-3	NITROBENZENE	80. U
54B	78-59-1	ISOPHORONE	80. U
57A	88-75-5	2-NITROPHENOL	80. U
34A	105-67-9	2,4-DIMETHYLPHENOL	80. U
1H	65-85-0	BENZOIC ACID	400. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	80. U
31A	120-33-2	2,4-DICHLOROPHENOL	80. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	80. U
55B	91-20-3	NAPHTHALENE	80. U
7H	106-47-8	4-CHLOROANILINE	80. U
52B	87-68-3	HEXACHLOROBUTADIENE	80. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	80. U
9H	91-57-6	2-METHYLNAPHTHALENE	80. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	80. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	80. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	400. U
20B	91-58-7	2-CHLORONAPHTHALENE	80. U
10H	88-74-4	2-NITROANILINE	400. U
71B	131-11-3	DIMETHYLPHTHALATE	80. U
77B	208-96-8	ACENAPHTHALENE	80. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481

BORATORY: IT/CERR
ABORATORY ID: 36569EI10
ATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

TA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 198

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS.	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	400. U
1B	83-32-9	ACENAPHTHENE	80. U
59A	51-28-5	2,4-DINITROPHENOL	400. U
58A	100-02-7	4-NITROPHENOL	400. U
8H	132-64-9	DIBENZOFURAN	80. U
35B	121-14-2	2,4-DINITROTOLUENE	80. U
36B	606-20-2	2,6-DINITROTOLUENE	80. U
70B	84-66-2	DIETHYLPHTHALATE	80. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	80. U
80B	86-73-7	FLUORENE	80. U
12H	100-01-6	4-NITROANILINE	400. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	400. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	80. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	80. U
9B	118-74-1	HEXACHLOROBENZENE	80. U
64A	87-86-5	PENTACHLOROPHENOL	400. U
81B	85-01-8	PHENANTHRENE	80. U
78B	120-12-7	ANTHRACENE	80. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	80. U
39B	206-44-0	FLUORANTHENE	80. U
84B	129-00-0	PYRENE	80. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	80. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	200. U
72B	56-55-3	BENZO (A) ANTHRACENE	80. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	80. U
76B	218-01-9	CHRYSENE	80. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	80. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	80. U
73B	50-32-8	BENZO (A) PYRENE	80. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	80. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	80. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	80. U

RECEIVED JUN 2 4 1986

Sample #: EH481

Laboratory: IT/Cerritos
Lab Sample ID: EH481
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 584011
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet Column # — (for MB's)
Pesticide/PCB's

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1L → 10mL; 10mL → 10mL
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-111-1027
1° Std File ID: B11-PM-111-1005, 1001
2° Sample File ID: ____
2° Std File ID: ____

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	1.0	1°	1.0	100

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #. EH481

LABORATORY: IT/CERR
LABORATORY ID: 36569EC13
MATRIX: WATER

CASE #/SAS # 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becheres

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	2.5ML. 5MLS
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	91.	100.	91
36569EC13	4-BROMOFLUOROBENZENE	101.	100.	101
	1,2-DICHLOROETHANE-D4	101.	100	101

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

LABORATORY	IT/CERR	CASE #/SAS #:	5840
LABORATORY ID.	36569EI10	QC REPORT #:	7242-3
MATRIX:	WATER	CONTRACT #:	68-01-7262
		DATE RECEIVED.	04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID.	DFTEI078		
UNITS.	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	69. J	102.	68
	2-FLUOROBIPHENYL	80.	100.	80
36569EI10	P-TERPHENYL-D14	57. J	103.	55
	PHENOL-D5	121.	206.	59
	2-FLUOROPHENOL	118.	203.	58
	2,4,6-TRIBROMOPHENOL	94.	205.	46

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		Unknown	390	30
2	105-60-2	Caprolactam	652	3,000
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI25
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--50UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 7-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	400. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	400. U
24A	95-57-8	2-CHLOROPHENOL	400. U
26B	541-73-1	1,3-DICHLOROBENZENE	400. U
27B	106-46-7	1,4-DICHLOROBENZENE	400. U
6H	100-51-6	BENZYL ALCOHOL	400. U
25B	95-50-1	1,2-DICHLOROBENZENE	400. U
2H	95-48-7	2-METHYLPHENOL	400. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	400. U
3H	106-44-5	4-METHYLPHENOL	400. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	400. U
12B	67-72-1	HEXACHLOROETHANE	400. U
56B	98-95-3	NITROBENZENE	400. U
54B	78-59-1	ISOPHORONE	400. U
57A	88-75-5	2-NITROPHENOL	400 U
34A	105-67-9	2,4-DIMETHYLPHENOL	400. U
1H	65-85-0	BENZOIC ACID	2000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	400. U
31A	120-33-2	2,4-DICHLOROPHENOL	400. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	400. U
55B	91-20-3	NAPHTHALENE	400. U
7H	106-47-8	4-CHLOROANILINE	400. U
52B	87-68-3	HEXACHLOROBUTADIENE	400. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	400. U
9H	91-57-6	2-METHYLNAPHTHALENE	400. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	400. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	400. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	2000. U
20B	91-58-7	2-CHLORONAPHTHALENE	400. U
10H	88-74-4	2-NITROANILINE	2000 U
71B	131-11-3	DIMETHYLPHTHALATE	400. U
77B	208-96-8	ACENAPHTHALENE	400. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH481RI

LABORATORY IT/CERR
LABORATORY ID. 36569EI25
MATRIX WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED 04/17/86

DATA RELEASE AUTHORIZED BY

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL.	LOW	GPC	Y_ N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT	1L. 2ML--50UL: 1ML		
PH.	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution reqd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	2000. U
1B	83-32-9	ACENAPHTHENE	400. U
59A	51-28-5	2,4-DINITROPHENOL	2000. U
58A	100-02-7	4-NITROPHENOL	2000 U
8H	132-64-9	DIBENZOFURAN	400. U
35B	121-14-2	2,4-DINITROTOLUENE	400. U
36B	606-20-2	2,6-DINITROTOLUENE	400. U
70B	84-66-2	DIETHYLPHTHALATE	400. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	400. U
80B	86-73-7	FLUORENE	400. U
12H	100-01-6	4-NITROANILINE	2000 U
60A	534-52-1	4,6-DINITRO-O-CRESOL	2000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	400. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	400 U
9B	118-74-1	HEXACHLOROBENZENE	400 U
64A	87-86-5	PENTACHLOROPHENOL	2000. U
81B	85-01-8	PHENANTHRENE	400. U
78B	120-12-7	ANTHRACENE	400. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	400. U
39B	206-44-0	FLUORANTHENE	400. U
84B	129-00-0	PYRENE	400 U
67B	85-68-7	BUTYLBENZYLPHTHALATE	400. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	800. U
72B	56-55-3	BENZO (A) ANTHRACENE	400. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	400. U
76B	218-01-9	CHRYSENE	400. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	400. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	400. U
73B	50-32-8	BENZO (A) PYRENE	400. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	400. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	400 U
79B	191-24-2	BENZO (G,H,I) PERYLENE	400. U

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH481RI

LABORATORY: IT/CERR
LABORATORY ID. 36569EI25
MATRIX: WATER

CASE #/SAS #. 5840
QC REPORT #. 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP.	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT	1L:2ML--50UL:1ML		
PH	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID	BDCEI674		
SENSITIVITY ID.	DFTEI092		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	57 J	102.	56
	2-FLUOROBIPHENYL	102. J	100.	102
36569EI25	P-TERPHENYL-D14	39 J	103	38
	PHENOL-D5	130. J	206.	63
	2-FLUOROPHENOL	106. J	203.	52
	2,4,6-TRIBROMOPHENOL	47. J	205.	23

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	611	4000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
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J - Estimated Value: Target Compound - 0 < Value < DL; or
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B - Compound found in Blank. Sample results are not Blank Corrected.
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NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
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UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

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RECEIVED JUN 2 4 1

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH482

LABORATORY: IT/CERR
LABORATORY ID: 36569EC5
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY. Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	6.	B
13H	67-64-1	ACETONE	28.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	28 May 86
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5 U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J 22 May 86
47V	75-25-2	BROMOFORM	5. U	TC
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	2.	JB
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	
20H	95-47-6	TOTAL XYLENES	5 U	

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH482

RECEIVED JUN 2 4 1

LABORATORY: IT/CERR
LABORATORY ID: 36569EI09
MATRIX: WATER

CASE #/SAS # 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS.	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20 U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20 U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH482

LABORATORY. IT/CERR
LABORATORY ID: 36569EI09
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100 U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH422

Laboratory: IT/Cerritos
Lab Sample ID: EH422
Sample Matrix: Water
Data Release Authorized by: PH/MB

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1l → 10ml ; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1017
1° Std File ID: B11-PM-112-1005, 1006

2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.66	1°	10	66

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
S - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH482

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EC5
MATRIX: WATER

CASE #/SAS #. 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC5	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	50.	50.	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH482

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID 36569EI09
MATRIX. WATER

CASE #/SAS #: 5840
QC REPORT #: 7252-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	93.	102.	91
	2-FLUOROBIPHENYL	90.	100.	90
36569EI09	P-TERPHENYL-D14	46	103.	45
	PHENOL-D5	151.	206.	73
	2-FLUOROPHENOL	127.	203.	63
	2,4,6-TRIBROMOPHENOL	147.	205.	72

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	—	Unknown	356	20
2	105-60-2	Caprolactam	633	50
3	—	Unknown	744	30
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

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86FG06D12

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EC6
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: TR62-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP	04/23/86
DATE ANALYZED	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	10. U
44V	75-09-2	METHYLENE CHLORIDE	4. JB
13H	67-64-1	ACETONE	10 U
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	5. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. UJ
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. UJ
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. UJ
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. UJ
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. UJ
47V	75-25-2	BROMOFORM	5. U
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	1. J
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	2. JB
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U

22 May 86
TC

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EI13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L. 2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID	BDCEI668			
SENSITIVITY ID:	DFTEI079			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20 U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE.	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EI13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI668			
SENSITIVITY ID:	DFTEI079			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20 U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20 U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH483

Laboratory: IT/Cerritos
Lab Sample ID: EH483
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10mL; 10mL → 10mL
For Dilution: Hg
pH: 0 N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11.PM-112-1018
1° Std File ID: B11-PM-112-1005,1004
2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.65	1°	10	65

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EC6
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Bocheser

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT.	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC6	4-BROMOFLUOROBENZENE	52.	50.	104
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
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15				
16				
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18				
19				
20				

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EI13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI668			
SENSITIVITY ID:	DFTEI079			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	60.	102.	59
	2-FLUOROBIPHENYL	56.	100.	56
36569EI13	P-TERPHENYL-D14	45.	103.	44
	PHENOL-D5	98.	206.	48
	2-FLUOROPHENOL	112.	203.	55
	2,4,6-TRIBROMOPHENOL	105.	205.	51

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		Unknown	342	20
2	105-60-2	Caprolactam	630	50
3		Unknown	734	20
4				
5				
6				
7				
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RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
@ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86 FG06513 RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EC7
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10 U	
44V	75-09-2	METHYLENE CHLORIDE	6.	B
13H	67-64-1	ACETONE	80.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5 U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10 U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	

22 May 86
TC

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EI14
MATRIX: WATER

CASE #/SAS #: 5840
GC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EI14
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH484

Laboratory: IT/Cerritos
Lab Sample ID: EH484
Sample Matrix: Water
Data Release Authorized by: RH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1019
1° Std File ID: B11-PM-112-1005, 10CL
2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.69	1°	1.0	69

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
S - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I

Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EC7
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Bocheser

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS.	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC7	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
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RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #. EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EI14
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID.	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	87.	102.	85
	2-FLUOROBIPHENYL	84.	100.	84
36569EI14	P-TERPHENYL-D14	73.	103.	71
	PHENOL-D5	42	206.	20
	2-FLUOROPHENOL	148	203.	73
	2,4,6-TRIBROMOPHENOL	126.	205.	61

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	—	unknown	366	10
2	105-60-2	caprolactam	646	1000
3	—	hydrocarbon	1113	10
4				
5				
6				
7				
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9				
10				
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12				
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14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986 5840-11-A

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EC8
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	5.	B
13H	67-64-1	ACETONE	17.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	2.	JB
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EI16
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--400UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	50. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	50. U
24A	95-57-8	2-CHLOROPHENOL	50. U
26B	541-73-1	1,3-DICHLOROBENZENE	50. U
27B	106-46-7	1,4-DICHLOROBENZENE	50. U
6H	100-51-6	BENZYL ALCOHOL	50. U
25B	95-50-1	1,2-DICHLOROBENZENE	50. U
2H	95-48-7	2-METHYLPHENOL	50. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	50. U
3H	106-44-5	4-METHYLPHENOL	50. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	50. U
12B	67-72-1	HEXACHLOROETHANE	50. U
56B	98-95-3	NITROBENZENE	50. U
54B	78-59-1	ISOPHORONE	50. U
57A	88-75-5	2-NITROPHENOL	50. U
34A	105-67-9	2,4-DIMETHYLPHENOL	50. U
1H	65-85-0	BENZOIC ACID	300. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	50. U
31A	120-33-2	2,4-DICHLOROPHENOL	50. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	50. U
55B	91-20-3	NAPHTHALENE	50. U
7H	106-47-8	4-CHLOROANILINE	50. U
52B	87-68-3	HEXACHLOROBUTADIENE	50. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	50. U
9H	91-57-6	2-METHYLNAPHTHALENE	50. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	50. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	50. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	300. U
20B	91-58-7	2-CHLORONAPHTHALENE	50. U
10H	88-74-4	2-NITROANILINE	300. U
71B	131-11-3	DIMETHYLPHTHALATE	50. U
77B	208-96-8	ACENAPHTHALENE	50. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EI16
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--400UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	300. U
1B	83-32-9	ACENAPHTHENE	50. U
59A	51-28-5	2,4-DINITROPHENOL	300. U
58A	100-02-7	4-NITROPHENOL	300. U
8H	132-64-9	DIBENZOFURAN	50. U
35B	121-14-2	2,4-DINITROTOLUENE	50. U
36B	606-20-2	2,6-DINITROTOLUENE	50. U
70B	84-66-2	DIETHYLPHTHALATE	50. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	50. U
80B	86-73-7	FLUORENE	50. U
12H	100-01-6	4-NITROANILINE	300. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	300. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	50. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	50. U
9B	118-74-1	HEXACHLOROBENZENE	50. U
64A	87-86-5	PENTACHLOROPHENOL	300. U
81B	85-01-8	PHENANTHRENE	50. U
78B	120-12-7	ANTHRACENE	50. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	50. U
39B	206-44-0	FLUORANTHENE	50. U
84B	129-00-0	PYRENE	50. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	50. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	100. U
72B	56-55-3	BENZO (A) ANTHRACENE	50. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	50. U
76B	218-01-9	CHRYSENE	50. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	50. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	50. U
73B	50-32-8	BENZO (A) PYRENE	50. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	50. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	50. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	50. U

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Sample #: EH485

Laboratory: IT/Cerritos
Lab Sample ID: EH425
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 58401
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet Column # — (for MB's)
Pesticide/PCB's

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1020
1° Std File ID: B11-PM-112-1005, 1006
2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.61	1°	1.0	61

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I Rev 4/86

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EC8
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Todd Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC8	4-BROMOFLUOROBENZENE	50.	50.	100
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #. EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EI16
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--400UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	83.	102.	81
	2-FLUOROBIPHENYL	90.	100.	90
36569EI16	P-TERPHENYL-D14	62.	103.	60
	PHENOL-D5	142.	206.	69
	2-FLUOROPHENOL	129.	203.	64
	2,4,6-TRIBROMOPHENOL	99.	206.	48

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	641	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL; GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL; Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

5840-11-A

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L: 2ML--100UL: 1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200 U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200. U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200 U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200. U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID.	DFTEI080			
UNITS:	UG/L			

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200. U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200. U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200. U
39B	206-44-0	FLUORANTHENE	200. U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH485RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	45. J	102.	44
	2-FLUOROBIPHENYL	71. J	100.	71
36569EI20	P-TERPHENYL-D14	46. J	103.	45
	PHENOL-D5	68. J	206.	33
	2-FLUOROPHENOL	99. J	203.	49
	2,4,6-TRIBROMOPHENOL	78. J	205.	38

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	614	603
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH485RI

LABORATORY: IT/CERR
LABORATORY ID. 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP.	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT	1L: 2ML--100UL: 1ML		
PH.	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID.	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200 U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200 U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200 U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200 U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200. U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200 U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200 U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

RECEIVED JUN 24 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

LABORATORY IT/CERR
LABORATORY ID: 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL	LOW	GPC	Y_ N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED	05/07/86	CONT EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--100UL:1ML		
PH	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID	BDCEI669		
SENSITIVITY ID.	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200. U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200 U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200. U
39B	206-44-0	FLUORANTHENE	200. U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH485RI

LABORATORY IT/CERR
LABORATORY ID. 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL 1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution reqd

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	45. J	102.	44
	2-FLUOROBIPHENYL	71. J	100.	71
36569EI20	P-TERPHENYL-D14	46. J	103.	45
	PHENOL-D5	68. J	206.	33
	2-FLUOROPHENOL	99. J	203.	49
	2,4,6-TRIBROMOPHENOL	78. J	205.	38

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	614	600
2				
3				
4				
5				
6				
7				
8				
9				
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12				
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16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
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C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
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UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
@ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match
Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86F906515

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EC9
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT # 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY: Todd Becherer

VOLATILE COMPOUNDS

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED.	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS.	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	5.	B
13H	67-64-1	ACETONE	70.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5 U	
6V	56-23-5	CARBON TETRACHLORIDE	5 U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5 U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5 U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	

22 May 86

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EI17
MATRIX: WATER

CASE #/SAS #: 5840
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SEMIVOLATILE COMPOUNDS (PAGE 1)

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ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L 2ML		
PH.	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EI17
MATRIX: WATER

CASE #/SAS #: 5840
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SEMIVOLATILE COMPOUNDS (PAGE 2)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC).	N/A			
STANDARD ID.	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20 U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH486

Laboratory: IT/Cerritos
Lab Sample ID: EH486
Sample Matrix: Water
Data Release Authorized by: RH/MS

Case #/SAS #: 5940 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10ml ; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1021
1° Std File ID: B11-PM-112-1005, 1006
2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:
BNS - Buzel was not spiked into this sample. It was reextracted for this reason. See EH436RE

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries

Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.2U		BNS	BNS

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EC9
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT # 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45	50	90
36569EC9	4-BROMOFLUOROBENZENE	50	50.	100
	1,2-DICHLOROETHANE-D4	50.	50.	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH486

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID. 36569EI17
MATRIX. WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH.	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	89.	102.	87
	2-FLUOROBIPHENYL	84.	100.	84
36569EI17	P-TERPHENYL-D14	63.	103.	61
	PHENOL-D5	21.	206.	10
	2-FLUOROPHENOL	150.	203.	74
	2,4,6-TRIBROMOPHENOL	145	205.	71

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	651	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
# - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486RI

LABORATORY. IT/CERR
LABORATORY ID: 36569EI26
MATRIX. WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200 U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200. U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200 U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200 U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486RI

LABORATORY: IT/CERR
LABORATORY ID. 36569EI26
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution reqd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200. U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200. U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200. U
39B	206-44-0	FLUORANTHENE	200 U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH486RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI26
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analysed Due To: dilution req'd

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	87. J	102.	85
	2-FLUOROBIPHENYL	122. J	100.	122 *
36569EI26	P-TERPHENYL-D14	48. J	103.	47
	PHENOL-D5	194 J	206	94
	2-FLUOROPHENOL	168 J	203.	83
	2,4,6-TRIBROMOPHENOL	111. J	205.	54

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	caprolactam	610	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 24 1986

86FG06516

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EC10
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Todd Bocherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	~~14. U~~ —
44V	75-09-2	METHYLENE CHLORIDE	7. B —
13H	67-64-1	ACETONE	170. B —
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	~~5. U~~
13V	75-34-3	1,1-DICHLOROETHANE	7. — HRS
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10 U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U J
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U J
47V	75-25-2	BROMOFORM	5. U
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	5 U
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5. U

22 May 86

RECEIVED JUN 24 1988

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EI18
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH487

RECEIVED JUN 24 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI18
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID.	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH427

Laboratory: IT/Cerritos
Lab Sample ID: EH427
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet Column # ___ (for MB's)
Pesticide/PCB's

Sample Level: LOW
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 500ml → 5ml ; 5ml → 5ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: BIL PM-112-1023
1° Std File ID: BIL PM-112-1005,1006

2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 500 ml or
W_s N/A g
V_t 5,000 ul
V_i 5 ul

Surrogate Spike Recoveries Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	10	1°	10	100

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
$ - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EC10
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED. 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP	04/23/86
DATE ANALYZED.	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID	LWVEC014
SENSITIVITY ID.	BFBEC023
UNITS	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC10	4-BROMOFLUOROBENZENE	50.	50	100
	1,2-DICHLOROETHANE-D4	50.	50	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EI18
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #. 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY.

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	91.	102.	89
	2-FLUOROBIPHENYL	87.	100.	87
36569EI18	P-TERPHENYL-D14	51.	103.	50
	PHENOL-D5	178.	206.	86
	2-FLUOROPHENOL	156.	203.	77
	2,4,6-TRIBROMOPHENOL	161.	205.	79

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	6116	200
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 24 1986

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Sample #: EH487
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec. MS	Conc. MSD	% Rec. MSD	RPD	QC Limits * RPD	QC Limits * Recovery
Pest.	Lindane (gamma-BHC)	0.200	0 (0.054)	0.22	110	0.22	110	0	<15	56-123
SMO	Heptachlor	0.205	↓	0.17	83	0.17	83	0	<20	40-131
Sample #	Aldrin	0.201	↓	0.15	74	0.15	74	0	<22	40-120
	Dieldrin	0.509	0 (0.14)	0.32	75	0.41	81	8	<18	52-126
EH487	Endrin	0.523	↓	0.47	90	0.50	96	6	<21	56-121
	4,4'-DDT	0.504	↓	0.54	107	0.55	109	2	<27	38-127
	Dibutyl chlorendate **	1.0	1.0	0.90	90	0.91	91	1	—	24-154

* Asterisked Values are outside QC Limits.
** Advisory Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: Pests 0 out of 7 outside QC Limits

Recovery: Pests 0 out of 14 outside QC Limits

Comments: _____

Summary of Unspiked HSL's

Fraction	Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Pest.	None found	0 (0.054)	0 (0.24)	0 (0.24)	0

Note: This section lists compounds on the HSL which were found in the Sample, MS, and/or MSD. It does not include Tentatively Identified compounds which may have been found in the Sample.

Rev 8/85

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86FG06R03

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EC11
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	5. U	
13H	67-64-1	ACETONE	33.	B —
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5 U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10 U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5 U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	
20H	95-47-6	TOTAL XYLENES	5. U	

22 May 86
TC

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EI19
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20 U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20 U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20 U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH488

LABORATORY: IT/CERR
LABORATORY ID. 36569EI19
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID.	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

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Sample #: EH488

Laboratory: IT/Cerritos
Lab Sample ID: EH488
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: LOW
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10 ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1024
1° Std File ID: B11-PM-112-1005.1004

2° Sample File ID: ____
2° Std File ID: ____

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.98	1°	10	98

* - Asterisked Values are outside QC Limits.
\# - ____ Recoveries due to Dilution.
$ - ____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

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ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EC11
MATRIX: WATER

CASE #/SAS #. 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Bechner

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45	50.	90
36569EC11	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	52	50.	104

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	75-28-5	2-Methyl propane	76	70
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EI19
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: [signature]

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.).	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	91.	102.	89
	2-FLUOROBIPHENYL	84.	100.	84
36569EI19	P-TERPHENYL-D14	56.	103.	54
	PHENOL-D5	148.	206.	72
	2-FLUOROPHENOL	141.	203.	69
	2,4,6-TRIBROMOPHENOL	139.	205.	68

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		none found		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
@ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

REFERENCE 19
SITE NAME Northeast Gravel Company
SITE ID MID049236821

REGION DIST	WSSN	WATER SUPPLY NAME	POP. SERVED	OWNER TYPE		COUNTY	SOURCE	PUR-SELL WATER FROM	PUR-SELL WATER TO	CLASS F	CLASS D	CLASS S	TREATMENT CHLORO	TREATMENT FLUORI	TREATMENT CORROS	TREATMENT FILTER	TREATMENT soften	TREATMENT soften	TREATMENT soften	TREATMENT soften	(AREA)-PHONE
2 09	02845	GREENFIELD ESTATES	100	P	1	KENT	W					4									(616)891-7937
2 09	03620	KENTWOOD	30,400	M	1	KENT	P	02790				1	5	6							(616)698-9610
2 09	03695	LAKE BELLA VISTA	840	P	1	KENT	W					4									(616)874-7489
2 09	03950	LOWELL	3,500	M	1	KENT	W			2		2	1	3		1	2			2	(616)897-5234
2 09	04085	MARACAIBO SHORES	60	P	1	KENT	W					4									(616)749-8916
2 09	05907	MILDRED HOUTING LEISURE ACRES	64	V	1	KENT	W														(616)636-5783
2 09	05320	PLAINFIELD TOWNSHIP	12,000	T	1	KENT	W		YES	1		1	1	3	1	1	1			2	(616)363-0961
2 09	05730	ROCKFORD	3,324	M	1	KENT	R		YES	2		3	1	3	1	1	1		2	2	(616)866-0560
2 09	06200	SPARTA	3,373	V	1	KENT	W				3	3	2	1			4	3			(616)887-8251
2 09	06860	WALKER	15,088	M	1	KENT	P	02790					5	6							(616)453-6311
2 09	06870	WALKER / ENGLISH HILLS	350	P	1	KENT	W				4	4	2					3			(616)361-0566
2 09	07260	WYOMING	59,616	M	1	KENT	G		YES	1		1	1	3	2	1			1		(616)397-6511
*** NUMBER OF SUPPLIES IN COUNTY			29																		
4 06	00050	AMBERG	211	V	1	KEWEENAW	B	04800				4									(906)337-3013
4 06	00160	AMBERG LOCATION	350	T	1	KEWEENAW	B	04800				2									(906)337-3502
4 06	01053	CAMP BARAGA	110	S	1	KEWEENAW	W					4									(906)524-7965
4 06	01630	COPPER HARBOR	100	T	1	KEWEENAW	W					4	2								(906)289-4628
4 06	01920	EAGLE HARBOR	260	T	1	KEWEENAW	G				3	4	2								(906)289-4207
4 06	01930	EAGLE RIVER	110	T	1	KEWEENAW	W				4	4	2								(906)337-2474
4 06	02590	GAY	63	T	1	KEWEENAW	G				3	4	2								(906)296-2296
4 06	04430	MOHAWK-FULTON	1,000	T	1	KEWEENAW	B	04800				2									(906)337-3502
4 06	04660	NEW ALLEGOUZ LOCATION	100	T	1	KEWEENAW	B	04800				2									(906)337-3502
4 06	04940	OLD ALLEGOUZ LOCATION	100	T	1	KEWEENAW	B	04800				2									(906)337-3502
*** NUMBER OF SUPPLIES IN COUNTY			10																		
2 04	00350	BALDWIN	612	M	1	LAKE	W					4									(616)745-4666
2 04	06901	WASH KING	25	P	1	LAKE	W														
2 04	07233	YATES TOWNSHIP	60	P	1	LAKE	W														(616)745-2262
*** NUMBER OF SUPPLIES IN COUNTY			3																		
1 02	00150	ALMONT	1,864	V	1	LAPEER	P	01600				3	5	6							(313)798-8528
1 02	01460	CLIFFORD	406	V	1	LAPEER	W				4	4	2								(517)761-7003
1 02	01570	COLUMBIAVILLE	953	V	1	LAPEER	W				4	4	2					3			(313)793-4411
1 02	01870	DRYDEN	650	V	1	LAPEER	W					4									(313)796-2093
1 02	02842	GREATER LAPEER CO UTIL AUTH	0			LAPEER		01600													
1 02	03340	IMLAY CITY	2,496	M	1	LAPEER	P	01600	YES			3	5	6							(313)724-2135
1 02	03760	LAPEER	6,225	M	1	LAPEER	P	01600	YES			2	5	6							(313)664-2903
1 02	04170	MAYFIELD TOWNSHIP	468	T	1	LAPEER	P	01600					5	6							
1 02	04362	METAMORA	336	V	1	LAPEER	W					4									(313)678-2334
1 02	04770	NORTH BRANCH	896	V	1	LAPEER	W					4									(313)688-2620
1 02	03790	OAKDALE CENTER	2,000	S	1	LAPEER	P	03760				3	5	6							
*** NUMBER OF SUPPLIES IN COUNTY			11																		

SEE REFERENCE SHEET

FOR SENSITIVE INFORMATION

SITE NAME: Northeast Gravel Co

SITE NUMBER: MID 049 236 821

LOCATION OF DOCUMENT: SEPARATE FILE, RED FOLDER

SUMMARY OF ACTIONABLE VIOLATIONS

Case Name North East Canal

The following is a list of violations which may provide a basis for the development of enforcement strategy. The violations fall into two basic categories: 1. Operation without a permit or 2. violation of a permit, final order, consent agreement etc. Please note any of these violations during the course of your review.

Violation of Act 245, P.A. 1929, the Water Resources Commission Act (discharge violation)

No permit _____

Violation of permit ✓

Surface water discharge _____

Groundwater discharge _____

Violation of Part 5 Rules for Act 245, P.A. 1929

Illegal storage _____

Improper storage _____

No PIPP _____

PIPP not implemented correctly _____

Violation of Act 641, P.A. 1978, the Solid Waste Management Act

No license _____

Violation of license Act 87

Other violations (failure to report critical materials, improper disposal of PCB's, illegal waste removal, etc.) Many violations of NPDES Stipulations (permit violations) as found in DNR samples of sludges.

Basically, the company was responsive to DNR findings, etc, as was the #1 customer - Lapeer Industrial. The problems probably came from less scrupulous haulers who did not adequately treat other sludges, resulting in permit violations.

(over)

On 8 January 1979 a meeting was held with representatives of the DNR, Wolverine World Wide, Inc., NE Gravel, + Consulting Engineers (Fishbeck, Thompson, Carr + Huber, Inc. The purpose of the meeting was to discuss preliminary ground water data, etc at the NE Gravel Site + the Power Street site. Ground water depths, flows, + water quality in the area were discussed. Wolverine World Wide (Rockford) discussed its continued use of the site for their spoils. It was decided that the DNR could license the site for disposal of WW's waste only if separation from the bottom of any cell to the ground water was 1 foot or more. For years, WW has used the NE Gravel Site (in a separate area) for disposal of their waste — this site is the only one available to them in this part of the state. WW's waste is essentially organic, with some inorganic portions (calcium precipitates) and trivalent chrome. Studies indicate that chrome in tannery sludges once buried will not travel far through soil types. WW has been disposing their waste at NE Gravel for 10 years.

Recently, WW is disposing of its waste at NE Gravel. In the fall week of 1978, monitoring wells were installed 50' south of the disposal area by WW. 2 additional wells were later put in, 1 at the NE corner and 1 to the East. Preliminary sampling showed no movement of chromium.

A hydrologist investigation was prepared by Walter Maxwell, P.E., a Ground Water Geologist.

New information from the monitor wells is needed.

EPA

POTEN HAZARDOUS WASTE SITE

FINAL STRATEGY DETERMINATION

REGION	SITE NUMBER
V	MI-000001090

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency, Site Tracking Syste .; Hazardous Waste Enforcement Task Force (EN-335), 401 M St., SW, Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
Northeast Gravel Co.	4300 Cannonsburg	
C. CITY	**D. STATE**	**E. ZIP CODE**
Belmont	MI	—

II. FINAL DETERMINATION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED		X			
B. RE IEDIAL ACTION NEEDED, BUT NO RESOURCES AVAILABLE *(If es, complete Section III.)*					
C. REMEDIAL ACTION *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR FINAL STRATEGY DETERMINATION

No apparent RCRA problem.
Site closed in 1977

F. IF A CASE DEVELOPMENT PLAN HAS BEEN PREPARED, SPECIFY THE DATE PREPARED *(mo., day, & yr.)*

G. IF AN ENFORCEMENT CASE HAS BEEN FILED, SPECIFY THE DATE FILED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
G. Wrisley	—	8/12/80

III. REMEDIAL ACTIONS TO BE TAKEN WHEN RESOURCES BECOME AVAILABLE

List all remedial actions, such as excavation, removal, etc. to be taken as soon as resources become available. See instructions for a list of Key Words for each of the actions to be used in the spaces below. Provide an estimate of the approximate cost of the remedy.

A. REMEDIAL ACTION	B. ESTIMATED COST	C. REMARKS
	$	
	$	
	$	
	$	
	$	
	$	
	$	
	$	
D. TOTAL ESTIMATED COST	$	

EPA Form T2070-5 (10-79)

Continue On Reverse

Continued From Front

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY ACTIONS *(On Site and Off-Site)*. List all emergency actions taken or planned to bring the site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE *(mo,day,&yr)*	3. ACTION END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State, Private Party)*	5. COST	6. SPECIFY 311 OR OTHER ACTION. INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY *(On Site and Off-Site)*: List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE *(mo,day,&yr)*	3. ACTION END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State Private Party)*	5. COST	6. SPECIFY 311 OR OTHER ACTION: INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				$	
				$	
				$	
				$	
				$	
				$	

C. MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL MAN-HOURS FOR REMEDIAL ACTIVITIES	3. TOTAL COST FOR REMEDIAL ACTIVITIES
a. EPA		$
b. STATE		$
c. PRIVATE PARTIES		$
d. OTHER *(specify)*:		$

Case name [illegible]

PRELIMINARY PROBLEM ASSESSMENT

Date 12-19-71

POTENTIAL HAZARDS (CHECK ALL APPLICABLE CATEGORIES)

Human health	___	Noticeable odors	___
Contamination of water supply	___	Contamination of soils	✓
Contamination of groundwater	✓	Property damage	___
		Sewer/storm drain problems	___
Contamination of surface water	___	Erosion problems	___
Contamination of food chain	___	Inadequate security	___
Damage to flora/fauna	___	Other (specify)	___
Fish kill	___	___	
Contamination of air	___	___	
Fire or explosion	___	___	
Spills/leaking containers (runoff) standing liquids	___		
Incompatible wastes	___		
Midnight dumping	___		

WHAT ADDITIONAL INFORMATION IS REQUIRED? [illegible]

DESCRIBE ANY NECESSARY ACTIONS WHICH SHOULD BE UNDERTAKEN? (ADDITIONAL SAMPLING, SITE INSPECTION, ETC.) [illegible]

POTENTIAL GROUND WATER CONTAMINATION SOURCE

IDENTIFICATION AND PRELIMINARY ASSESSMENT

This form is completed for each potential hazardous waste site to help set priorities for site inspections. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections. If information is not available, place an "x" in the space provided.

SITE IDENTIFICATION

COMPANY NAME NORTHEAST GRAVEL Co. (a Michigan corporation)

ADDRESS 4300 CANNONSBURG Rd, Belmont, MI

LOCATION (COUNTY, TOWN & RANGE) SE 1/4, NW 1/4, Sec 24, T8N, R11W, PLAINFIELD Twp KENT County

OWNER/OPERATOR ① Lester Bauer, Manager ② Harold E. Neitzel, Pres. — 1971.) ~~Jun~~ (Closed in 1971. Records date to 1971.

HOW LONG HAS THIS FACILITY BEEN OPERATING AT THIS SITE? Operation of site before 1971 indicated, however,

HAS THERE EVER BEEN AN OWNERSHIP TRANSFER? NOT indicated in file (see back #1)

IF SO WHEN? _____

PREVIOUS OWNER? _____

OPERATION CHARACTERIZATION

TYPE OF OPERATION (I.E. MANUFACTURING, LANDFILL, ETC.) Treatment of industrial wastes (cellar lagoon discharges), metallic sludges, some separation of wastes, landfilling of dried material (filling → dewatering → removal)

WASTE CHARACTERIZATION

Waste type:

____Unknown ____Liquid ____Solid ✓ Sludge ____Gas

Waste characteristics:

____Unknown ____Corrosive ____Ignitable ____Radioactive ____Highly Volatile

✓ Toxic ____Reactive ____Inert ____Flamable

____Other Specify _____

Waste description (metal sludges, PCB's, etc.) metal hydroxides

* In August, 1972, Northeast Gravel Co., ~~closed~~ ~~it~~ the business with Approved Industrial Removal Co. Extent of the arrangement is not indicated in the file, but A.I.R.C. invested heavily in processing facilities at the NE Gravel site. AI.R.C was, and remained the #1 customer of NE Gravel. Messers Wenchowsky and Allison were the chief participants from A.I.R. Co.

PROBLEM CHARACTERIZATION (I.E. UNLINED SEEPAGE LAGOON, IMPROPER BARREL DISPOSAL, ETC. Unlined lagoons over permeable gravel and sand Company often exceeded their permit requirement with samples showing higher than allowed nickel, copper, Chromium, zinc, cyanide, and oil + grease

LIST ALL APPLICABLE PERMITS HELD BY THE SITE (FILL IN DATE OF ISSUANCE & PERMIT NUMBER)

NPDES _____ Liquid industrial waste _____

Air _____ Groundwater discharge M00288 (Oct 19, 1976)

Solid waste _____ Soil & sedimentation _____

Inland lakes _____ Other (specify) ① MS0000238 April 21, 1972 (voluntary stipulation) ② MS0000021 7/73

COMPLIANCE HISTORY Often exceeded their permit requirements, esp from 9/1974 on. A 4th notice of non-compliance and order to comply was issued 11-24-75, w/ cc going to Approval 3rd Removal.

CONTAMINATION INFORMATION wells: 3 driven wells and 2 open water areas have been available for periodic testing of ground water quality or changes therein.

HAS THERE BEEN ANY ATTEMPT TO MONITOR THE GROUNDWATER IN THE PAST Yes

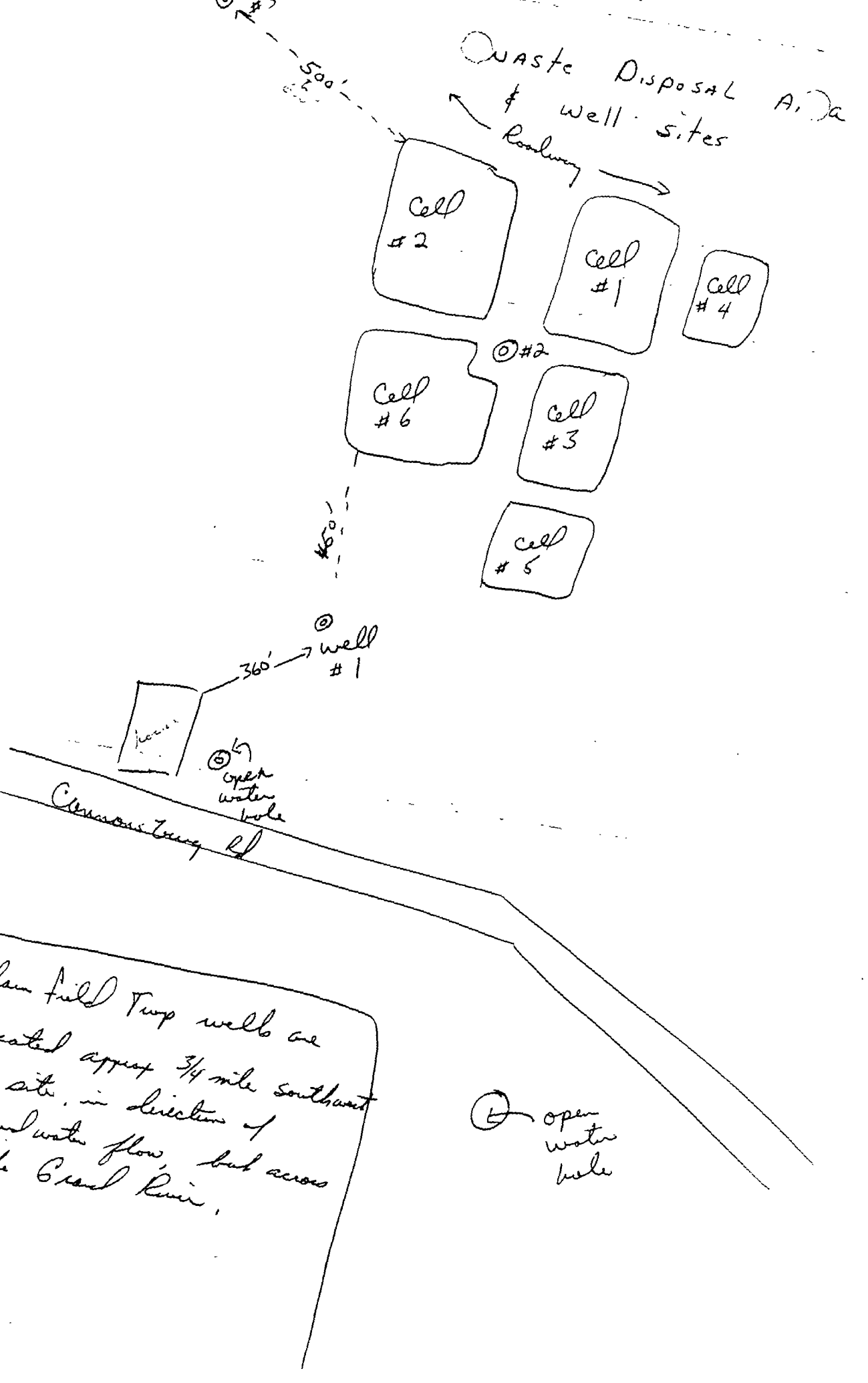
If so, give the location or identification number of the wells (over)

List any pertinent monitoring data (include date and laboratory used for analysis No contamination of monitor wells or open water holes. Some contamination in Well #2, which is in the middle of all area, however, [illegible] approx 900' to south.

GIVE THE LOCATION & DISTANCE TO THE NEAREST PRIVATE WELL _____

GIVE THE SOURCE OF MUNICIPAL WATER SUPPLY Plainfield Twp wells (over)

LIST ANY KNOWN GEOLOGICAL CHARACTERISTICS OF THE AREA Permeable SANDS AND GRAVELS OCCUR between the disposal pits AND the water table.


Waste Disposal Area
& well sites
Roadway
N.
500'
Cell #2
Cell #1
Cell #4
#2
Cell #6
Cell #3
Cell #5
650'
well #1
360'
open water hole
Cimarron Twp Rd
open water hole
Lam field Twp wells are
ated approx 3/4 mile southwest
site in direction of
d water flow but across
e Grand River.

DEPARTMENT ACTION

HISTORY OF SITE INSPECTIONS (LIST DATE, INSPECTING AGENCY & RESULTS) (1) From [illegible] Aug 5, 1971 a series of samples were taken by [illegible] DNR showing chemical [illegible] in the lagoons [illegible] 9-[illegible] 11-[illegible] and by Williams & Works showing [illegible] 1972

REGULATORY ACTIONS (NOTICES OF NONCOMPLIANCE & VIOLATIONS, DATES & REASONS)

(1) [illegible] 4th notice of non compliance & order to comply issued to company to [illegible] the allegedly [illegible] discharge and signed an agreed order. Samples were taken from 5-[illegible] also on 9-17-74, 1-3-75, 4-25-75, 8-25-75.

REMEDIAL ACTIONS REQUESTED (ACTIONS & DATES) Lagoon samples continued to show higher than allowable ground water and surface water. Approval expansion is attempt to lower content.

Were these actions accomplished? Not completely. In late Jul 1977 all eliminating sites of coal on N & Canal were placed out by the State. N & Canal was shut down

(2) Richard P. Bassett, Geologist, Geo. Survey Div. visited site on 2-4-72 and determined that the monitoring well system was adequate.

(3) Chester Harvey, Sam Engineer, on 6-14-72, reviewed the company past year of operation and evaluated the well samples - finding the acceptable up on contamination.

(4) Jim [illegible] Sam Engineer, visited the site and submitted a letter on 6-30-75 finding the operation satisfactory, & discharge to the site was averaged at 6.75 gallons per month.

(5) Chester Harvey on 6-13-74, evaluated the site and determined it is the water operated & stated "the report contains a flow that disposed metal was bioassayed & the evaluated waste was absent from the ground water contact points."

(6) Chester Harvey, on 5-2-75 - site inspection, noted no well-run water and no change in the original ground water parameters.

(7) In 1975, DNR sampling of the lagoons showed ground water in the monitor wells, however, continued to show an absence of contaminants.

(8) Williams & Works laboratories continued supplying monitor results to DNR showing no contamination.

282

fishbeck
thompson
carr
&
huber
consulting engineers

Carl V. Huber, P.E.
Principal, Vice President

June 8, 1984
Project No. 75803/191-66

PTI RECEIVED 3
SITE NAME Northeast Gravel Company
SITE ID MID049236821

Mr. Gerald Heyt
State of Michigan
350 Ottawa Avenue, N.W.
Grand Rapids, MI 49503

Dear Mr. Heyt:

Re: Wolverine World Wide, Inc. - Northeast Gravel Company - Kent County, Michigan

At the request of Wolverine World Wide, Inc., we would like to summarize the discussion that occurred between the Michigan Department of Natural Resources and representatives of Wolverine World Wide, Inc. at a meeting held in your office on May 31, 1984. The attempt of this letter is to provide information which can be submitted to EPA during their review of the Northeast Gravel site. It is not our intent at this time to question the ranking of the Northeast Gravel site on the National Priority List. The purpose is to indicate to you our confusion after reviewing the State of Michigan's assessment of this site as well as the EPA Site Inspection Report. As you are aware, the purpose of our meeting was to ascertain whether the facts with which we have been presented are correct and whether they indeed should not be changed in the record to provide a more factual basis for understanding.

The Northeast Gravel site can actually be divided into three sub-sites. The most southerly sub-site is that site which accepted metal hydroxide residues and spent plating baths. The sub-site north of that was an old landfill and the sub-site north of the landfill received dewatered sludges generated by Wolverine World Wide. After reviewing the EPA Inspection Report, it would appear that all of the emphasis of that report pertains to the sub-site containing Wolverine World Wide waste. The report alleged that the waste is hazardous when, indeed, it is not. The report also indicated that groundwater contamination resulted from this sub-site when it is known that the problems which occurred in the past at the Northeast Gravel site occurred from the most

southerly portion of that site pertaining to the disposal of metal hydroxide residues. The following, therefore, are important facts which should be considered in clarifying the record:

1. As you are aware, Northeast Gravel Company accepted liquid and semiliquid plating residues into specific portions of the site which had been excavated. Wastes going into areas of the facility were primarily metal hydroxides and spent plating baths. Northeast Gravel did have a system for segregating certain wastes to different areas at the site but primarily the wastes received, as far as can be determined by us, were generally liquid in nature or dewatered by centrifuges to dewater them to a semiliquid state.

2. There were monitoring wells located throughout this portion of the facility. We are not sure at the present time how many ever did exist or where they were located but we are aware that sampling did occur since our laboratory was involved with some of the analyses. Most of the wells were located downstream from the main site.

3. Wolverine World Wide, a leather tanner located in Rockford, Michigan, requested permission of Northeast Gravel to dispose of dewatered tannery sludges on the Northeast Gravel property. A separate site was established north (upgradient) of the site which accepted the plating residues. The tannery sludge was a nonhazardous material and was dewatered to approximately 30 - 35% solids. The only metal it contained was trivalent chromium which had been precipitated in the waste treatment systems.

4. At about the time that RCRA regulations were being proposed, it was decided that monitoring wells should be installed south of that portion of the site where Wolverine World Wide waste disposed (north of the plating waste site) to check groundwater data specifically for metals. This data was used during the promulgation of the RCRA regulations to support the fact that the trivalent chromium in leather tanning wastes is bound and does not leach readily. These monitoring wells were checked periodically throughout the years since their installation and although a couple do not exist at the present time, monitoring wells still are present onsite for sampling.

5. The primary plating residue area was closed approximately one year before Wolverine ceased disposal at the site. As you are aware, Wolverine now disposes of their material at the 10-Mile landfill.

6. On Saturday, March 3, 1984, an article appeared in The Grand Rapids Press which indicated that the Northeast Gravel site was being considered for cleanup action under Superfund as well as Act 307. The Press article went on to indicate that the primary generator on that site was Wolverine World Wide.

7. Due to our confusion after this article regarding the primary generator, we requested information from Mr. Daniel Pierson of the Department of Natural Resources. Mr. Pierson sent us the MSAS Site Screening Table as well as the EPA Site Inspection Report prepared by the EPA contractor Ecology and Environment.

8. At approximately the same time that the above information was received, Wolverine World Wide addressed a letter to Mr. John Oakes of the USEPA in Chicago requesting information under the Freedom of Information Act for the site. Mr. Oakes sent the Potential Hazardous Waste Site Final Strategy Determination, EPA form T2070-5, as well as the Potential Groundwater Contamination Identification and Preliminary Assessment. He indicated that he was unable to release the EPA site inspection report due to legal ramifications.

9. The potential groundwater contamination source identification and preliminary assessment form appears to be accurate with regard to plating waste disposal. The identification and preliminary assessment form has the following important inclusions:

   a. In the "Operation Characterization", it indicates that the site was used for the treatment of metallic sludges with lagoons.

   b. Under "Waste Description", it is indicated that the waste is from metal hydroxides.

   c. Under "Problem Characterization", it is indicated that unlined lagoons over permeable gravel and sands have leached with samples indicating higher-than-allowed nickel, chromium, zinc, cyanide and oil and grease.

   d. Under "Compliance History", it is indicated that the sampling often exceeded compliance values.

   e. Under "Contamination Information", it indicates that the wells are basically 900 feet to the south of the lagoon cells.

   f. The assessment form indicates that Approved Industrial Removal Company was the number one customer of the landfill. The form indicated that the site was licensed to handle 675,000 gallons of liquids per month.

   g. The assessment form seems to be accurate based on our knowledge of the site. It generally concludes that the problems that the DNR found related to the disposal of hydroxide sludges and liquids in the primary portion of the Northeast Gravel site. Nowhere do we find in the form that the groundwater contamination problems were attributed to the disposal of sludges by Wolverine World Wide. The compliance

problems focused around the disposal by Approved Industrial Removal Company. The groundwater contamination which was noted, was obviously from metal hydroxide sludges based on the parameters which were found.

10. Now when one looks at the EPA site inspection report, the confusion mounts. The following items are important:

    a. In Part 2 under Waste Information it indicates that the material that was disposed of was sludge and the approximate yardage was 12,000 yards. It would appear that this reference is to the Wolverine material on the sub-site portion of the Northeast Gravel site. Part 2 also indicates that the material is toxic, persistent and soluble. However, we know that the tannery waste is not hazardous. That same form indicates that the 12,000 cubic yards pertains to plating wastes, but the Wolverine sludge is not a plating waste and does not contain the heavy metals which are listed.

    b. In Part 3 of the EPA Site Inspection Report, it indicates that the groundwater samples showed elevated levels of nickel, copper, chromium, zinc, cyanide, and oil and grease. This basically confirms the previous form discussed, that this sample was derived from the sampling wells south of the metal hydroxide area and has really nothing to do with the 12,000 cubic yards of tannery wastes.

    c. In Part 4 of that same form, it once again indicates the 12,000 cubic yards of material. It also goes on to indicate that the dewatered sludge was buried in 15' to 20' deep trenches which would again refer to the Wolverine site.

    d. In Part 9 of that form, the only generator listed is Wolverine World Wide.

This entire fact sheet was discussed with Mr. Fred Norling as well as Mr. John Oakes of the EPA. After going through it with them, they indicated also that there appears to be a great deal of confusion on the EPA Site Inspection Report. Although this is only a supposition, it appears that the EPA contractor, when interviewing various people on the site, related the Wolverine sub-site with the primary metal hydroxide site. The EPA report basically does not mention the metal hydroxide waste with the exception of the one part reporting groundwater contamination.

It is Wolverine World Wide's position to ensure that the record being sent to EPA in Washington for their review is accurate. Wolverine's position is that their waste is not hazardous and, therefore, should not be described as toxic and persistent. It is also Wolverine's position that the sub-site containing their wastes should not be included as a part of the total Northeast Gravel site for any regulatory purposes.

We are hopeful that the State of Michigan can help Wolverine World Wide in ensuring that the record is clear. Once the record is straight, then we will review other portions of the appropriate regulatory acts to determine how to proceed. Right now we are not in a position to know whether the primary Northeast Gravel site is being evaluated or the portion of it where Wolverine World Wide's waste was disposed.

As indicated to you at our May 31 meeting, we believe the above facts to be accurate. Should you have any difficulty with what has been stated above, do not hesitate to call. In summary, it is our opinion that the State assessment of the Northeast Gravel site is accurate and even though EPA sent us this report, it is believed that the EPA site inspection report does not correlate well with the events stated in the State of Michigan file. Hopefully, this clarification can be communicated to EPA for their review.

Very truly yours,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Carl V. Huber, P.E.

mea

cc: Robert Burch, Wolverine World Wide
F. Gene Burch, Wolverine World Wide
Eugene Smary, Esq., Warner, Norcross & Judd

MI-0282-10

ecology and environment, inc.

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

Date Received for Review: 5/14/86 Date Review Completed: 6/3/86

TO: Jerry Goode

FROM: Suzanne Kozlowski

SUBJECT: Northeast Gravel Michigan R05-8504-12

Sample Description: Case # 5840 residential well and blank
ABN, Pesticide/PCB, CN^-, Hg, Metals

Project Data Status: waiting for monitoring wells organic analyses

FIT Data Review Findings:
Ba, Cu, Fe, Sr, Zn, Ca, K, Mg and Na found in residential sample. Copper is the only toxic metal.

Additional Comments:

Book No. 5
Page No. 128

recycled paper

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PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151

Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
ABN ACID FRACTION	12-28%	≤ 36%	SURROGATE MATRIX SPIKES	27-79%	10-107%	SURROGATE SPIKES
ABN BASE NEUTRAL	4-16%	≤ 36%	"	59-116%	25-133%	"

COMMENT:

QC FLAGS:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED MAY 14 1986

DATE: 5-9-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRADE

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: FIT

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

MAY 12 1986

U.S. EPA CENTRAL REGIONAL LAB
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

Corrected Copy

U.S. EPA - REGION V, CENTRAL REGIONAL LABORATORY
536 SOUTH CLARK STREET, CHICAGO, ILLINOIS 60605

RECEIVED MAY 1 4 1986

SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05S74

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

RECEIVED MAY 1 4 1986

STUDY NAME: NORTHEAST GRAVEL STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05S74 ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
39.	86-73-7	FLUORENE	1.0	U
40.	100-02-7	4-NITROPHENOL	1.5	U
41.	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	1.0	U
42.	84-66-2	DIETHYL PHTHALATE	1.0	U
43.	534-52-1	4,6-DINITRO-2-METHYLPHENOL	(15)	U
44.	122-66-7	1,2-DIPHENYLHYDRAZINE	1.0	U
45.	86-30-6	N-NITROSODIPHENYLAMINE *	1.5	U
	122-39-4	DIPHENYLAMINE *		
46.	100-01-6	4-NITROANILINE	3.0	U
47.	101-55-3	4-BROMOPHENYLPHENYL ETHER	1.5	U
48.	118-74-1	HEXACHLOROBENZENE	1.5	U
49.	87-86-5	PENTACHLOROPHENOL	2.0	U
50.	85-01-8	PHENANTHRENE	1.0	U
51.	120-12-7	ANTHRACENE	2.5	U
52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
56.	218-01-9	CHRYSENE **	1.5	U
57.	56-55-3	BENZO(A)ANTHRACENE **		
58.	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	1.0	U
59.	117-84-0	DI-N-OCTYL PHTHALATE	1.5	U
60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
65.	191-24-2	BENZO(GHI)PERYLENE	4.0	U
66.	88-74-4	2-NITROANILINE	1.0	U

CODES: U --- COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT FOR REAGENT WATER.
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

* THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
*** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.

VALUES IN PARENTHESES ARE ESTIMATES. ACTUAL VALUES ARE BEING DETERMINED AT THIS TIME.

corrected copy

U.S. EPA - REGION V, CENTRAL REGIONAL LABORATORY
536 SOUTH CLARK STREET, CHICAGO, ILLINOIS 60605

RECEIVED MAY 14 1986

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SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05R07

ACTIVITY CODE: C48100

	CAS #	COMPOUND	CONCENTRATION (PPB)	
1.	62-53-3	ANILINE	1.5	U
2.	111-44-4	BIS(2-CHLOROETHYL)ETHER	1.5	U
3.	108-95-2	PHENOL	2.0	U
4.	95-57-8	2-CHLOROPHENOL	2.0	U
5.	541-73-1	1,3-DICHLOROBENZENE	2.0	U
6.	106-46-7	1,4-DICHLOROBENZENE	2.0	U
7.	95-50-1	1,2-DICHLOROBENZENE	2.5	U
8.	100-51-6	BENZYL ALCOHOL	2.0	U
9.	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	2.5	U
10.	95-48-7	2-METHYLPHENOL	1.0	U
11.	67-72-1	HEXACHLOROETHANE	2.0	U
12.	621-64-7	N-NITROSODIPROPYLAMINE	1.5	U
13.	98-95-3	NITROBENZENE	2.5	U
14.	106-44-5	4-METHYLPHENOL	1.0	U
15.	78-59-1	ISOPHORONE	2.5	U
16.	88-75-5	2-NITROPHENOL	2.0	U
17.	105-67-9	2,4-DIMETHYLPHENOL	2.0	U
18.	111-91-1	BIS(2-CHLOROETHOXY)METHANE	2.5	U
19.	120-83-2	2,4-DICHLOROPHENOL	2.0	U
20.	120-82-1	1,2,4-TRICHLOROBENZENE	2.0	U
21.	91-20-3	NAPHTHALENE	2.0	U
22.	106-47-8	4-CHLOROANILINE	2.0	U
23.	87-68-3	HEXACHLOROBUTADIENE	2.5	U
24.	65-85-0	BENZOIC ACID	(30)	U
25.	91-57-6	2-METHYLNAPHTHALENE	2.0	U
26.	59-50-7	4-CHLORO-3-CRESOL	1.5	U
27.	77-47-4	HEXACHLOROCYCLOPENTADIENE	2.0	U
28.	88-06-2	2,4,6-TRICHLOROPHENOL	1.5	U
29.	95-95-4	2,4,5-TRICHLOROPHENOL	1.5	U
30.	91-58-7	2-CHLORONAPHTHALENE	1.5	U
31.	208-96-8	ACENAPHTHYLENE	1.5	U
32.	131-11-3	DIMETHYL PHTHALATE	1.5	U
33.	606-20-2	2,6-DINITROTOLUENE	1.0	U
34.	83-32-9	ACENAPHTHENE	1.5	U
35.	99-09-2	3-NITROANILINE	2.5	U
36.	132-64-9	DIBENZOFURAN	1.0	U

STUDY NAME: NORTHEAST GRAVEL

STUDY NUMBER: SF-3151

LAB SAMPLE I.D. NO: SF-3151 86FG05R07

ACTIVITY CODE: C48100

RECEIVED MAY 1 4 1986

	CAS #	COMPOUND	CONCENTRATION (PPB)	
37.	51-28-5	2,4-DINITROPHENOL	(15)	U
38.	121-14-2	2,4-DINITROTOLUENE	1.0	U
39.	86-73-7	FLUORENE	1.0	U
40.	100-02-7	4-NITROPHENOL	1.5	U
41.	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	1.0	U
42.	84-66-2	DIETHYL PHTHALATE	1.0	U
43.	534-52-1	4,6-DINITRO-2-METHYLPHENOL	(15)	U
44.	122-66-7	1,2-DIPHENYLHYDRAZINE	1.0	U
45.	86-30-6	N-NITROSODIPHENYLAMINE *	1.5	U
	122-39-4	DIPHENYLAMINE *		
46.	100-01-6	4-NITROANILINE	3.0	U
47.	101-55-3	4-BROMOPHENYLPHENYL ETHER	1.5	U
48.	118-74-1	HEXACHLOROBENZENE	1.5	U
49.	87-86-5	PENTACHLOROPHENOL	2.0	U
50.	85-01-8	PHENANTHRENE	1.0	U
51.	120-12-7	ANTHRACENE	2.5	U
52.	84-74-2	DI-N-BUTYL PHTHALATE	2.0	U
53.	206-44-0	FLUORANTHENE	1.5	U
54.	129-00-0	PYRENE	1.5	U
55.	85-68-7	BUTYLBENZYL PHTHALATE	3.5	U
56.	218-01-9	CHRYSENE **	1.5	U
57.	56-55-3	BENZO(A)ANTHRACENE **		
58.	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	1.8	for
59.	117-84-0	DI-N-OCTYL PHTHALATE	1.5	U
60.	205-99-2	BENZO(B)FLUORANTHENE ***	1.5	U
61.	207-08-9	BENZO(K)FLUORANTHENE ***		
62.	50-32-8	BENZO(A)PYRENE	2.0	U
63.	193-39-5	INDENO(1,2,3-CD)PYRENE	3.5	U
64.	53-70-3	DIBENZO(A,H)ANTHRACENE	2.5	U
65.	191-24-2	BENZO(GHI)PERYLENE	4.0	U
66.	88-74-4	2-NITROANILINE	1.0	U

common contaminant rubber gloves usually

CODES: U --- COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT FOR REAGENT WATER.
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

* THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.
*** THESE TWO PARAMETERS ARE REPORTED AS A TOTAL.

VALUES IN PARENTHESES ARE ESTIMATES. ACTUAL VALUES ARE BEING DETERMINED AT THIS TIME.

RECEIVED MAY 2 1 1986

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-20-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker, SP
CRL QC Coordinator

TO: Data User: FIT

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED BY
Griffin
MAY 20 1986

U.S. EPA CENTRAL
REGIONAL LAB

RECEIVED MAY 21 1986

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151 Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	~~% Recovery~~ % Bias	Limit	Method of Quality Control
PCB	4%	≤ 35%	MATRIX SPIKES	79-82	60-122 ~~62-118~~	DUPLICATE MATRIX SPIKE
LINDANE	10%			84-93	62-118	
HEPTACHLOR	7%			71-76	62-124	
ALDRIN	5%			78-82	50-104	
ENDOSULFAN-1	0%			81-81	65-123	
DIELDRIN	1%			73-74	79-126	
ENDRIN	9%			168-184 *	69-119	
DDT	14%			48-55 *	66-117	
METHOXYCHLOR	14%			52-60 *	71-139	

COMMENT: * MATRIX EFFECT

QC FLAGS: * RESULTS SHOULD BE CONSIDERED BIASED

Superfund ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

DIVISION/BRANCH: ESD Sampling Date: 4/16/86 (Month Day Year) Arrival Date: 4/7/86 (Month Day Year) Analysis Due Date: 5/7/86 (Month Day Year)

D.U. Number: Y905 Group # : SF 3151 Activity # ; C48100 Study: North East Gravel

ALL UNITS ARE MICROGRAMS PER LITER OR MILLIGRAMS PER KILOGRAM.

RECEIVED MAY 21 1986

Pesticide / Sample #	Y-BHC Lindane	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	Endrin	Endosulfan II	pp-DDE	Beta-BHC	Delta-BHC	α-BHC	pp-DDD	pp-DDT	Methoxy Chlor	Endosulfan sulfate	Endrin aldehyde	Endrin ketone	Toxaphene	Tech-Chlordane
1 86FG05$74	<.05	<.05	<.05	<.05	<.05	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.5	<.1	<.1	<.1	<.1	<.1	<1.0	<.5
2 86FG05R07	<.05	<.05	<.05	<.05	<.05	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.5	<.1	<.1	<.1	<.1	<.1	<1.0	<.5
3																				
4																	AK	5/13/86		
5																	GF	5-14-86		
6																	GF	5-14-86		
7																				
8																				
9																				
10																				
11																				
12																				

Superfund (FIT) ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM: **Form # 1:**

DIVISION/BRANCH: ESD Sampling Date: 4/16/86 (Month Day Year) Arrival Date: 4/17/86 (Month Day Year) Analysis Due Date: 5/7/86 (Month Day Year)

D.U. Number: Y905 Group #: SF3151 Activity #: C48100 Study: North East Gravel

All units are micrograms per liter or milligram per kilograms Sample Type: Water, Sediment, Oil, Sludge

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor	Aroclor	Aroclor	Dibuthyl phthalate	Diethyl Hexyl phthalate	
1	86FG05S74	<.5	<.5	<1.0	<1.0						
2	86FG05R07	<.5	<.5	<1.0	<1.0						
3										AK 5/13/86	
4										G.F 5-14-86	
5										YE 5-16-86	
6											
7											
8											
9											
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
0											
1											
2											

RECEIVED MAY 21 1986

RECEIVED MAY 14 1986

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-9-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: FIT

The Region V Central Regional Laboratory has completed its analyses of 4 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

TRANSMITTED TO FIT
Griffin
MAY 12 1986

U.S. EPA CENTRAL REGIONAL LAB
536 S. CLARK STREET
CHICAGO, ILL. 60605

RECEIVED MAY 14 1986

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151

Matrix: WATER

Site Name: NORTHEAST GRAVEL

	PRECISION			ACCURACY		
Parameter	RPD (R)	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
CN	0.5 µg/L	≤15 µg/L	CONTROL STD	91%	85-115%	CONTROL STD
Hg	.03-.06 µg/L	≤0.1 µg/L	"	115-129% *	"	"

COMMENT: * BIASED HIGH BUT NO Hg DETECTED IN SAMPLES
∴ DATA ACCEPTED

QC FLAGS:

5/6/86
ACTIVITY#C48100
OK-BS
A

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS - NUTRIENTS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER PHENOLICS UG PHENOL/L MIN 74818	WATER CYANIDE UG CN/L MIN 74919	WATER GROSS ALPHA P CI/L MIN 75020	WATER CR+6 UG CR+6/L MIN 74816	WATER MERCURY UG HG/L MIN 74717
86F605S74	5-93902 GRACELAND CHURCH	**	✓ K8			
86F605R07	BLANK 5-93911	*	✓ K5			
86F605S74	5-93905 GRACELAND CHURCH					✓ K0.1
86F605R07	BLANK 5-93912					✓ K0.1
			A. Gadub 4-29-86			RS-ICL 5/1/86
		* Screening by auto flash Distillation MN #335.3				
		** Manual Distillation, Auto spectrophotometric determination MN #74919				

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5/19/86 JS

NORTH EAST GRAVEL
C481ZZ GTFADTWDZZ
SF3151 JR 5-7-86

DL1:[001,054]RUN524.BRN 07-MAY-86 14:38:04 PAGE 3

DATA SET : SF3151

RECEIVED MAY 21 1986

ELEMENT		BLANK FG05R07		FG05S74
AG	ug/L	< 3.00	<	3.00
AL		< 80.0	<	80.0
B		< 80.0	<	~~80.0~~
BA		< 5.0		13.2
BE		< 1.00	<	1.00
CD		< 2.00	<	2.00
CO		< 6.00	<	6.00
CR		< 8.00	<	8.00
CU		< 6.0		36.2
FE		< 80.		135.
LI		< 10.0	<	10.0
MN		< 5.00	<	5.00
MO		< 10.0	<	10.0
NI		< 15.0	<	15.0
SN		< 40.0	<	40.0
SR		< 10.0		41.8
TI		< 25.0	<	25.0
V		< 5.00	<	5.00
Y		< 5.00	<	5.00
ZN		< 40.		343.
CA	mg/L	< 0.5		56.6
K		< ~~0.01 HW~~	< 0.2	~~0.84 HW~~
MG		< 0.1		20.2
NA		< 1.00		1.71

POTASSIUM DATA IS FROM STD CURVE FLAME AA

5-20-86

MI-0282-09

ecology and environment, inc.

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

Date Received for Review: 5/14/86 Date Review Completed: 6/3/86

TO: Jerry Goode

FROM: Suzanne Kozlowski

SUBJECT: Northeast Gravel Michigan RD5-8504-12

Sample Description: Case # 5840 eleven (11) low water metals and cyanide analyses

Project Data Status: waiting for monitoring well organics

FIT Data Review Findings:

Copper, sodium and zinc were detected in the blank MEE606. Do not use copper. [ ] mean above instrument detection but below contract required detection limit. Cyanide was found in the duplicate MEE601 but not in sample MEJ100. A good chromium hit was found in MEJ100 and the duplicate MEE601.

Additional Comments:

Book No. 5
Page No. 128

recycled paper

DATA SUMMARY

Case No. 5840

Laboratory RMAL

Matrix IIW

Units ug/l

EPA TR #	MEJ096	MEJ097	MEJ098	MEJ099	MEJ100	MEE601	MEE602	MEE603	MEE604	MEE605	MEE606			COMMENTS
Lab I D														
Aluminum				[20]			[46]							
Antimony														
Arsenic														
Barium	[26]	[64]	[35]	[63]	[41]	[36]	[23]	[24]	[21]	[72]				
Beryllium														
Cadmium														
Calcium	67900	68500	78900	80500	86100	88200	84000	72300	57800	75700				
Chromium					43	43								
Cobalt														
Copper	[6.7]	[7.1]	[8.6]	[11]	[7.9]	[7.3]	[9.4]	[9.6]	[9.2]	[5.1]	[4]			
Iron		104		[17]		[32]	[87]	[20]	[20]	[32]				
Lead														
Magnesium	22700	24900	25200	25400	27300	28000	24600	24500	21800	25600				
Manganese	[7.4]	63	[6.6]	240	[8.6]	[4.8]	[13]	[7.8]		[8.7]				
Mercury														
Nickel				[9.3]										
Potassium	[2090]	[987]	[2010]	[2440]	[2490]	[2490]	[971]	[1100]	[1320]	[2020]				
Selenium														
Silver														
Sodium	9740	9940	22500	25400	9710	9740	7550	11400	7170	3320	[1030]			
Thallium														
Tin														
Vanadium														
Zinc	23	[15]	[14]	30	[11]	[13]	[20]	22	[18]	[15]	[6.3]			
Cyanide						11								
% Solids														

RECEIVED MAY 1 4 1986

5-14-86

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-9-86

SUBJECT: Review of Region V CLP Data
Received for Review on 5/6/86

RECEIVED MAY 14 1986

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thakkar

TO: Data User: Jt

We have reviewed the data for the following case(s).

SITE NAME: Northeast Gravel SMO Case No. 5840

EPA Data Set No. SE3171 No. of Samples: 11 D.U./Activity Numbers 4905 | C48500

CRL No. 86FG06508 - 86FG06R03

SMO Traffic No. MEJ096-100 ; MEE601 - 606

CLP Laboratory: RMAL Hrs. Required for Review: 2

Following are our findings. This review covers 11 low water samples analysed for metals and cyanide.
Duplicate analysis for Zn showed RPD 23%, a control limit of ±CRDL should be used for samples values less than 5 times CRDL, that is why Zn data is not marked with *
all QC audits are acceptable.

Ada Kim
5.8.86

(X) Data are acceptable for use.
( ) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

EPA FORM 1320-6 (REV 3-76)

RECEIVED 1 4 1986

00002

Form I

86F606508

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEJ096

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	22700	P
✓ 2.	ANTIMONY	26U	P	14.	MANGANESE	[7.4]	P
✓ 3.	ARSENIC	10U	F	✓ 15.	MERCURY	0.1U	CV
4.	BARIUM	[26]	P	✓ 16.	NICKEL	6U	P
✓ 5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2090]	P
✓ 6.	CADMIUM	5U	P	✓ 18.	SELENIUM	5U	F
7.	CALCIUM	67900	P	✓ 19.	SILVER	3U	P
✓ 8.	CHROMIUM	5U	P	20.	SODIUM	9740	P
✓ 9.	COBALT	7U	P	✓ 21.	THALLIUM	10U	F
✓ 10.	COPPER	[6.7]	P	✓ 22.	TIN	16U	P
11.	IRON	16U	P	✓ 23.	VANADIUM	5U	P
✓ 12.	LEAD	5U	F	24.	ZINC	23	P
✓	Cyanide	10U	AS		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ indicate toxic metals
⊙ are hits

CV = [illegible]

Lab Manager [signature]

RECEIVED MAY 1 4 1986
00003

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

36F606509
EPA Sample No.
MEJ097

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	24900	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	63	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[64]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[987]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	68500	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	5U	P	20.	SODIUM	9940	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[7.1]	P	✓22.	TIN	16U	P
11.	IRON	104	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	[15]	P
✓	Cyanide	10U	AS		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ indicate toxic metals
○ are hits

Lab Manager [signature]

RECEIVED MAY 1 4 1986
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Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

86F606510
EPA Sample No.
MEJ098

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	25200	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	[6.6]	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[35]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2010]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	78900	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	5U	P	20.	SODIUM	22500	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[8.6]	P	✓22.	TIN	16U	P
11.	IRON	[20]	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	[14]	P
✓Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ indicate toxic metals
○ are hits

Lab Manager [signature]

RECEIVED MAY 14 1986
00006

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

86FG06512
EPA Sample No.
MEJ100

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	27300	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	[8.6]	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[41]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2490]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	86100	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	43	P	20.	SODIUM	9710	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[7.9]	P	✓22.	TIN	16U	P
11.	IRON	16U	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	[11]	P
✓	Cyanide	10U	AS		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ are toxic metals
O are hits

Lab Manager [signature]

RECEIVED MAY 14 1986

00005

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

86FG06511
EPA Sample No.
MEJ099

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	[20]	P	13.	MAGNESIUM	25400	P
2.	ANTIMONY	26U	P	14.	MANGANESE	240	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[63]	P	16.	NICKEL	[9.3]	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2440]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	80500	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	25400	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[11]	P	22.	TIN	16U	P
11.	IRON	[17]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	30	P
	Cyanide	10U	AS		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: toxic metals are hits

Lab Manager [signature]

RECEIVED MAY 1 4 1986
00007

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

86FG06012
EPA Sample No.
MEE601

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Duplicate of MEJ100

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	28000	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	[4.8]	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[36]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2490]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	88200	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	43	P	20.	SODIUM	9740	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[7.3]	P	✓22.	TIN	16U	P
11.	IRON	[32]	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	[13]	P
✓Cyanide		11	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ are toxic metals
○ are hits

Lab Manager [signature]

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00008

Form I

86FG06513

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEE602

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	[46]	P	13.	MAGNESIUM	24600	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	[13]	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[23]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[971]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	84000	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	5U	P	20.	SODIUM	7550	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[9.4]	P	✓22.	TIN	16U	P
11.	IRON	[87]	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	[20]	P
✓Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ toxic metals
○ are hits

Lab Manager DHratt

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Form I

86FG06514

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEE603

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	24500	P
✓2.	ANTIMONY	26U	P	14.	MANGANESE	[7.8]	P
✓3.	ARSENIC	10U	F	✓15.	MERCURY	0.1U	CV
4.	BARIUM	[24]	P	✓16.	NICKEL	6U	P
✓5.	BERYLLIUM	1U	P	17.	POTASSIUM	[1100]	P
✓6.	CADMIUM	5U	P	✓18.	SELENIUM	5U	F
7.	CALCIUM	72300	P	✓19.	SILVER	3U	P
✓8.	CHROMIUM	5U	P	20.	SODIUM	11400	P
✓9.	COBALT	7U	P	✓21.	THALLIUM	10U	F
✓10.	COPPER	[9.6]	P	✓22.	TIN	16U	P
11.	IRON	[20]	P	✓23.	VANADIUM	5U	P
✓12.	LEAD	5U	F	24.	ZINC	22	P
✓Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ✓ are toxic metals
○ are hits

Lab Manager [signature]

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Form I

86FG06515

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEE604

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	21800	P
2.	ANTIMONY	26U	P	14.	MANGANESE	4U	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[21]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[1320]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	57800	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	7170	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[9.2]	P	22.	TIN	16U	P
11.	IRON	[20]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[18]	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: 8 are toxic metals
are hits

Lab Manager D. Hatt

RECEIVED MAY 1 4 1986

00011

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

86FG06316
EPA Sample No.
MEE605

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	25600	P
2.	ANTIMONY	26U	P	14.	MANGANESE	[8.7]	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	[72]	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	[2020]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	75700	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	33200	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[5.1]	P	22.	TIN	16U	P
11.	IRON	[32]	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[15]	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: toxic metals are hits

Lab Manager [signature]

RECEIVED 1 4 1986

00012

Form I

86FG06R03

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEE606

Date 5-2-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 5840
QC REPORT NO. 55887

Elements Identified and Measured

BLANK

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

UG/L

1.	ALUMINUM	19U	P	13.	MAGNESIUM	295U	P
2.	ANTIMONY	26U	P	14.	MANGANESE	4U	P
3.	ARSENIC	10U	F	15.	MERCURY	0.1U	CV
4.	BARIUM	11U	P	16.	NICKEL	6U	P
5.	BERYLLIUM	1U	P	17.	POTASSIUM	542U	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	352U	P	19.	SILVER	3U	P
8.	CHROMIUM	5U	P	20.	SODIUM	[1030]	P
9.	COBALT	7U	P	21.	THALLIUM	10U	F
10.	COPPER	[4]	P	22.	TIN	16U	P
11.	IRON	16U	P	23.	VANADIUM	5U	P
12.	LEAD	5U	F	24.	ZINC	[6.3]	P
Cyanide		10U	AS	Percent Solids (%)			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: FIELD BLANK

Lab Manager [signature]

RECEIVED MAY 1 4 1986

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Form III

Q.C. Report No. 55887

BLANKS

LAB NAME ROCKY MOUNTAIN ANALYTICAL CASE NO. 5840

DATE 5-2-86 UNITS ug/L

Matrix WATER

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2	
Metals:								
1. ALUMINUM	19U	19U	19U			19U		
2. ANTIMONY	26U	26U	26U			26U		
3. ARSENIC	10u	10u	10u	10u		10u		F
4. BARIUM	11U	11U	11U			11U		
5. BERYLLIUM	1U	1U	1U			1U		
6. CADMIUM	5U	5U	5U			5U		
7. CALCIUM	352U	352U	352U			352U		
8. CHROMIUM	5U	5U	5U			5U		
9. COBALT	7U	7U	7U			7U		
10. COPPER	3U	3U	3U			[4.4]		
11. IRON	16U	16U	16U			16U		
12. LEAD	5u	5u	5u	5u		5u		F
13. MAGNESIUM	295U	295U	295U			295U		
14. MANGANESE	4U	4U	4U			4U		
15. MERCURY	0.1u	0.1u	0.1u			0.1u		
16. NICKEL	6U	6U	6U			6U		
17. POTASSIUM	542U	542U	542U			542U		
18. SELENIUM	5u	5u	5u	5u		5u		
19. SILVER	3U	3U	3U			3U		
20. SODIUM	[1230]	[1720]	[1930]			[1490]		
21. THALLIUM	10u	10u	10u	10u		10u		
22. TIN	16U	16U	16U			16U		
23. VANADIUM	5U	5U	5U			5U		
24. ZINC	2U	2U	2U			[2.9]		
Other:								
Cyanide	10u	10u	10u			10u		

QC EXCEPTION SUMMARY REPORT

CASE # 5840
DATA SET # SF3171
LAB Q.C.# 55887
DATE:

SITE Northeast Gravel
LAB RMAL
REVIEWED BY [illegible]

MATRIX: IIW
CONC. : IIL

WATER SAMPLE SPK. MES097
WATER SAMPLE DUP. MES096
SOIL SAMPLE SPK.
SOIL SAMPLE DUP.

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER / COMMENTS
	Holding Time	Cal Blanks	Init Cal ver	Contin Cal ver	Prep Blk AQ	Prep Blk SOL	ICS %R	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk. %R	AQ Dup RPD	AQ Spk %R	Ser Dln AQ	Ser Dln SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blind Blank	Blind Spike %R	Split Sample RPD	
Aluminum																								
Antimony																								
Arsenic																								
Barium																								
Beryllium																								
Cadmium																								
Calcium																								
Chromium																								
Cobalt																								
Copper																								
Iron																								
Lead																								
Magnesium																								
Manganese																								
Mercury																								
Nickel																								
Potassium																								
Selenium																								
Silver																								
Sodium																								
Thallium																								
Tin																								
Vanadium																								
Zinc																								
Cyanide																								

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RECEIVED MAY 14 1986
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Form V

Q.C. Report No. 55887

SPIKE SAMPLE RECOVERY

LAB NAME ROCKY MOUNTAIN ANALYTICAL

DATE 5-2-86

CASE NO. 5840
EPA Sample No. MEJ097
Lab Sample ID No. -
Units UG/L

MATRIX WATER

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R[1]
Metals:					
1. ALUMINUM	75-125	1680	19U	2000	84
2. ANTIMONY	75-125	484	26U	500	97
3. ARSENIC	75-125	22	10U	20	110
4. BARIUM	75-125	1740	[64]	2000	84
5. BERYLLIUM	75-125	47	1U	50	94
6. CADMIUM	75-125	44	5U	50	88
7. CALCIUM	75-125	155000	68500	100000	87
8. CHROMIUM	75-125	168	5U	200	84
9. COBALT	75-125	488	7U	500	98
10. COPPER	75-125	240	[7.1]	250	93
11. IRON	75-125	1020	104	1000	92
12. LEAD	75-125	24	5U	20	120
13. MAGNESIUM	75-125	71000	24900	50000	92
14. MANGANESE	75-125	239	63	200	88
15. MERCURY	75-125	1.01	0.1U	1	101
16. NICKEL	75-125	356	6U	400	89
17. POTASSIUM	75-125	47700	[987]	50000	93
18. SELENIUM	75-125	7.5	5U	10	75
19. SILVER	75-125	44	3U	50	88
20. SODIUM	75-125	99800	9940	100000	90
21. THALLIUM	75-125	43	10U	50	86
22. TIN	75-125	344	16U	400	86
23. VANADIUM	75-125	468	5U	500	94
24. ZINC	75-125	205	[15]	200	95
Other:					
Cyanide	75-125	104	10U	100	104

[1] %R = [(SSR - SR)/SA] x 100
"R"- out of control

Comments:

Form VI

Q.C. Report No. 55867 RECEIVED MAY 14 1986

DUPLICATES

LAB NAME ROCKY MOUNTAIN ANALYTICAL

DATE 5-2-86

CASE NO. 5840
EPA Sample No. MEJ096
Lab Sample ID No. -
Units UG/L

Matrix WATER

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. ALUMINUM		19U	19U	NC
2. ANTIMONY		26U	26U	NC
3. ARSENIC		10U	10U	NC
4. BARIUM		[26]	[26]	NC
5. BERYLLIUM		1U	1U	NC
6. CADMIUM		5U	5U	NC
7. CALCIUM		67900	68000	0.15
8. CHROMIUM		5U	5U	NC
9. COBALT		7U	7U	NC
10. COPPER		[6.7]	[7.5]	NC
11. IRON		16U	[20]	NC
12. LEAD		5U	5U	NC
13. MAGNESIUM		22700	22700	0
14. MANGANESE		[7.4]	[7.6]	NC
15. MERCURY		0.1U	0.1U	NC
16. NICKEL		6U	6U	NC
17. POTASSIUM		[2090]	[2070]	NC
18. SELENIUM		5U	5U	NC
19. SILVER		3U	3U	NC
20. SODIUM		9740	9320	4.4
21. THALLIUM		10U	10U	NC
22. TIN		16U	16U	NC
23. VANADIUM		5U	5U	NC
24. ZINC		23	29	23
Other:				
Cyanide		10U	10U	NC

X Out of Control

[1] To be added at a later date. [2] RPD = [|S-D|/((S+D)/2)] x 100

NC - Non calculable RPD due to value(s) less than CRDL

MI-0282-08

ecology and environment, inc.

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

Date Received for Review: 4/29/86 Date Review Completed: 5/7/86

TO: Jerry Goode

FROM: Suzanne Kozlowski

SUBJECT: NE Gravel Michigan R05-8504-12

Sample Description: Case # CRL one residental water and blank As, Sb, Se, Pb and Tl and VOA data

Project Data Status: waiting for rest of metals, CN^-, Hg^{+2}, ABN, Pest/PCB data for residential well AND Monitor Well Data

FIT Data Review Findings: for 574
The VOA TIC page is missing. No organics detected in sample. Pb was detected in sample 574.

Additional Comments:

Book No. 5
Page No. 128, 130

recycled paper

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151 Matrix: WATER

Site Name: NORTHEAST GRAVEL

RECEIVED APR 2 9 1996

	PRECISION			ACCURACY		
Parameter	RPD R	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
As	0.7 µg/L	≤ 2 µg/L	CONTROL STANDARD	92-95%	90-110%	CONTROL STANDARD
Pb	0.4 µg/L	"	"	105-106%	90-110%	"
Sb	0.5 µg/L	"	"	99-104%	"	"
Se	0.6 µg/L	"	"	91-97%	"	"
~~Tl~~						

COMMENT:

QC FLAGS:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED APR 2 9 1986

DATE: 4-25-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST GRAVEL

FROM: Steve Parker, SP
CRL QC Coordinator

TO: Data User: FIT

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

Griffin
APR 28 1986

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05#74

Data Set #: SF-3151
Matrix : WATER

	CAS #	Compounds	Concentration (PPB)
1.	74-87-3	Chloromethane	10 U
2.	74-83-9	Bromomethane	10 U
3.	75-01-4	Vinyl Chloride	10 U
4.	75-00-3	Chloroethane	1.5 U
5.	75-09-2	Methylene Chloride	1.0 U
6.	107-02-8	Acrolein	100 U
7.	67-64-1	Acetone	75 U
8.	107-37-1	Acrylonitrile	50 U
9.	75-15-0	Carbon Disulfide	3.0 U
10.	75-35-4	1,1-Dichloroethene	1.5 U
11.	75-35-3	1,1-Dichloroethane	1.5 U
12.	156-60-5	trans-1,2-Dichloroethene	1.5 U
13.	67-66-3	Chloroform	1.5 U
14.	78-93-3	2-Butanone	50 U
15.	107-06-2	1,2-Dichloroethane	1.5 U
16.	71-55-6	1,1,1-Trichloroethane	1.5 U
17.	56-23-5	Carbon Tetrachloride	1.5 U
18.	108-05-4	Vinyl Acetate	15 U
19.	75-27-4	Bromodichloromethane	1.5 U
20.	78-87-5	1,2-Dichloropropane	1.5 U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0 U
22.	79-01-6	Trichloroethene	1.5 U
23.	71-43-2	Benzene	1.5 U
24.	124-48-1	Dibromochloromethane	1.5 U
25.	79-00-5	1,1,2-Trichloroethane	1.5 U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0 U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5 U
28.	75-25-2	Bromoform	1.5 U
29.	108-10-1	4-Methyl-2-pentanone	2.5 U
30.	519-78-6	2-Hexanone	3.6 U
31.	127-18-4	Tetrachloroethene	1.5 U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5 U
33.	108-88-3	Toluene	1.5 U
34.	108-90-7	Chlorobenzene	1.5 U
35.	100-41-4	Ethylbenzene	1.5 U
36.	100-42-5	Styrene	1.0 U
37.	108-38-3	m-Xylene	2.0 U
38.		o,p-Xylene (total)	2.5 U

RECEIVED APR 29 1986

Data Qualifiers:

U -Compound was analyzed for but not detected. The value reported is the method detection limit for reagent water.

SLC -Suspected Laboratory Contaminant.

SFC -Suspected Field Contaminant.

PRECISION AND ACCURACY STATEMENT

Data Set: SF 3151

Matrix: WATER

Site Name: NORTHEAST GRAVEL

RECEIVED APR 29 1986

	PRECISION			ACCURACY		
Parameter	RPD R'	Limit	Method of Quality Control	% Recovery % Bias	Limit	Method of Quality Control
VOA	NOT AVAILABLE *	≤ 22%	DUPLICATE MATRIX SPIKES	83-102%	77-133%	MATRIX SPIKES

COMMENT: * EQUIPMENT FAILURE - SURROGATES - 5% RPD

QC FLAGS:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 4-25-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTH EAST GRAVEL

FROM: Steve Parker,
CRL QC Coordinator

TO: Data User: FIT

The Region V Central Regional Laboratory has completed its analyses of 2 (number) WATER (matrix type) samples for the parameters listed on the attached sheet. The discrete values reported on the result forms should be considered to be of the precision and accuracy levels listed.

PRECISION is a measure of reproducibility or the closeness with which individual measurements of the same property, under similar conditions agree with each other. It is expressed as the relative percent difference (RPD) or the absolute concentration difference (R') between duplicate analyses. The limit acceptable at the time of analysis is stated. QC data within these limits indicate that the analysis was in control for that set of data.

ACCURACY is a measure of the closeness of an individual measurement to the expected value. It can be expressed as percent recovery of a known spike or standard concentration, or as percent bias which is the deviation from the true value. The limits applicable at the time of analysis are stated. A 95% confidence interval means that 95% of the time, percent recovery will fall between those limts.

Attachment

RECEIVED APR 29 1986

REGISTERED BY
Griffin
APR 28 1986

U S EPA CENTRAL REGIONAL LAB
536 S CLARK STREET
CHICAGO ILLINOIS 60605

4/21/86 ACTIVITY # C4817 6TFA05WUZZ

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLE DATE 4/16/86 LAB ARRIVAL DATE 4/17/86 DUE DATE 5/7/86

DU NUMBER Y405 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

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CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET161	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
86FG05S74	5-93901 GRACELAND CHURCH	✓	✓ <2	✓ 2.7	✓ <2	✓ <2	
86FG05R07	BLANK 5-93910	✓	✓ <2.	✓ <2	✓ <2	✓ <2	
			I.L	I.L	I.L	I.L	
			4.18.86	4.18.86.	4.18.86	4.18.86.	

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05P07

Data Set #: SF-3151
Matrix : WATER

BLANK

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	CAS #	Compounds	Concentration (PPB)
1.	74-87-3	Chloromethane	10 U
2.	74-83-9	Bromomethane	10 U
3.	75-01-4	Vinyl Chloride	10 U
4.	75-00-3	Chloroethane	1.5 U
5.	75-09-2	Methylene Chloride	1.0 U
6.	107-02-8	Acrolein	100 U
7.	67-64-1	Acetone	75 U
8.	107-37-1	Acrylonitrile	50 U
9.	75-15-0	Carbon Disulfide	3.0 U
10.	75-35-4	1,1-Dichloroethene	1.5 U
11.	75-35-3	1,1-Dichloroethane	1.5 U
12.	156-60-5	trans-1,2-Dichloroethene	1.5 U
13.	67-66-3	Chloroform	1.5 U
14.	78-93-3	2-Butanone	50 U
15.	107-06-2	1,2-Dichloroethane	1.5 U
16.	71-55-6	1,1,1-Trichloroethane	1.5 U
17.	56-23-5	Carbon Tetrachloride	1.5 U
18.	108-05-4	Vinyl Acetate	15 U
19.	75-27-4	Bromodichloromethane	1.5 U
20.	78-87-5	1,2-Dichloropropane	1.5 U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0 U
22.	79-01-6	Trichloroethene	1.5 U
23.	71-43-2	Benzene	1.5 U
24.	124-48-1	Dibromochloromethane	1.5 U
25.	79-00-5	1,1,2-Trichloroethane	1.5 U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0 U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5 U
28.	75-25-2	Bromoform	1.5 U
29.	108-10-1	4-Methyl-2-pentanone	2.5 U
30.	519-78-6	2-Hexanone	3.6 U
31.	127-18-4	Tetrachloroethene	1.5 U
32.	79-34-5	1,1,2,2-Tetrachloroethane	1.5 U
33.	108-88-3	Toluene	1.5 U
34.	108-90-7	Chlorobenzene	1.5 U
35.	100-41-4	Ethylbenzene	1.5 U
36.	100-42-5	Styrene	1.0 U
37.	108-38-3	m-Xylene	2.0 U
38.		o,p-Xylene (total)	2.5 U

Data Qualifiers:

U -Compound was analyzed for but not detected. The value reported is the method detection limit for reagent water.

SLC -Suspected Laboratory Contaminant.

SFC -Suspected Field Contaminant.

VOLATILE ORGANIC ANALYSIS DATA SHEET
U.S. EPA - Region V, Central Regional Laboratory

Study Name: NORTHEAST GRAVEL
Sample # : 86FG05R07

Data Set #: SF-3151
Matrix : WATER

BLANK

TENTATIVELY IDENTIFIED COMPOUNDS	ESTIMATED CONC. (PPB)
UNKNOWN#1	7.9

RECEIVED APR 2 9 1986

5303-SM 282

RECORD OF COMMUNICATION

☒ PHONE ☐ PERSONAL ☐ MEETING ☐ CONFERENCE
☐ OTHER (SPECIFY)
(Record of Telephone Conversation)

TO: Marge Kolkar
Acting Field Supervisor
U.S. Fish & Wildlife Service

FROM: Joan Calabrese
US EPA
Region V

DATE: [illegible]
TIME: 11:05 am

SUBJECT: Lost Lake, MI
Information regarding "Distance to a Sensitive Environment" for HRS for 5 Michigan potential NPL sites

SUMMARY OF COMMUNICATION

Marge said that there are no ~~to~~ officially designated "critical habitat(s) of an endangered species or "national wildlife refuge(s) in Michigan.

6 6 5 ft
2 miles

Marge wanted to make clear to me what would ~~constitute~~ constitute a wetland if an area of land is adjacent to a large body of water (such as the Grand River) it is considered a wetland. Intermittent streams & small ponds are considered wetlands

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORM HRS
TO

EPA [illegible]

Department of Natural Resources Environmental Enforcement Division	1. County Kent	No 41	2 Date of Report 7-25-80	3 File No 277-41-80	4 File Class 0245
	5. Township Plainfield Sec 24		6 Date of Original	7 ☐ Original Investigation ☒ Supplementary Investigation	
8 Division or District Law Division District 9	9. City or Village Belmont		10 PEAS No		
11 Type of Site Groundwater Contamination Task Force			12 Type of Investigation Criminal / Civil		
13 Name of Site/Facility/Firm Northeast Gravel Company					
14 Address 4300 Cannonsburg Rd., Belmont, Michigan					
15 Contacted Lester Bauer			16 Position General Manager		
17 Origin G.C.T.F.					
18 Address					
19 Received by			20 Investigating Officers William Leutscher / E. Bols		

INFORMATION:
Northeast Gravel Company operated a sludge disposal area until 1978. The area was used for dewatering and landfilling of these industrial sludges. Part of the area was also used as adisposal area for waste from Wolverine Worldwide of Rockford. This disposal area was closed in January 1980. Monetor wells were installed (3) for monetoring the sludge disposal area and other wells have been installed to monetor the Wolverine disposal area.

INTERVIEW:
7-9-80 Mr. Lester Bauer was advised of rights by ECO Leutscher. Mr. Bauer indicated that the company would have no objection to the search and sampling by the DNR.

SITE INSPECTION AND SAMPLING:
7-23-80 On site: E. Bols, Wm Leutscher. For company: Lester Bauer.
Monetor well #1 was sampled. Monetor Well #2 could not draw out a sample with a hand pump. Monetor Well #3 had been damaged and could not be sampled. The sample was taken by E. Bols. The area used previously by Wolverine was inspected by officers but no samples were taken from the monetor wells.

STATUS:
Open

21 Investigating Officer's Signature	22 Name (Typed)	23 Reviewing Officer
William O. Leutscher	William O. Leutscher	
24 Station and Address: District 9 Grand Rapids		☐ Closed

MODIFIED LEGRAND ASSESSMENT

MD-282-10

COUNTY	OWNER CAT	SITE CLASS	SITE NUMBER	SITE LOCATION	SITE ID
HENT	PRV	A		41 0 8 N 1 1 W 2 4 C A	3 2

NAME A) OWNER B) OPERATOR C) COMPLAINANT D) APPLICANT E) NONE

NORTHEAST GRAVEL CO.

MAILING ADDRESS

4300 CANNONSBURG ROAD

CITY	STATE	ZIP CODE	AREA CODE	TELEPHONE NUMBER
BELMONT	MI			-

DATE ASSESSED	SIC CODE	WASTE ID	SITE STATUS	HYDROGEO REPORT?
09 05 80	311		I	A A B — FISHBURN, TOMPKINS, CARR + HUBER, INC

STEP 1 *	STEP 2 *	STEP 3 Q *	STEP 4	STEP 5 *	STEP 6	STEP 7	STEP 8	STEP 9	MISCELLANEOUS IDENTIFIERS
9D 2	5A 1	8 1	22	7A 2	3	0	10	6	T

Has the groundwater or surface water quality in the site area been adversely affected? 1) YES 2) NO 3) UNKNOWN

Explain: Low level chromium found in monitor wells near site, not in wells 100-200' downgradient

Have drinking water wells in the site area been adversely affected? If so, what type? 1) YES 2) NO 3) UNKNOWN

Explain

REPRESENTATIVE WELL RECORD

Location
A) 5 wells/ 1 sq mi @ 70 ft.
B) 3 wells/ 1 sq. mi @ 145 ft.
C) ____ wells/ ____ sq mi @ ____ ft
D) ____ wells/ ____ sq mi @ ____ ft

Lithology	Thickness	DEP
(A)		
SAND-GRAV.	12	12
GRAV	13	25
SAND	5	30
SAND+GRAV	20	50
FINE SAND	8	58
(B)		
CLAY	62	62
GRAV	10	72
CLAY	32	104
GRAV	28	132
CLAY	2	134
OTR SAND	14	148

COMMENTS

STEP 1 - Engineering plans, ARD files, 1961, indicate base of trenches ≈ 8 ft above water table. (W.T. elev. from hydro evaluation, W. Ghent)

STEP 3 - Memo, ARD files 9-7-77, "discontinue taking plating wastes."
9-2-77 - Disposal of heavy metal sludge.
9-31-73 ~~substantial~~ quantities of oil (500 gal) in sludge dewatering pit.

HYDROGEO REPORT - ~~indicates~~ low levels of chromium in groundwater near disposal site. Not found ≈ 200 ft away. Cluster wells advisable to detect if contaminants migrated on plume migrating vertically as well as laterally.

C.P.

May 1, 1980

Mr. F. Gene Parch, C.P.E.
Wolverine World Wide, Inc.
Rockford, Michigan 49351

File Rec Rec
S Reg III

Re: Northeast Gravel Company Landfill
Kent County

Dear Mr. Parch:

As you are aware, Northeast Gravel Landfill was directed to close its operation last September 1979. Subsequent to that direction you requested on behalf of Wolverine World Wide, Inc. an extension until January 1, 1980, for material disposed of at the site from Wolverine.

We agreed to that extension contingent upon a consent agreement which was drafted and provided to our Environmental Enforcement Division. Although the consent agreement was not released by Environmental Enforcement the site was allowed to continue on an interim basis through January 1, 1980.

My interest at this time is not what has transpired but the current situation and possible future problems. It is my understanding that disposal did cease on January 1, 1980, as per our verbal agreement. Although we did not discuss or agree to finalization of the site, I think it is imperative that an impermeable seal be provided to the material and that the area be restricted so that existing ground operations will not disturb it.

I will appreciate receiving from you a status report relative to Wolverine's disposal of material at Northeast Gravel Landfill and what you would consider your company's interest or commitment toward finalizing the disposal area.

Very truly yours,

RESOURCE RECOVERY DIVISION

Rod L. Mosier, Regional Supervisor

RLM:sl

cc: Jim Miller
C. Heyt
L. Bauer

This document paid for with State Funds

B5-8504-12

MI-282-09

NON-NOTIFICATION DISPOSITION FORM

1. Name of Installation: Northeast Gravel Company

   Installation Mailing Address: 4300 Cannonsburg Road

   Belmont | MI | 49306

   City or Town | State | Zip Code

2. Location of Installation: Same as Above

   City or Town | State | Zip Code

3. Installation Contact: Lester Bauer - Owner

   Name and Title

   Phone No.: 616-361-6192 or 616-361-0255

   Area Code and Number

4. Type of Hazardous Waste Activity if Determined (check one):

   [ ] Generation [ ] Transportation

   [ ] Treat/Store/Dispose [ ] Underground Injection

5. Description of State follow-up action (including name of State assignee, file data reviewed, person(s) contacted by State, date(s) and type of contact(s), and information obtained):

   See attached addendum

6. List of Supporting Documents Attached:

   See attached addendum

7. Type of Enforcement Action Recommended by State:

   See attached addendum

8. Disposition Form Signed and Dated by State:
   Brian Monroe, Water Quality Specialist Brian Monroe

   Date 6-11-81

4300 CONNONSBURG ROAD
BELMONT MI 49306

THIS IS YOUR MONTHLY REPORT FORM FOR
SEE REVERSE SIDE FOR RETURN MAIL

NORTHEAST GRAVEL COMPANY
OUTFALL # 008
METALLIC SLUDGE DISCHARGE

RECEIVED
MAR 24 1976
Water Qual. Control

Please complete and submit two copies of this form at the end of each month. This report must reach our Lansing office by the 10th of the month.

LATE REPORT

89 | REPORT NUMBER MS0000238 | OUTFALL NUMBER 410187

PARAM.	32270	01030	01042	00720	01065	00400	
NAME	CHLOROFORM-EXTRA	CHROMIUM-DISSOLV	COPPER-DISSOLVED	CYANIDE-TOTAL	NICKEL-DISSOLVED	PH	
UNITS	UG/L	UG/L	UG/L	MG/L	UG/L	0 TO 14	
LIMIT	MAXIMUM 25	MAXIMUM 50	MAXIMUM 500	MAXIMUM 0.1	MAXIMUM 500	MAXIMUM 10.5 MINIMUM 8.5	
DATE	1 DAILY AVG HIGH LOW	1 DAILY AVG HIGH LOW	1 DAILY AVG HIGH LOW	1 DAILY AVG HIGH LOW	1 DAILY AVG HIGH LOW	1 DAILY AVG HIGH LOW	1 DAILY AVG HIGH LOW
1							
4							
5							
6							
7							
8							
9	1 none	1 13	1 71	1 45	1 7.2	9.7	
10							
11							
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29							
30							
31							
MONTHLY SUMMARY	AVERAGE	AVERAGE 13	AVERAGE 71	AVERAGE 45	AVERAGE 7.2	AVERAGE 9.7	AVERAGE
	MAXIMUM	MAXIMUM	MAXIMUM	MAXIMUM	MAXIMUM	MAXIMUM	MAXIMUM
	NUMBER DAYS REPORTING	NUMBER DAYS REPORTING	NUMBER DAYS REPORTING	NUMBER DAYS REPORTING	NUMBER DAYS REPORTING	NUMBER DAYS REPORTING	NUMBER DAYS REPORTING
	TOTAL SAMPLES TAKEN	TOTAL SAMPLES TAKEN	TOTAL SAMPLES TAKEN	TOTAL SAMPLES TAKEN	TOTAL SAMPLES TAKEN	TOTAL SAMPLES TAKEN	TOTAL SAMPLES TAKEN
	DAYS EXCEEDING MAXIMUM	DAYS EXCEEDING MAXIMUM	DAYS EXCEEDING MAXIMUM	DAYS EXCEEDING MAXIMUM	DAYS EXCEEDING MAXIMUM	DAYS EXCEEDING MAXIMUM	DAYS EXCEEDING MAXIMUM
	AVG. EXCEEDANCE	AVG. EXCEEDANCE	AVG. EXCEEDANCE	AVG. EXCEEDANCE	AVG. EXCEEDANCE	AVG. EXCEEDANCE	AVG. EXCEEDANCE
BEGINNING DATE 09 1 76		DUP PUNCH (69-80)	DUP PUNCH (69-80)	DUP PUNCH (69-80)	DUP PUNCH (69-80)	DUP PUNCH (69-80)	DUP PUNCH (69-80)
ENDING DATE 09 30 76 (M M D D Y Y)							

SIGNATURE OF CERTIFIED OPERATOR No Operator

CERTIFICATION NUMBER 410188

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

TELEPHONE NUMBER 616 - 361-6192

R4515 Rev. 3/75

ROAD GRAVEL - Crushed or Bank
STONE and FILL SAND

WE WILL DELIVER ANYWHERE

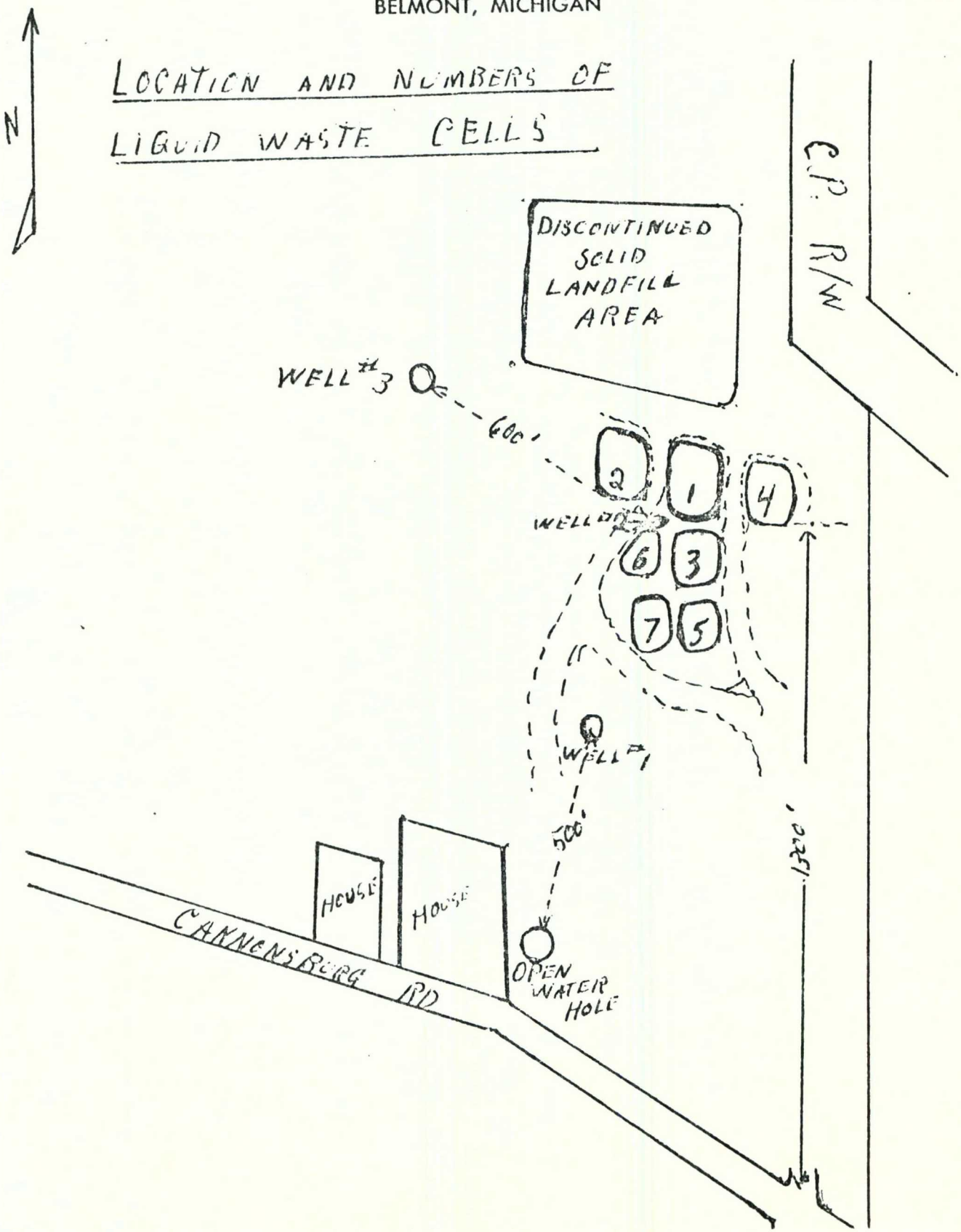
Northeast Gravel Co.

Phone 361-6192

4300 CANNONSBURG RD.

BELMONT, MICHIGAN

RECEIVED
SEP 29 1975
Water Qual. Control



CHEMICAL ANALYSIS

Waste Waters

Michigan Water Resources Commission

O.

B 158

Received _____ Sample or Sta. No. _____

Source N. E. Guard (Name of Industry or Municipality) _____ (City or Twp.) Kent (County)

Location _____

Type of Waste: metals, food, paper, chemical, petroleum, machinery, _____

Collection start _____ am pm 11-25-75, ending _____ am pm --

Water Temperature _____ °C °F Flow _____ gpm cfs

Apperance Blue liquid

Receiving Water Impoundment

Collected by T. Lapp

Report results to " "

Address O + H M C Staff

CK	Determination	mg/l	CK	Determination	mg/l
	DO				
	BOD				
V	pH	11.1			
	Susp. Solids				
	Susp. Vol. Solids				
	Sol. Ortho PO_4-P				
	Total PO_4-P				
	NO_3-N				
	NH_3-N				
E	Cu	.08			
E	Ni	<.05			
E	CN	3.8			
E	Cr^{+6}	.02			
E	Cr^{+3}	3.0			

Examiner [illegible]

R 4564
Rev 7/72

Waste Waters
Michigan Water Resources Commission

03960

Received _____ Sample or Sta. No. _____

Source N E Gravel (Name of Industry or Municipality) _____ (City, or Twp.) Kent (County)

Location _____

Type of Waste (metals), food, paper, chemical, petroleum, machinery, _____

Collection start _____ am/pm 6 – 5 7 5, ending _____ am/pm —

Water Temperature _____ °C/°F Flow _____ gpm/cfs

Apperance Lt. Green color

Receiving Water N. E. lagoon

Collected by Tom Leep

Report results to " "

Address 8th floor Mason Bldg

OK	Determination	mg/l	OK	Determination	mg/l
	DO				
	BOD				
N	pH	8.5			
	Susp. Solids				
	Susp. Vol. Solids				
	Sol. Ortho PO_4-P			Filter all Test	
	Total PO_4-P				
	NO_3-N				
	NH_3-N				
	Cu	0.[illegible]			
	Ni	[illegible]			
	Cr^6 Cr^3	43,730		N/C - will have [illegible]	
	CN	0.[illegible]			

Examiner J. R.

R 4064
Rev. 7/72

Waste Waters
Michigan Water Resources Commission

0395[illegible]

Received _____ Sample or Sta. No. _____

Source N. E. Gravel (Name of Industry or Municipality) _____ (City or Twp.) Kent (County)

Location _____

Type of Waste (metals), food, paper, chemical, petroleum, machinery, _____

Collection start _____ am/pm 6 – 5 7 5, ending _____ am/pm —

Water Temperature _____ °C/°F Flow _____ gpm/cfs

Apperance Blue-Green Color

Receiving Water N Middle lagoon

Collected by Tom Leep

Report results to " "

Address 8th floor Mason Bldg.

OK	Determination	mg/l	OK	Determination	mg/l
	DO				
	BOD				
Y	pH	10.1			
	Susp. Solids				
	Susp. Vol. Solids				
	Sol. Ortho PO_4-P			Filter All Tests	
	Total PO_4-P				
	NO_3-N				
	NH_3-N				
	Cu	0.[illegible]			
	Ni	0.0[illegible]			
	Cr^6 Cr^3	4,7[illegible]			
	CN	0.[illegible]			

Examiner J. R.

R 4064
Rev. 7/72

LOCATION	POPULATION	OWNERSHIP	SOURCE	TREATMENT					
				Std. Filtration	Lime Softening	Zeolite Softening	Iron Removal	Chlorination	Fluoridation
KALAMAZOO COUNTY (Cont'd)									
Portage Township	800	M	Water from City of Kalamazoo.						
Fabercrest	70	T	Well in drift 120′ deep						
Portage Junior High School property									
Lexington Green	100	T	Wells in drift 180′ deep						
Sprinkle Road (2 wells)									
Milham School Area	1,330	T	Wells in drift 182′ to 186′ deep						
Milham School property (2 wells)									
Pershing School Area	100	T	Wells in drift 169′ to 174′ deep						
Centre Ave. and Penn. R. R. (2 wells)									
Twyckenham Area	750	T	Wells in drift 92′ to 142′ deep						
Amberly School property (2 wells)									
Schuring Avenue and Rockford Street									
Westfield Plat	100	T	Wells in drift 146′ to 185′ deep						
Milham Avenue (2 wells)									
Schoolcraft	1,205	M	Wells in drift 62′ to 183′ deep					x	
Cass and Earl Streets (3 wells)									
Vicksburg	2,224	M	Wells in drift 81′ to 143′ deep						
Richardson and Prairie Streets (2 wells)									
Fourth and Kenyon Streets									
KALKASKA COUNTY									
Kalkaska	1,250	M	Wells in drift 75′ to 255′ deep				x	x	
Laurel and Chestnut Streets									
Hyde and Chestnut Streets									
Birch and Kalkaska Streets									
KENT COUNTY									
Alpine Township									
Westgate Subdivision (Owner: Northgate Water Co.)	1,300	P	Wells in drift 91′ to 140′ deep						
Westgate and Lamoreaux									
Branywyne Drive									
Westnedge and Springfield									
Bekins Street									
Cannon Township									
Rockford Village Subdivision	150	M	Water from Rockford.						
Cedar Springs	1,768	M	Wells in drift 47′ to 90′ deep						x
Maple and Main Streets (2 wells)									
Beech Street and Park Street									
Courtland Township									
Rockford Village Subdivision	30	M	Water from Rockford.						
East Grand Rapids	10,924	M	2000′ of 16″ and 1,100′ of 24″ Intake 40′ deep in Reed's Lake					x	x
Grand Rapids	212,270	M	Lake Michigan: 6,200′ of 54″ Intake 55′ deep in Lake Michigan	x					x
Grand Rapids Township									
Cascadia Subdivision No. 2		T	Water from Grand Rapids.						
Forest Hills Subdivision (2 wells) (Owner: Mr. R. D. Brooks)	40	P	Wells in drift 150′ deep					x	
Michigan Veterans Facility (Owner: State of Michigan)	470	S	Water from Grand Rapids.						
North Park (Owner: North Park Water Co., Mr. Charles Russell)	400	P	Wells in drift 40′ deep						
Between Coit Rd. and Effie St. (4 wells)									
Grandville	7,975	M	Wells in drift 30′ to 41′ deep					x	x
Oakes and Washington, Well 1									
Oakes and Washington, Well 2									
Pineview and Aron (2 wells)									
East Elementary School									
Lowell	2,545	M	Wells in drift 49′ to 72′ deep					x	x
Washington Street									
Gee Drive and Foreman (3 wells)									
Paris Township	5,000	T	Wells in rock and drift 60′ to 345′ deep			x		x	x
353—48th Street, Well 1						x			
Well 2						x			
Well 3						x			
36th Street									
Aleda Avenue									
1661—44th Street (standby only)									
Burgis Avenue									
Pine Creek Subdivision	300	T							
Mick Avenue and Tampa (2 wells)									

MODIFIED LEGRAND ASSESSMENT

COUNTY	OWNER CAT.	SITE CLASS.	SITE NUMBER	SITE LOCATION	STEP 10
KENT	PRVA			41 08N 11W 24 BD	27

NAME: A) OWNER B) OPERATOR C) COMPLAINTANT D) APPLICANT E) NONE

A NORTHEAST GRAVEL COMPANY

MAILING ADDRESS

4300 CANNONSBURG ROAD

CITY	STATE	ZIP CODE	AREA CODE	TELEPHONE NUMBER
BELMONT	MI	49306	616	361-6192

DATE ASSESSED	SIC CODE	WASTE ID	SITE STATUS	HYDROGEO REPORT?
06 29 80		C 2103	A	C 2 3 — P. NOLD, GLGST, PUB. HEALTH DEPT. FROM USES TOPO & CROSS SECTION MAPS AND USES WELL LOGS.

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	STEP 9	MISCELLANEOUS IDENTIFIERS
3D 1	3C 1	8 2	14	7A 1	5	1	13	6	CPT

BOX 1 — Has the groundwater or surface water quality in the site area been adversely affected? 1) YES 2) NO 3) UNKNOWN

Explain: OHMC HAS MONITORED. SMALL AMTS CR+6 IN SITES GROUNDWATER

BOX 3 — Have drinking water wells in the site area been adversely affected? If so, what type? 1) YES 2) NO 3) UNKNOWN

Explain: NO ADJOINING SITES HAVE BEEN TESTED; CR LEVELS ARE VERY LOW & CLOSE TO GUIDELINES (BRIAN MONROE OHMC)

REPRESENTATIVE WELL RECORD

Location			
A)	7 wells/ 1 sq. mi. @	117-205	ft.
B)	5 wells/ 1 sq. mi. @	95-268	ft.
C)	wells/ sq. mi. @		ft.
D)	wells/ sq. mi. @		ft.

Lithology	Thickness	DTB
Sand	0'-5'	0-5'
Clay	10-22'	10-27'
Sand	30'-130'	40'-157'
Clay & Gravel	30'-129'	
Sand	40'-132'	
		286'

SWL = 76'-116'

COMMENTS ★ CONTACT DON LAMOREAUX
PLAINFIELD TWP SUPERVISOR
1-616-361-2836

★ SIC: NONE; BUT MAINLY PLATING WASTES HAVE BEEN DUMPED AT THE SITE.

★ HYDROGEO. AREA HIGHLY VARIABLE W/MANY CLAY LENSES (SEE ROUGH CROSS-SECTION ATTACHED) BUT THESE DO NOT SEEM TO BE CONTINOUS.

★ STEP 3. METAL PLATING WASTES, SOME ABOVE LIMIT AMOUNTS OF Cr^{+6}. (BRIAN MONROE OHMC)

STEP 6 I RATED THIS A "5" BECAUSE OF THE LARGE POPULATION INVOLVED BUT THE SITE IS APPARANTLY DOWN-GRADIENT FROM MOST OF THESE. (SEE MAP)

★ MISC IDENT: Cr^{+6} CAN BE DETECTED IN MONITORING WELLS CHECKED BY OHMC (BRIAN MONROE DNR-OHMC)

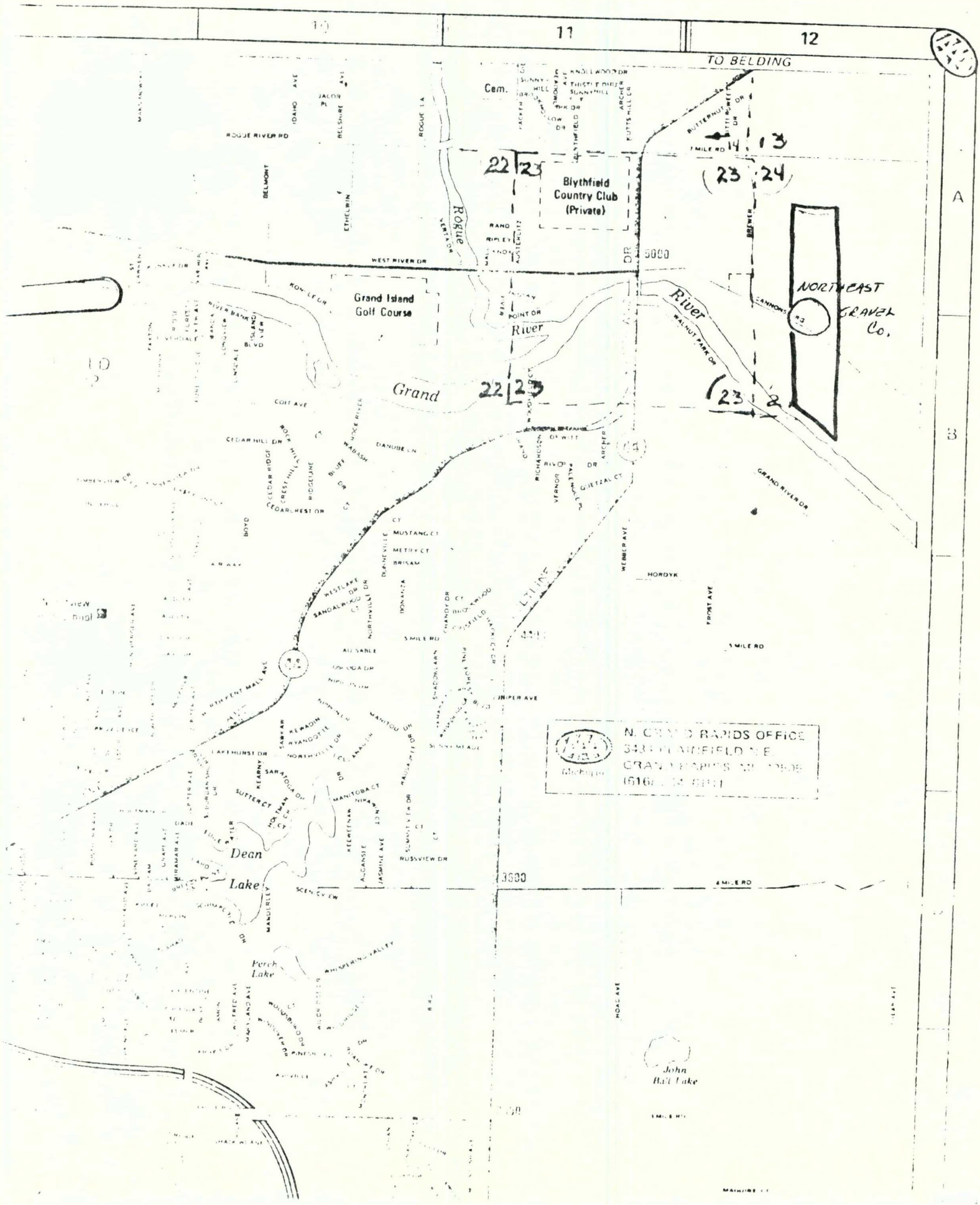
AREA LOCATED IN GLACIAL LAKE BED ON EDGE OF MORAINE DEPOSIT. SEE GENERALIZED CROSS-SECTIONS, LAST PAGES.

- GRAND RIVER WITHIN 1 MILE OF SITE, DOWN GRADIENT.

Dept. of Public Health

C.P.

5-80


10
11
12
TO BELDING
Cem.
ROGUE RIVER RD
IDAHO AVE
JALOR PL
BELSHIRE AVE
ROGUE LA
DELMONT
ETHELWIN
22
23
Blythfield Country Club (Private)
Rogue
River
WEST RIVER DR
Grand Island Golf Course
POINT DR
River
Grand
22
23
14
13
23
24
23
2
NORTHEAST GRAVEL Co.
WALNUT PARK DR
GRAND RIVER DR
COLT AVE
CEDAR HILL DR
DANUBE LN
CEDAR RIDGE
CEDAR CREST HILL
RIDGELINE
CEDAREST DR
BLUFF
WABASH
BOYD
MUSTANG CT
METRY CT
BRISAM
WEBER AVE
HORDYK
FROST AVE
WESTLAKE DR
SANDALWOOD DR
NORTHVILLE DR
DONANZA
AUSABLE
OSCODA DR
MIDLAND DR
SMILE RD
JUNIPER AVE
MANITOU DR
LAKEHURST DR
NORTHVILLE DR
SARATOGA DR
SUTTER CT
MANITOBA CT
RUSSVIEW DR
Dean Lake
SCENIC VIEW
Perch Lake
WHISPERING VALLEY
John Ball Lake
3000
4 MILE RD
N. GRAND RAPIDS OFFICE
Michigan

MI-282-08

ENVIRONMENTAL PROTECTION AGENCY
NOTIS DATA MANAGEMENT SYSTEM

REPORT #4 — LISTING BY FACILITY — REPORT DATE: 10/14/81
REGION: 05 STATE: MI

ID NO.	SITE STREET / SITE CITY / SITE COUNTY / EPA SITE ID NO.	NOTIFIER NAME / NOTIFIER STREET / NOTIFIER CITY / (CONTACT NAME/TITLE) / (CONTACT PHONE)	STATE	ZIP	NOTIFIER STATUS (PRES OWN, PAST OWN PRES OP, PAST OP TRANSPORTER, VOLUNTEER)
MIR000001168	MORTHEAST GRAVEL RIVER RD. GRANND RAPIDS KENT MID980609333	W BRAND BOROSKY, ASST. SEC. 900 JORIE BLVD. OAK BROOK (DIVER, JEFFREY ENV. COUNSEL) (312-654-8800)	IL	60521	TRANSPORTER

RELEASES TO THE ENVIRONMENT:

DATES OF WASTE HANDLING: 1976 TO 1980

WASTE AMOUNT: 324.000 CU FT AREA: 20 ACRES HAP PRESENT: NO FORM TYPE: 8900-1

NOTIF. POSTMARKED DATE: 81/08/09 SIGNATURE PRESENT: YES DATE OF LAST UPDATE: 81/09/25

TYPE OF FACILITY	TYPES OF WASTES	SOURCES OF WASTE
OTHER-(SEE COMMENTS) LANDFILL	HEAVY METALS	IRON/STEEL FOUNDRY

COMMENTS	SEQ NO.
LENGTHY SEE FILE ATTACHMENT.	1

8303-03A
282

fishbeck
thompson
carr
&
huber
consulting engineers

Carl V. Huber, P.E.
Principal, Vice President

June 8, 1984
Project No. 75803/191-66

Mr. Gerald Heyt
State of Michigan
350 Ottawa Avenue, N.W.
Grand Rapids, MI 49503

Dear Mr. Heyt:

Re: Wolverine World Wide, Inc. - Northeast Gravel Company - Kent County, Michigan

At the request of Wolverine World Wide, Inc., we would like to summarize the discussion that occurred between the Michigan Department of Natural Resources and representatives of Wolverine World Wide, Inc. at a meeting held in your office on May 31, 1984. The attempt of this letter is to provide information which can be submitted to EPA during their review of the Northeast Gravel site. It is not our intent at this time to question the ranking of the Northeast Gravel site on the National Priority List. The purpose is to indicate to you our confusion after reviewing the State of Michigan's assessment of this site as well as the EPA Site Inspection Report. As you are aware, the purpose of our meeting was to ascertain whether the facts with which we have been presented are correct and whether they indeed should not be changed in the record to provide a more factual basis for understanding.

The Northeast Gravel site can actually be divided into three sub-sites. The most southerly sub-site is that site which accepted metal hydroxide residues and spent plating baths. The sub-site north of that was an old landfill and the sub-site north of the landfill received dewatered sludges generated by Wolverine World Wide. After reviewing the EPA Inspection Report, it would appear that all of the emphasis of that report pertains to the sub-site containing Wolverine World Wide waste. The report alleged that the waste is hazardous when, indeed, it is not. The report also indicated that groundwater contamination resulted from this sub-site when it is known that the problems which occurred in the past at the Northeast Gravel site occurred from the most

1500 East Beltline S.E. · Suite 200 · Grand Rapids, Michigan 49506 · 616/949-2332

southerly portion of that site pertaining to the disposal of metal hydroxide residues. The following, therefore, are important facts which should be considered in clarifying the record:

1. As you are aware, Northeast Gravel Company accepted liquid and semiliquid plating residues into specific portions of the site which had been excavated. Wastes going into areas of the facility were primarily metal hydroxides and spent plating baths. Northeast Gravel did have a system for segregating certain wastes to different areas at the site but primarily the wastes received, as far as can be determined by us, were generally liquid in nature or dewatered by centrifuges to dewater them to a semiliquid state.

2. There were monitoring wells located throughout this portion of the facility. We are not sure at the present time how many ever did exist or where they were located but we are aware that sampling did occur since our laboratory was involved with some of the analyses. Most of the wells were located downstream from the main site.

3. Wolverine World Wide, a leather tanner located in Rockford, Michigan, requested permission of Northeast Gravel to dispose of dewatered tannery sludges on the Northeast Gravel property. A separate site was established north (upgradient) of the site which accepted the plating residues. The tannery sludge was a nonhazardous material and was dewatered to approximately 30 - 35% solids. The only metal it contained was trivalent chromium which had been precipitated in the waste treatment systems.

4. At about the time that RCRA regulations were being proposed, it was decided that monitoring wells should be installed south of that portion of the site where Wolverine World Wide waste disposed (north of the plating waste site) to check groundwater data specifically for metals. This data was used during the promulgation of the RCRA regulations to support the fact that the trivalent chromium in leather tanning wastes is bound and does not leach readily. These monitoring wells were checked periodically throughout the years since their installation and although a couple do not exist at the present time, monitoring wells still are present onsite for sampling.

5. The primary plating residue area was closed approximately one year before Wolverine ceased disposal at the site. As you are aware, Wolverine now disposes of their material at the 10-Mile landfill.

6. On Saturday, March 3, 1984, an article appeared in The Grand Rapids Press which indicated that the Northeast Gravel site was being considered for cleanup action under Superfund as well as Act 307. The Press article went on to indicate that the primary generator on that site was Wolverine World Wide.

7. Due to our confusion after this article regarding the primary generator, we requested information from Mr. Daniel Pierson of the Department of Natural Resources. Mr. Pierson sent us the MSAS Site Screening Table as well as the EPA Site Inspection Report prepared by the EPA contractor Ecology and Environment.

8. At approximately the same time that the above information was received, Wolverine World Wide addressed a letter to Mr. John Oakes of the USEPA in Chicago requesting information under the Freedom of Information Act for the site. Mr. Oakes sent the Potential Hazardous Waste Site Final Strategy Determination, EPA form T2070-5, as well as the Potential Groundwater Contamination Identification and Preliminary Assessment. He indicated that he was unable to release the EPA site inspection report due to legal ramifications.

9. The potential groundwater contamination source identification and preliminary assessment form appears to be accurate with regard to plating waste disposal. The identification and preliminary assessment form has the following important inclusions:

   a. In the "Operation Characterization", it indicates that the site was used for the treatment of metallic sludges with lagoons.

   b. Under "Waste Description", it is indicated that the waste is from metal hydroxides.

   c. Under "Problem Characterization", it is indicated that unlined lagoons over permeable gravel and sands have leached with samples indicating higher-than-allowed nickel, chromium, zinc, cyanide and oil and grease.

   d. Under "Compliance History", it is indicated that the sampling often exceeded compliance values.

   e. Under "Contamination Information", it indicates that the wells are basically 900 feet to the south of the lagoon cells.

   f. The assessment form indicates that Approved Industrial Removal Company was the number one customer of the landfill. The form indicated that the site was licensed to handle 675,000 gallons of liquids per month.

   g. The assessment form seems to be accurate based on our knowledge of the site. It generally concludes that the problems that the DNR found related to the disposal of hydroxide sludges and liquids in the primary portion of the Northeast Gravel site. Nowhere do we find in the form that the groundwater contamination problems were attributed to the disposal of sludges by Wolverine World Wide. The compliance

problems focused around the disposal by Approved Industrial Removal Company. The groundwater contamination which was noted, was obviously from metal hydroxide sludges based on the parameters which were found.

10. Now when one looks at the EPA site inspection report, the confusion mounts. The following items are important:

    a. In Part 2 under Waste Information it indicates that the material that was disposed of was sludge and the approximate yardage was 12,000 yards. It would appear that this reference is to the Wolverine material on the sub-site portion of the Northeast Gravel site. Part 2 also indicates that the material is toxic, persistent and soluble. However, we know that the tannery waste is not hazardous. That same form indicates that the 12,000 cubic yards pertains to plating wastes, but the Wolverine sludge is not a plating waste and does not contain the heavy metals which are listed.

    b. In Part 3 of the EPA Site Inspection Report, it indicates that the groundwater samples showed elevated levels of nickel, copper, chromium, zinc, cyanide, and oil and grease. This basically confirms the previous form discussed, that this sample was derived from the sampling wells south of the metal hydroxide area and has really nothing to do with the 12,000 cubic yards of tannery wastes.

    c. In Part 4 of that same form, it once again indicates the 12,000 cubic yards of material. It also goes on to indicate that the dewatered sludge was buried in 15' to 20' deep trenches which would again refer to the Wolverine site.

    d. In Part 9 of that form, the only generator listed is Wolverine World Wide.

This entire fact sheet was discussed with Mr. Fred Norling as well as Mr. John Oakes of the EPA. After going through it with them, they indicated also that there appears to be a great deal of confusion on the EPA Site Inspection Report. Although this is only a supposition, it appears that the EPA contractor, when interviewing various people on the site, related the Wolverine sub-site with the primary metal hydroxide site. The EPA report basically does not mention the metal hydroxide waste with the exception of the one part reporting groundwater contamination.

It is Wolverine World Wide's position to ensure that the record being sent to EPA in Washington for their review is accurate. Wolverine's position is that their waste is not hazardous and, therefore, should not be described as toxic and persistent. It is also Wolverine's position that the sub-site containing their wastes should not be included as a part of the total Northeast Gravel site for any regulatory purposes.

We are hopeful that the State of Michigan can help Wolverine World Wide in ensuring that the record is clear. Once the record is straight, then we will review other portions of the appropriate regulatory acts to determine how to proceed. Right now we are not in a position to know whether the primary Northeast Gravel site is being evaluated or the portion of it where Wolverine World Wide's waste was disposed.

As indicated to you at our May 31 meeting, we believe the above facts to be accurate. Should you have any difficulty with what has been stated above, do not hesitate to call. In summary, it is our opinion that the State assessment of the Northeast Gravel site is accurate and even though EPA sent us this report, it is believed that the EPA site inspection report does not correlate well with the events stated in the State of Michigan file. Hopefully, this clarification can be communicated to EPA for their review.

Very truly yours,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Carl V. Huber, P.E.

mea

cc: Robert Burch, Wolverine World Wide
F. Gene Burch, Wolverine World Wide
Eugene Smary, Esq., Warner, Norcross & Judd

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NPL Candidate

Narrative Summary

Site Name and Location

County: Kent
Township & Range: 8N-11W

Northeast Gravel Company
4300 Cannonsburg Road
Belmont, Michigan

Northeast Gravel Company is a gravel mining operation which received dewatered sludge and plating waste for disposal in trenches on site. Groundwater samples have shown elevated levels of heavy metals, including chromium, nickel, copper, zinc as well as cyanide. Disposal operations at the site ceased in 1978 per MDNR specifications.

MI-282-07

POTENTIAL GROUND WATER CONTAMINATION SOURCE

IDENTIFICATION AND PRELIMINARY ASSESSMENT

This form is completed for each potential hazardous waste site to help set priorities for site inspections. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections. If information is not available, place an "x" in the space provided.

SITE IDENTIFICATION

COMPANY NAME NORTHEAST GRAVEL Co (a Michigan corporation)

ADDRESS 4300 CANNONSBURG Rd., Belmont, MI

LOCATION (COUNTY, TOWN & RANGE) SE 1/4, NW 1/4, Sec 24, T8N, R11W, Plainfield Twp KENT County

OWNER/OPERATOR ① Lester Bauer, Manager ② Harold E. Neitzel, Pres. — 1971. Twp
(Lessee Fill) Closed in 1971. Records date to 1971.

HOW LONG HAS THIS FACILITY BEEN OPERATING AT THIS SITE? Operation of site before 1971 (unknown)
(Wetland, Floodplain, or, adjacent to sub-sewer 176 Year)

HAS THERE EVER BEEN AN OWNERSHIP TRANSFER? NOT indicated in file (see back #1) however,

IF SO WHEN? ____

PREVIOUS OWNER? ____

OPERATION CHARACTERIZATION

TYPE OF OPERATION (I.E. MANUFACTURING, LANDFILL, ETC.) Treatment of metallic sludges, some industrial wastes (Lagoon cell or discharges), Separation of wastes, Landfilling of dried material (Filling → dewatering → removal)

WASTE CHARACTERIZATION

Waste type:

____ Unknown ____ Liquid ____ Solid ✓ Sludge ____ Gas

Waste characteristics:

____ Unknown ____ Corrosive ____ Ignitable ____ Radioactive ____ Highly Volatile

✓ Toxic ____ Reactive ____ Inert ____ Flamable

____ Other Specify ____

Waste description (metal sludges, PCB's, etc.) metal hydroxides

PROBLEM CHARACTERIZATION (I.E. UNLINED SEEPAGE LAGOON, IMPROPER BARREL DISPOSAL, ETC. Unlined lagoons over permeable gravel and sand Company often exceeded their permit requirement with samples showing higher the allowed nickel, copper, chromium, zinc, cyanide, and oil + grease

LIST ALL APPLICABLE PERMITS HELD BY THE SITE (FILL IN DATE OF ISSUANCE & PERMIT NUMBER)

NPDES _____ Liquid industrial waste _____

Air _____ Groundwater discharge M100288 (Oct 19, 1976)

Solid waste _____ Soil & sedimentation _____

Inland lakes _____ Other (specify) ① VS0000238 Apr. 21, 1972 (voluntary stipulation) ② MS0000021 7/73

COMPLIANCE HISTORY Often exceeded their permit requirements, esp from 9/1974 on. A 4th notice of non-compliance and order to comply was issued 11-24-75, w/ cc going to Attorney Gen. Bureau.

CONTAMINATION INFORMATION wells: 3 driven wells and 2 open water areas have been available for periodic testing of ground water quality or changes therein.

HAS THERE BEEN ANY ATTEMPT TO MONITOR THE GROUNDWATER IN THE PAST Yes

If so, give the location or identification number of the wells (over)

List any pertinent monitoring data (include date and laboratory used for analysis No contamination of monitor wells or open water holes. Some contamination in Well #2, which is in the middle of all area, however, [illegible] reports [illegible] Grand Rapids approx 900' to south.

GIVE THE LOCATION & DISTANCE TO THE NEAREST PRIVATE WELL _____

GIVE THE SOURCE OF MUNICIPAL WATER SUPPLY Plainfield Twp wells (over)

LIST ANY KNOWN GEOLOGICAL CHARACTERISTICS OF THE AREA Permeable sands and gravels occur between the disposal pits and the water table

DEPARTMENT ACTION Compliance

HISTORY OF SITE INSPECTIONS (LIST DATE, INSPECTING AGENCY & RESULTS) [illegible]

[illegible] to Aug 5, 1971 a [illegible] of samples were taken by the DNR [illegible] 7-[illegible] 1-8-71 and by Williams & Works [illegible]

REGULATORY ACTIONS (NOTICES OF NONCOMPLIANCE & VIOLATIONS, DATES & REASONS)

[illegible] 75 [illegible] of non compliance [illegible] [illegible] the allowed [illegible] of the [illegible] [illegible] Samples were taken June 5 - Aug 26, 1975 also on 9-17-74, 1-8-75, 4-25-75, 6-25-75

REMEDIAL ACTIONS REQUESTED (ACTIONS & DATES) Lagoon samples continued to show higher than allowable permit requirements and [illegible] approval [illegible] attempt to [illegible]

Were these actions accomplished? [illegible] completely In late Oct 1977 all discharging sites of soil in NE Grand were placed out by the State. NE Grand was shut down

---

(2) Richard F. Bissell, Geologist, Geo. Survey Div. received attention on 3-4-72 and determined that the monitoring well system was adequate.

(3) Charles Harvey, Sanitary Engineer, on 6-16-72, reviewed the company past year of operation and evaluated the well samples - finding them acceptable, no contamination.

(4) James R. Gerard, Civil Sanitary Engineer, visited the site and submitted a letter on 6-30-73 finding the operation satisfactory. Contamination at the site was reported to 6.75 million gallons per month.

(5) Charles Harvey on 6-13-74, evaluated the site and determined that the well-specified a critical "the report contains to show that dissolved metal was associated with the evaluated waste and about than the general water control points."

(6) Charles Harvey, on 5-2-75 - site inspection noted no well-known site and no change in the original general water parameters.

(7) In 1975, DNR sampling of the lagoons showed general contamination of monitor wells, however, continued to show an absence of contaminants.

(8) Williams + Works laboratories continued sampling monitor results to DNR showing no contamination.

Case name [illegible]

PRELIMINARY PROBLEM ASSESSMENT

Date 12-17-[illegible]

POTENTIAL HAZARDS (CHECK ALL APPLICABLE CATEGORIES)

Human health	___	Noticeable odors	___
Contamination of water supply	___	Contamination of soils	✓
Contamination of groundwater	✓	Property damage	___
		Sewer/storm drain problems	___
Contamination of surface water	___	Erosion problems	___
Contamination of food chain	___	Inadequate security	___
Damage to flora/fauna	___	Other (specify)	___
Fish kill	___	___	
Contamination of air	___	___	
Fire or explosion	___	___	
Spills/leaking containers (runoff) standing liquids	___		
Incompatible wastes	___		
Midnight dumping	___		

WHAT ADDITIONAL INFORMATION IS REQUIRED? I'm not satisfied with the number of monitor wells or the location additional wells should be put in – [illegible] the south - southeast of the lagoon site

DESCRIBE ANY NECESSARY ACTIONS WHICH SHOULD BE UNDERTAKEN? (ADDITIONAL SAMPLING, SITE INSPECTION, ETC.) See above the monitor well [illegible] to be [illegible] in number and [illegible] the [illegible]

SUMMARY OF ACTIONABLE VIOLATIONS

Case Name [illegible]

The following is a list of violations which may provide a basis for the development of enforcement strategy. The violations fall into two basic categories: 1. Operation without a permit or 2. violation of a permit, final order, consent agreement etc. Please note any of these violations during the course of your review.

Violation of Act 245, P.A. 1929, the Water Resources Commission Act (discharge violation)

No permit _____

Violation of permit ✓

Surface water discharge _____

Groundwater discharge _____

Violation of Part 5 Rules for Act 245, P.A. 1929

Illegal storage _____

Improper storage _____

No PIPP _____

PIPP not implemented correctly _____

Violation of Act 641, P.A. 1978, the Solid Waste Management Act

No license _____

Violation of license Act 87

Other violations (failure to report critical materials, improper disposal of PCB's, illegal waste removal, etc.) Many violations of [illegible] (count violations) as found in DNR samples of lagoons

---

Basically, the company was responsive to DNR findings, etc, as was the #1 customer - Approved Industrial. The problems probably came from less scrupulous haulers who did not adequately ~~[illegible]~~ treat their sludges, resulting in permit violations.

(over)

had no of C-56 in monitor wells and is basically within its guidelines.

from: Brian Monroe
O.H.M.C.

FROM: Dave Dennis — File

TO: A. Hogarth

SUBJECT: Northeast Gravel — Don Lanoreaux - Plainfield Twp. Supervisor 616-361-2836

OUR JOB NO.

DATE OF MEMO: 2/17/78

MESSAGE

I recently received a TX from a Mr. Don Lanoreaux, Plainfield Twp. Supervisor regarding disposal of wastehauler material at Northeast Gravel. His main concern is with Approved Industrial Removal. He is afraid they may have slipped some C-56 still residue into this site since they use it so often. He says there are monitoring wells at the site and asked if they have been checked for C-56. I told him probably not. He asked that we do so. I told him that I would make such a request. It sounds like a good idea. Comment.

SIGNED A. Hogarth

SENDER — DO NOT WRITE BELOW THIS LINE

REPLY

Andy —

We'll have a sample checked for C-56 — May have to wait until snow is gone however —

See Brian Monroe — Tom Leep — Dave 3732794

" " OHMC Tomorrow " " 6/24/80

R&Rec. Dist E III 3221300

SIGNED DATE

REPLY SENDER — Retain part 2 for your follow-up, send parts 1 and 3 to addressee

6/30/80 - As of this date NE Gravel has had no trace of C-56 in monitor wells and is basically within its guidelines.

From: Brian Monroe
O.S.M.C.

January 22, 1975

Northeast Gravel Company
4370 Cannonsburg Road
Belmont, Michigan 49306

Attention: Mr. Bauer

Gentlemen:

On January 3, 1975, I sampled your lagoon on Cannonsburg Road. Enclosed are the results.

Your Water Resources Commission stipulation requires that the waste contained prior to discharge not more than 1) pH 8.5 to 10.5; 2) copper 0.5 mg/l; 3) nickel 0.5 mg/l; 4) Cr6 0.05 mg/l; 5) cyanide .1 mg/l; 6) oil and grease, maximum of 25 mg/l. Your north-middle lagoon where the sample was taken is above your permit requirements. The nickel showed 1.1 mg/l and the oil and grease was 6 percent (60,000 mg/l). In regard to this, I am sending you a Notice of Noncompliance and Order to Comply. If you have any questions, feel free to call me at 517-373-1947.

Very truly yours,

BUREAU OF WATER MANAGEMENT

Tomas Leon, Water Quality Investigator
Oil & Hazardous Materials Control Section

TL:clp
Enclosure
cc: B. Dennis
J. Shauver

In Reference to Case No(s):

5840

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

RECEIVED JUN 2 4 1986

Telephone Record Log

Date of Call: 28 May 86

Laboratory Name: I.T. Corp

Lab Contact: [illegible]

Region: 7

Regional Contact: [illegible]

Call Initiated By: ____ Laboratory ____ Region

In reference to data for the following sample number(s):

[illegible]

Summary of Questions/Issues Discussed:

Requested [illegible]

Summary of Resolution:

[illegible] Send ODAS
Sent on 28 May 86 Check Region V
Rerequested ODAS from 16 June 86
Received 17 June 86 on 2nd try

[illegible]
Signature

28 May 86
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

RECEIVED JUN 2 4 1986

<<<< USER'S INFORMATION >>>>

SITE NAME_____NORTHEAST GRAVEL_____SMO Case No. _5840_____.. ENTER TITL

DATE: 22 MAY 86 REVIEWER: TOM CLYNE
ECOLOGY & ENVIRONMENT

SUMMARY

OF THE 11 SAMPLES IN THIS CASE, ONLY 2 SAMPLES HAD HRS HITS. THERE ARE LABORATORY/FIELD ARTIFACTS IN SOME OF THE SAMPLES AND THERE ARE ALSO TIC's IN SOME OF THE SAMPLES. A TIC CALLED CAPROLACTAN HAD VERY LARGE VALUES IN SEVERAL SAMPLES THAT THE LAB HAD TO DILUTE AND RERUN THE SAMPLES. YOU WILL SEE THE RI AFTER THE SMO NUMBER. YOU MAY NEED TO INVESTIGATE WERE THIS COMPOUND CAME FROM.

FOR SAMPLE 480, FOUR VOA VIALS WERE TO HAVE BEEN SHIPED AS LISTED ON THE CHAIN OF CUSTODY. THE LAB ONLY RECEIVED 2 VOA VIALS.

THE SYMBOL --#-- REPRESENTS A HRS HIT!

EH 480	HSL	VOA	CHLOROETHANE	6J	UG/L	
			1,1-DICHLOROETHANE	8		#
EH 487	HSL	VOA	CHLOROMETHANE	4J	UG/L	
			1,1-DICHLOROETHANE	7		#

TOM

RECEIVED JUN 2 4 1986

SITE NAME_____NORTHEAST GRAVEL_____SMO Case No. _5840_____

CONTINUOUS
FOR VOA; THE RUN ON 86-04-23 HAD 5 RF < 0.30 AND 8 > 25 %D. ON 86-04-24, HAD 6 RF < 0.30 AND 7 > 25 %D.
NO SPCC OR CCC INVOLVED.

G PESTICIDES ACCEPTABLE. SEE LAB NARRATIVE FOR PROBLEMS.

RECEIVED JUN 2 4 1986

Case #/SAS #: 5840
JN: 36569
Contract #: 68-01-7262

May 16, 1986

Analtyical Results - BNA

Samples EH480, EH480MSRI, EH480MSDRI, EH481RI and EH486RI were injected a second time as a dilution was required to bring Phenol-d5 within 30 scans units of the standard. There were considerable amounts of Caprolactam detected in these samples which were re-run diluted. The large amounts of Caprolactam caused matrix effects in the samples resulting in retention times being off from the times expected from the standards.

Both sets of data for the re-injected samples are being submitted for comparison.

Analytical Results - Pesticides

Sample EH486 was not spiked with Dibutyl chlorendate in the original extraction. This sample was re-extracted outside of holdinjg times, therefore, both data shets are being submitted.

The %D for Dibutyl chlorendate in the original analysis of sample EH486 could not be quantitated since no Dibutyl chlorendate was detected.

The %RSD of 4,4'-DDT is greater than 10% for the Mixed Phase data with Lab ID # B11-PM-111-1. This data was not used for DDD, DDE or DDT quantitation.

RECEIVED JUN 2 4 1986

Case #/SAS #: 5840
JN: 36569
Contract #: 68-01-7262

May 16, 1986

Screening Results

The above samples were not screened by GC. For the analyses each sample was assumed to be Low concentration unless observation indicated the presence of compounds at Medium concentration. A sample which was initially analyzed as Low and found to contain compounds at Medium concentration was re-analyzed as a Medium level sample.

All of the above samples were analyzed as Low concentration samples in all fractions.

Surrogate Recoveries - BNA's

Sample EH486RI had a recovery of 2-Fluorobiphenyl (a Base/Neutral surrogate) which were outside the acceptance windows. The recovery was greater than the 10% minimum required. Re-extraction/analysis is not required under these circumstances.

Spike Recoveries - Acids

In the spiked samples, EH480MS and EH480MSD, one out of ten spiked Acid compounds had recoveries outside the acceptance windows.

These samples were not re-extracted/analyzed because it is not contractually required.

Spike Recoveries - Base/Neutral's

In the spiked samples, EH480MSRI and EH480MSDRI, one out of twelve spiked Base/Neutral compounds had recoveries outside the acceptance windows.

These samples were not re-extracted/analyzed because it is not contractually required.

p. 2 of 2

RECEIVED JUN 24 1986

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Surrogate Recovery (%)

Contract #: 68-01-7262

Job #: 36569

SMO TR # (Sample #)	Volatile			Semi-volatile						Pesticide
	T-d8 88-110	BFB 86-115	DCE-d4 76-114	N-d5 35-114	2-Fb 43-116	Tp-d14 33-141	P-d5 10- 94	2-FP 21-100	TBrP 10-123	DiBuCl** 24-154
MB LWBEC031 LW	90	98	98	87	85	45	75	68	70	78
MB LWBEC034 LW	104	110	100	NA	→	→	NA	→	→	99
MB 112-1105 LW	NA	→	→	NA	→	→	NA	→	→	72
Recovery Summary										

Comments:

* Values outside QC Limits.
** Advisory Limits Only.
NA - Not Analyzed
NS - Not Spiked
NR - Not Reported
-- Analyzed under another QC Report

Volatiles: ___ out of ___ outside QC Limits
Semi-volatiles: ___ out of ___ outside QC Limits
Pesticides: ___ out of ___ outside QC Limits

Recovery Summary = #'s Outside QC Limits / Total #'s Reported
(Does not include Method Blanks)

Rev 8/85

WATER MS/MSD RECOVERY

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec MS	Conc. MSD	% Rec MSD	RPD	QC Limits * RPD	QC Limits * Recovery
VOA SMO Sample # EH479	1,1-Dichloroethene	50.	5u	55	110	57	114	4	<14	61-145
	Trichloroethene	↓	↓	49	98	49	98	Ø	<14	71-120
	Chlorobenzene			52	104	54	108	4	<13	75-130
	Toluene			51	102	52	104	2	<13	76-125
	Benzene			51	102	53	106	4	<11	76-127
B/N SMO Sample # EH480	1,2,4-Trichlorobenzene	103.	20u	91	88	86	83	6	<28	39- 98
	Acenaphthene	100.	20u	87	87	91	91	4	<31	46-118
	2,4-Dinitrotoluene	101.	20u	87	86	84	83	4	<38	24- 96
	Pyrene	103.	20u	74	72	75	73	1	<31	26-127
	N-Nitroso-di-n-propylamine	102.	20u	85	83	79	77	7	<38	41-116
	1,4-Dichlorobenzene	101.	20u	70	69	69	68	2	<28	36- 97
Acid SMO Sample # EH480	Pentachlorophenol	207.	100u	110	53	100J	48	10	<50	9-103
	Phenol	203.	20u	59	29	29	14	68*	<42	12- 89
	2-Chlorophenol	213.	20u	170	80	120	56	35	<40	27-123
	4-Chloro-3-methylphenol	205.	20u	200	97	230	112*	14	<42	23- 97
	4-Nitrophenol	215.	100u	150	70	140	65	7	<50	10- 80
Pest. SMO Sample # EH487	Lindane (gamma-BHC)	0.200	Ø (0.05u)	0.22	110	0.22	110	Ø	<15	56-123
	Heptachlor	0.205	↓	0.17	83	0.17	83	Ø	<20	40-131
	Aldrin	0.204		0.15	74	0.15	74	Ø	<22	40-120
	Dieldrin	0.509	Ø (0.14)	0.38	75	0.41	81	8	<18	52-126
	Endrin	0.523		0.47	90	0.50	96	6	<21	56-121
	4,4'-DDT	0.504		0.54	107	0.55	109	2	<27	38-127

* Asterisked Values are outside QC Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: VOA's Ø out of 5 outside QC Limits
B/N's Ø out of 6 outside QC Limits
Acids 1 out of 5 outside QC Limits
Pests Ø out of 6 outside QC Limits

Recovery: VOA's Ø out of 10 outside QC Limits
B/N's Ø out of 12 outside QC Limits
Acids 1 out of 10 outside QC Limits
Pests Ø out of 12 outside QC Limits

Comments: _____

Rev 8/85

RECEIVED Jun 24 1986

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103.	20. U	91.	88	86.	83	6
ACENAPHTHENE	100.	20. U	87.	87	91.	91	-4
2,4-DINITROTOLUENE	101.	20. U	87.	86	84.	83	4
PYRENE	103.	20. U	74.	72	75.	73	-1
NITROSOPROPYLAMINE	102.	20. U	85.	83	79.	77	7
1,4-DICHLOROBENZENE	101.	20. U	70.	69	69.	68	2
PENTACHLOROPHENOL	207.	100. U	110.	53	100. J	48	10
PHENOL	203.	20. U	59.	29	29.	14	68*
2-CHLOROPHENOL	213.	20. U	170.	80	120.	56	35
P-CHLORO-M-CRESOL	205.	20. U	200.	97	230.	112*	-14
4-NITROPHENOL	215.	100. U	150.	70	140.	65	7
NITROBENZENE-D5	102.	78.	92.	90	110.	108	-18
2-FLUOROBIPHENYL	100.	81.	86.	86	85.	85	1
P-TERPHENYL-D14	103.	57.	53.	51	56.	54	-5
PHENOL-D5	206.	89.	69.	33	33.	16	70
2-FLUOROPHENOL	203.	123.	129.	63	118.	58	9
TRIBROMOPHENOL	205.	118.	128.	62	122.	59	5

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 0 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	20U	38	25	41

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/CERR

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH479
CONTRACT #: 68-01-7262
UNITS: UG/L

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
DICHLOROETHYLENE	50.	5. U	55.	110	57.	114	-4
TRICHLOROETHYLENE	50.	5. U	49.	98	49.	98	0
CHLOROBENZENE	50.	5. U	52.	104	54.	108	-4
TOLUENE	50.	5. U	51.	102	52.	104	-2
BENZENE	50.	5. U	51.	102	53.	106	-4
TOLUENE-D8	50.	45.	51.	102	51.	102	0
BROMOFLUOROBENZENE	50.	50.	53.	106	53.	106	0
DICHLOROETHANE-D4	50.	50.	48.	96	49.	98	-2

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: VOA'S 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: VOA'S 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Methylene Chloride	10 B	14 B	17 B	19
Acetone	31 B	26	31	18

WATER MS/MSD RECOVERY

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec MS	Conc. MSD	% Rec MSD	RPD	QC Limits * RPD	QC Limits * Recovery
VOA	1,1-Dichloroethene								<14	61-145
SMO	Trichloroethene								<14	71-120
Sample #	Chlorobenzene								<13	75-130
	Toluene								<13	76-125
	Benzene								<11	76-127
	1,2,4-Trichlorobenzene	103.	200u	110J	107*	98J	95	12	<28	39- 98
B/N	Acenaphthene	100.	200u	100J	100	100J	100	Ø	<31	46-118
SMO	2,4-Dinitrotoluene	101.	200u	58J	57	66J	65	13	<38	24- 96
Sample #	Pyrene	103.	200u	79J	77	78J	76	1	<31	26-127
EH480RI	N-Nitroso-di-n-propylamine	102.	200u	71J	70	72J	70	1	<38	41-116
	1,4-Dichlorobenzene	101.	200u	85J	84	84J	83	1	<28	36- 97
Acid	Pentachlorophenol	206.	1000u	66J	32	62J	30	7	<50	9-103
SMO	Phenol	202.	200u	180J	89	160J	79	12	<42	12- 89
Sample #	2-Chlorophenol	212.	200u	170J	80	120J	57	35	<40	27-123
EH480RI	4-Chloro-3-methylphenol	205.	200u	170J	83	140J	68	19	<42	23- 97
	4-Nitrophenol	215.	1000u	32J	15	38J	18	16	<50	10- 80
Pest.	Lindane (gamma-BHC)								<15	56-123
SMO	Heptachlor								<20	40-131
Sample #	Aldrin								<22	40-120
	Dieldrin								<18	52-126
	Endrin								<21	56-121
	4,4'-DDT								<27	38-127

* Asterisked Values are outside QC Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: VOA's — out of — outside QC Limits
B/N's Ø out of 6 outside QC Limits
Acids Ø out of 5 outside QC Limits
Pests — out of — outside QC Limits

Recovery: VOA's — out of — outside QC Limits
B/N's 1 out of 12 outside QC Limits
Acids Ø out of 10 outside QC Limits
Pests — out of — outside QC Limits

Comments: _____

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Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Sample #: EH487
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec. MS	Conc. MSD	% Rec. MSD	RPD	QC Limits * RPD	QC Limits * Recovery
Pest. SMO Sample # EH487	Lindane (gamma-BHC)	0.200	0 (0.054)	0.22	110	0.22	110	0	<15	56-123
	Heptachlor	0.205	↓ ↓	0.17	83	0.17	83	0	<20	40-131
	Aldrin	0.201	↓ ↓	0.15	74	0.15	74	0	<22	40-120
	Dieldrin	0.509	0 (0.14)	0.38	75	0.41	81	8	<18	52-126
	Endrin	0.523	↓ ↓	0.47	90	0.50	96	6	<21	56-121
	4,4'-DDT	0.504	↓ ↓	0.54	107	0.55	109	2	<27	38-127
	Dibutyl chlorendate **	1.0	1.0	0.90	90	0.91	91	1	—	24-154

* Asterisked Values are outside QC Limits.
** Advisory Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: Pests 0 out of 7 outside QC Limits

Recovery: Pests 0 out of 14 outside QC Limits

Comments: _____

Summary of Unspiked HSL's

Fraction	Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Pest.	None found	0 (0.054)	0 (0.24)	0 (0.24)	0

Note: This section lists compounds on the HSL which were found in the Sample, MS, and/or MSD. It does not include Tentatively Identified compounds which may have been found in the Sample.

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METHOD BLANK SUMMARY

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report

Contract #: 68-01-7262
Job Number: 36569

Circle Units: ug/Kg, ug/L

Sample # (MB #)	Lab ID (Run #)	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL,TIC OR UNKNOWN)	CONC.	UNITS	CRDL
METHOD BLANK	LWBEC 031	4/23/86	VOA	Water	Low	GCMSC	75-09-2	Methylene Chloride	3 J	ug/L	5U
"	"	"	"	"	"	"	67-64-1	Acetone	5 J	"	10U
"	"	"	"	"	"	"	108-88-3	Toluene	2 J	"	5U
"	LWBEC 034	4/24/86	"	"	"	"	75-09-2	Methylene Chloride	6	"	5U
"	"	"	"	"	"	"	108-88-3	Toluene	2 J	"	5U
MB0417P1	112-1070	4/22/86	Pest	"	"	GC#5A	—	NONE FOUND	0.05U	"	—
"	111-1023	"	"	"	"	GC#11B	—	" "	0.05U	"	—
MB0423P3	112-1105	4/25/86	"	"	"	"	—	" "	0.05U	"	—

Comments:

Footnotes: For all GCMS analyses the Instrument ID Code is included in the Lab ID (Run #).
Inst. ID Code is character 5 for Tune, Standards, and Blanks, character 7 for Samples.

Instrument Manuf.	Finn.	Finn.	Finn.	HP	Finn.	Finn.
Instrument Model	OWA-1	OWA-2 1020A	OWA-3 1020B	5988A	4021	4500
Inst. ID Code	A	B	C	H	I	J

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Rev 4/86

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480RI
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103.	200. U	110. J	107*	98. J	95	12
ACENAPHTHENE	100.	200. U	100. J	100	100. J	100	0
2,4-DINITROTOLUENE	101.	200. U	58. J	57	66. J	65	-13
PYRENE	103.	200 U	79. J	77	78. J	76	1
NITROSOPROPYLAMINE	102.	200. U	71. J	70	72. J	70	-1
1,4-DICHLOROBENZENE	101.	200 U	85. J	84	84. J	83	1
PENTACHLOROPHENOL	206.	1000. U	66. J	32	62. J	30	7
PHENOL	202.	200. U	180. J	89	160. J	79	12
2-CHLOROPHENOL	212.	200. U	170. J	80	120. J	57	35
P-CHLORO-M-CRESOL	205.	200. U	170. J	83	140. J	68	19
4-NITROPHENOL	215.	1000. U	32. J	15	38. J	18	-16
NITROBENZENE-D5	102.	82. J	80. J	78	75. J	73	7
2-FLUOROBIPHENYL	100.	110. J	113. J	113	109. J	109	4
P-TERPHENYL-D14	103.	51. J	47. J	46	50. J	48	-6
PHENOL-D5	206.	174. J	185. J	90	153. J	74	19
2-FLUOROPHENOL	203.	146. J	140. J	69	119. J	59	16
TRIBROMOPHENOL	205.	101. J	104. J	51	90. J	44	15

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 1 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	200u	21 J	8 J	90

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: OWA1
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wesenhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5 ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	20 U
75-01-4	Vinyl Chloride	5 U
75-00-3	Chloroethane	20 U
75-09-2	Methylene Chloride	2 U
67-64-1	Acetone	20 U
75-15-0	Carbon Disulfide	20 U
75-35-4	1,1-Dichloroethene	20 U
75-34-3	1,1-Dichloroethane	10 U
156-60-5	trans-1,2-Dichloroethene	9 U
67-66-3	Chloroform	20 U
107-06-2	1,2-Dichloroethane	10 U
78-93-3	2-Butanone	20 U
71-55-6	1,1,1-Trichloroethane	20 U
56-23-5	Carbon Tetrachloride	10 U
108-05-4	Vinyl Acetate	20 U
75-27-4	Bromodichloromethane	9 U
79-34-5	1,1,2,2-Tetrachloroethane	10 U
78-87-5	1,2-Dichloropropane	6 U
10061-02-6	trans-1,3-Dichloropropene	9 U
79-01-6	Trichloroethene	20 U
124-48-1	Dibromochloromethane	20 U
79-00-5	1,1,2-Trichloroethane	20 U
71-43-2	Benzene	10 U
10061-01-5	cis-1,3-Dichloropropene	9 U
110-75-8	2-Chloroethylvinylether	20 U
75-25-2	Bromoform	30 U
591-78-6	2-Hexanone	20 U
108-10-1	4-Methyl-2-Pentanone	20 U
127-18-4	Tetrachloroethene	30 U
108-88-3	Toluene	20 U
108-90-7	Chlorobenzene	10 U
100-41-4	Ethylbenzene	9 U
100-42-5	Styrene	20 U
	Total Xylenes	3 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: 4021
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wesuhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1µl injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	1 U
62-53-3	Aniline	NA
111-44-4	bis(2-Chloroethyl)ether	1 U
95-57-8	2-Chlorophenol	2 U
541-73-1	1,3-Dichlorobenzene	1 U
106-46-7	1,4-Dichlorobenzene	1 U
100-51-6	Benzyl Alcohol	3 U
95-50-1	1,2-Dichlorobenzene	3 U
95-48-7	2-Methylphenol	5 U
39638-32-9	bis(2-Chloroisopropyl)ether	1 U
106-44-5	4-Methylphenol	6 U
621-64-7	N-Nitroso-di-n-propylamine	2 U
67-72-1	Hexachloroethane	1 U
98-95-3	Nitrobenzene	1 U
78-59-1	Isophorone	6 U
88-75-5	2-Nitrophenol	4 U
105-67-9	2,4-Dimethylphenol	4 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy)methane	5 U
120-83-2	2,4-Dichlorophenol	3 U
120-82-1	1,2,4-Trichlorobenzene	2 U
91-20-3	Naphthalene	2 U
106-47-8	4-Chloroaniline	6 U
87-68-3	Hexachlorobutadiene	2 U
59-50-7	4-Chloro-3-methylphenol	2 U
91-57-6	2-Methylnaphthalene	4 U
77-47-4	Hexachlorocyclopentadiene	4 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	2 U
91-58-7	2-Chloronaphthalene	2 U
88-74-4	2-Nitroaniline	4 U
131-11-3	Dimethyl phthalate	2 U
208-96-8	Acenaphthylene	3 U
99-09-2	3-Nitroaniline	30 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: OWA2
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wesuhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	20	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	8	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	20	U
108-05-4	Vinyl Acetate	2	U
75-27-4	Bromodichloromethane	2	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
78-87-5	1,2-Dichloropropane	8	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	3	U
71-43-2	Benzene	10	U
10061-01-5	cis-1,3-Dichloropropene	0	U
110-75-8	2-Chloroethylvinylether	20	U
75-25-2	Bromoform	20	U
591-78-6	2-Hexanone	20	U
108-10-1	4-Methyl-2-Pentanone	7	U
127-18-4	Tetrachloroethene	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	8	U
	Total Xylenes	6	U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

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Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: 4021
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wuhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1 µl injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

83-32-9	Acenaphthene	1 U
51-28-5	2,4-Dinitrophenol	20 U
100-01-7	4-Nitrophenol	20 U
132-64-9	Dibenzofuran	5 U
121-14-2	2,4-Dinitrotoluene	1 U
606-20-2	2,6-Dinitrotoluene	3 U
84-66-2	Diethyl phthalate	2 U
7005-72-3	4-Chlorophenyl phenyl ether	6 U
86-73-7	Fluorene	2 U
100-01-6	4-Nitroaniline	40 U
534-52-1	4,6-Dinitro-2-methylphenol	20 U
86-30-6	N-Nitrosodiphenylamine (1)	10 U
101-55-3	4-Bromophenyl phenyl ether	3 U
118-74-1	Hexachlorobenzene	3 U
87-86-5	Pentachlorophenol	20 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-butyl phthalate	4 U
206-44-0	Fluoranthene	8 U
92-87-5	Benzidine	NA
129-00-0	Pyrene	3 U
85-68-7	Butyl benzyl phthalate	5 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)anthracene	4 U
117-81-7	bis(2-Ethylhexyl)phthalate	4 U
218-01-9	Chrysene	4 U
117-84-0	Di-n-octyl phthalate	2 U
205-99-2	Benzo(b)fluoranthene	5 U
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	5 U
193-39-5	Indeno(1,2,3-cd)pyrene	8 U
53-70-3	Dibenzo(a,h)anthracene	6 U
191-24-2	Benzo(g,h,i)perylene	10 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

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GC # 6B

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#6B
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wesuhl

Case #/SAS #: ——
QC Report #: Detection Limit
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5ul injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.0009 U
319-85-7	beta-BHC	0.002 U
319-86-8	delta-BHC	0.02 U
58-89-9	gamma-BHC (Lindane)	0.0005 U
76-44-8	Heptachlor	0.001 U
309-00-2	Aldrin	0.002 U
1024-57-3	Heptachlor Epoxide	0.002 U
959-98-8	Endosulfan I	0.02 U
60-57-1	Dieldrin	0.001 U
72-55-9	4,4'-DDE	0.002 U
72-20-8	Endrin	0.01 U
33213-65-9	Endosulfan II	0.001 U
72-54-8	4,4'-DDD	0.002 U
1031-07-8	Endosulfan Sulfate	0.004 U
50-29-3	4,4'-DDT	0.004 U
72-43-5	Methoxychlor	0.02 U
53494-70-5	Endrin Ketone	0.004 U
57-74-9	Chlordane	0.02 U
8001-35-2	Toxaphene	0.06 U
12674-11-2	Arochlor-1016	0.03 U
11104-28-2	Arochlor-1221	0.3 U
11141-16-5	Arochlor-1232	0.009 U
53469-21-9	Arochlor-1242	0.009 U
12672-29-6	Arochlor-1248	0.02 U
11097-69-1	Arochlor-1254	0.02 U
11096-82-5	Arochlor-1260	0.04 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ____ ml or
W_s ____ g
V_t ____,000 ul
V_i ____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
——	Pest.	Dibutyl Chlorendate	0.009 U	——	——

* - Asterisked Values are outside QC Limits.
\# - ____ Recoveries due to Dilution.
S - ____ Recoveries due to Matrix Effects.

NS - Not Spiked

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Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: OWA 3
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Musuhl

Case #/SAS #: ——
QC Report #: DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L (ng)

74-87-3	Chloromethane	20 U
74-83-9	Bromomethane	30 U
75-01-4	Vinyl Chloride	20 U
75-00-3	Chloroethane	20 U
75-09-2	Methylene Chloride	30 U
67-64-1	Acetone	20 U
75-15-0	Carbon Disulfide	20 U
75-35-4	1,1-Dichloroethene	20 U
75-34-3	1,1-Dichloroethane	20 U
156-60-5	trans-1,2-Dichloroethene	20 U
67-66-3	Chloroform	20 U
107-06-2	1,2-Dichloroethane	10 U
78-93-3	2-Butanone	20 U
71-55-6	1,1,1-Trichloroethane	20 U
56-23-5	Carbon Tetrachloride	10 U
108-05-4	Vinyl Acetate	20 U
75-27-4	Bromodichloromethane	10 U
79-34-5	1,1,2,2-Tetrachloroethane	6 U
78-87-5	1,2-Dichloropropane	20 U
10061-02-6	trans-1,3-Dichloropropene	20 U
79-01-6	Trichloroethene	20 U
124-48-1	Dibromochloromethane	20 U
79-00-5	1,1,2-Trichloroethane	10 U
71-43-2	Benzene	20 U
10061-01-5	cis-1,3-Dichloropropene	6 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	6 U
591-78-6	2-Hexanone	20 U
108-10-1	4-Methyl-2-Pentanone	3 U
127-18-4	Tetrachloroethene	10 U
108-88-3	Toluene	10 U
108-90-7	Chlorobenzene	10 U
100-41-4	Ethylbenzene	10 U
100-42-5	Styrene	10 U
	Total Xylenes	10 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

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GC #5A
Instrument
Detection Limits

Sample #:

Laboratory: IT/Cerritos
Lab ID: GC / EC GC#5A
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Wsuhl

Case #/SAS #: ——
QC Report #: Detection Limit
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5ul injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, (ng)

319-84-6	alpha-BHC	0.0002 U
319-85-7	beta-BHC	0.001 U
319-86-8	delta-BHC	0.1 U
58-89-9	gamma-BHC (Lindane)	0.0007 U
76-44-8	Heptachlor	0.0001 U
309-00-2	Aldrin	0.001 U
1024-57-3	Heptachlor Epoxide	0.002 U
959-98-8	Endosulfan I	0.002 U
60-57-1	Dieldrin	0.009 U
72-55-9	4,4'-DDE	0.002 U
72-20-8	Endrin	0.002 U
33213-65-9	Endosulfan II	0.005 U
72-54-8	4,4'-DDD	0.006 U
1031-07-8	Endosulfan Sulfate	0.02 U
50-29-3	4,4'-DDT	0.02 U
72-43-5	Methoxychlor	0.03 U
53494-70-5	Endrin Ketone	0.0009 U
57-74-9	Chlordane	0.004 U
8001-35-2	Toxaphene	0.03 U
12674-11-2	Arochlor-1016	0.01 U
11104-28-2	Arochlor-1221	0.2 U
11141-16-5	Arochlor-1232	0.2 U
53469-21-9	Arochlor-1242	0.05 U
12672-29-6	Arochlor-1248	0.2 U
11097-69-1	Arochlor-1254	0.2 U
11096-82-5	Arochlor-1260	0.02 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ——— ml or
W_s ——— g
V_t ——— ,000 ul
V_i ——— ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, (ng)

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
——	Pest.	Dibutyl Chlorendate	0.003 U	——	——

* - Asterisked Values are outside QC Limits.
\# - ——— Recoveries due to Dilution.
S - ——— Recoveries due to Matrix Effects.

NS - Not Spiked

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Sample #: GC#7A Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#7A
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Chuyl Wrzuhl

Case #/SAS #: ——
QC Report #: Detection Limit
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ——
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 5ul Injected
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.001 U
319-85-7	beta-BHC	0.002 U
319-86-8	delta-BHC	0.002 U
58-89-9	gamma-BHC (Lindane)	0.002 U
76-44-8	Heptachlor	0.002 U
309-00-2	Aldrin	0.002 U
1024-57-3	Heptachlor Epoxide	0.001 U
959-98-8	Endosulfan I	0.01 U
60-57-1	Dieldrin	0.002 U
72-55-9	4,4'-DDE	0.002 U
72-20-8	Endrin	0.004 U
33213-65-9	Endosulfan II	0.004 U
72-54-8	4,4'-DDD	0.006 U
1031-07-8	Endosulfan Sulfate	0.03 U
50-29-3	4,4'-DDT	0.03 U
72-43-5	Methoxychlor	0.1 U
53494-70-5	Endrin Ketone	0.02 U
57-74-9	Chlordane	0.03 U
8001-35-2	Toxaphene	0.5 U
12674-11-2	Arochlor-1016	0.03 U
11104-28-2	Arochlor-1221	0.04 U
11141-16-5	Arochlor-1232	0.3 U
53469-21-9	Arochlor-1242	0.2 U
12672-29-6	Arochlor-1248	0.09 U
11097-69-1	Arochlor-1254	0.06 U
11096-82-5	Arochlor-1260	0.06 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ——— ml or
W_s ——— g
V_t ——— ,000 ul
V_i ——— ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
——	Pest.	Dibutyl Chlorendate	0.004 U	——	——

* - Asterisked Values are outside QC Limits.
\# - ——— Recoveries due to Dilution.
$ - ——— Recoveries due to Matrix Effects.

NS - Not Spiked

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Sample #: GC#8B Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#8B
Lab ID for Dil:
Sample Matrix:
Data Release Authorized by: Chris Wisuhl

Case #/SAS #:
QC Report #: Detection Limit
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level:
Date Extracted:
Date Analyzed:
Spl->Extract: 5 µl injected
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.004 U
319-85-7	beta-BHC	0.03 U
319-86-8	delta-BHC	0.01 U
58-89-9	gamma-BHC (Lindane)	0.002 U
76-44-8	Heptachlor	0.002 U
309-00-2	Aldrin	0.004 U
1024-57-3	Heptachlor Epoxide	0.01 U
959-98-8	Endosulfan I	0.002 U
60-57-1	Dieldrin	0.008 U
72-55-9	4,4'-DDE	0.02 U
72-20-8	Endrin	0.003 U
33213-65-9	Endosulfan II	0.005 U
72-54-8	4,4'-DDD	0.01 U
1031-07-8	Endosulfan Sulfate	0.02 U
50-29-3	4,4'-DDT	0.01 U
72-43-5	Methoxychlor	0.1 U
53494-70-5	Endrin Ketone	0.02 U
57-74-9	Chlordane	0.04 U
8001-35-2	Toxaphene	0.4 U
12674-11-2	Arochlor-1016	0.09 U
11104-28-2	Arochlor-1221	0.04 U
11141-16-5	Arochlor-1232	0.04 U
53469-21-9	Arochlor-1242	0.02 U
12672-29-6	Arochlor-1248	0.2 U
11097-69-1	Arochlor-1254	0.07 U
11096-82-5	Arochlor-1260	0.08 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ml or
W_s g
V_t ,000 ul
V_i ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate	0.05 U		

* - Asterisked Values are outside QC Limits.
\# - Recoveries due to Dilution.
$ - Recoveries due to Matrix Effects.

NS - Not Spiked

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Sample #: GC/EC Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#11 B
Lab ID for Dil: ———
Sample Matrix: ———
Data Release Authorized by: Cheryl Wurtel

Case #/SAS #: ———
QC Report #: Detection Limit
Contract #: ———
Date Rec'd: ———

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: ———
Date Extracted: ———
Date Analyzed: ———
Spl->Extract: 5ul injected
For Dilution: ———
pH: ———
% Moisture: ———
% Moisture (Decanted): ———
Lab Std ID: ———

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.001 U
319-85-7	beta-BHC	0.002 U
319-86-8	delta-BHC	0.002 U
58-89-9	gamma-BHC (Lindane)	0.004 U
76-44-8	Heptachlor	0.004 U
309-00-2	Aldrin	0.01 U
1024-57-3	Heptachlor Epoxide	0.0005 U
959-98-8	Endosulfan I	0.03 U
60-57-1	Dieldrin	0.008 U
72-55-9	4,4'-DDE	0.001 U
72-20-8	Endrin	0.04 U
33213-65-9	Endosulfan II	0.002 U
72-54-8	4,4'-DDD	0.007 U
1031-07-8	Endosulfan Sulfate	0.02 U
50-29-3	4,4'-DDT	0.04 U
72-43-5	Methoxychlor	0.07 U
53494-70-5	Endrin Ketone	0.02 U
57-74-9	Chlordane	0.04 U
8001-35-2	Toxaphene	0.6 U
12674-11-2	Arochlor-1016	0.2 U
11104-28-2	Arochlor-1221	0.09 U
11141-16-5	Arochlor-1232	0.03 U
53469-21-9	Arochlor-1242	0.1 U
12672-29-6	Arochlor-1248	0.04 U
11097-69-1	Arochlor-1254	0.1 U
11096-82-5	Arochlor-1260	0.1 U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ——— ml or
W_s ——— g
V_t ———,000 ul
V_i ——— ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
———	Pest.	Dibutyl Chlorendate	0.03 U	———	———

* - Asterisked Values are outside QC Limits.
\# - ——— Recoveries due to Dilution.
$ - ——— Recoveries due to Matrix Effects.

NS - Not Spiked

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GC#12B Instrument Detection Limits

Sample #:

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#12B
Lab ID for Dil:
Sample Matrix:
Data Release Authorized by: Anne Lu Suhl

Case #/SAS #:
QC Report #: Detection Limit
Contract #:
Date Rec'd:

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level:
Date Extracted:
Date Analyzed:
Spl->Extract: 5ul injected
For Dilution:
pH:
% Moisture:
% Moisture (Decanted):
Lab Std ID:

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L, ng

319-84-6	alpha-BHC	0.0002U
319-85-7	beta-BHC	0.0007U
319-86-8	delta-BHC	0.0004U
58-89-9	gamma-BHC (Lindane)	0.0001U
76-44-8	Heptachlor	0.005U
309-00-2	Aldrin	0.006U
1024-57-3	Heptachlor Epoxide	0.0003U
959-98-8	Endosulfan I	0.06U
60-57-1	Dieldrin	0.005U
72-55-9	4,4'-DDE	0.0002U
72-20-8	Endrin	0.003U
33213-65-9	Endosulfan II	0.006U
72-54-8	4,4'-DDD	0.003U
1031-07-8	Endosulfan Sulfate	0.002U
50-29-3	4,4'-DDT	0.07U
72-43-5	Methoxychlor	0.03U
53494-70-5	Endrin Ketone	0.003U
57-74-9	Chlordane	0.01U
8001-35-2	Toxaphene	0.1U
12674-11-2	Arochlor-1016	0.1U
11104-28-2	Arochlor-1221	0.04U
11141-16-5	Arochlor-1232	0.003U
53469-21-9	Arochlor-1242	0.05U
12672-29-6	Arochlor-1248	0.04U
11097-69-1	Arochlor-1254	0.06U
11096-82-5	Arochlor-1260	0.08U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s ml or
W_s g
V_t ,000 ul
V_i ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L, ng

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate	0.03U		

* - Asterisked Values are outside QC Limits.
NS - Not Spiked
\# - Recoveries due to Dilution.
S - Recoveries due to Matrix Effects.

Rev 8/85

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirkenberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 50ul Sample + 5ml Water
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

74-87-3	Chloromethane	10000u
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	500u
67-64-1	Acetone	10000u
75-15-0	Carbon Disulfide	500u
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	10000u
71-55-6	1,1,1-Trichloroethane	500u
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	10000u
75-27-4	Bromodichloromethane	500u
79-34-5	1,1,2,2-Tetrachloroethane	
78-87-5	1,2-Dichloropropane	
10061-02-6	trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	10000u
75-25-2	Bromoform	500u
591-78-6	2-Hexanone	10000u
108-10-1	4-Methyl-2-Pentanone	10000u
127-18-4	Tetrachloroethene	500u
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Krokenberger

Case #/SAS #: ——
QC Report #: —— CRDL-DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1l -> 10ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

319-84-6	alpha-BHC	0.05U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	0.1U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1 U
12674-11-2	Arochlor-1016	0.5U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	1U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kuhlenberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1L → 2mL
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

62-75-9	N-Nitrosodimethylamine	10U
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	50U
111-91-1	bis(2-Chloroethoxy)methane	10U
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	50U
91-58-7	2-Chloronaphthalene	10U
88-74-4	2-Nitroaniline	50U
131-11-3	Dimethyl phthalate	10U
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	50U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: —
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kolsberger

Case #/SAS #: —
QC Report #: — CRDL - Qb
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: low
Date Extracted: —
Date Analyzed: —
Spl->Extract: 5ml Sample
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

74-87-3	Chloromethane	10U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	5U
67-64-1	Acetone	10U
75-15-0	Carbon Disulfide	5U
75-35-4	1,1-Dichloroethene	↓
75-34-3	1,1-Dichloroethane	↓
156-60-5	trans-1,2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1,2-Dichloroethane	↓
78-93-3	2-Butanone	10U
71-55-6	1,1,1-Trichloroethane	5U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	10U
75-27-4	Bromodichloromethane	5U
79-34-5	1,1,2,2-Tetrachloroethane	↓
78-87-5	1,2-Dichloropropane	↓
10061-02-6	trans-1,3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1,1,2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1,3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	10U
75-25-2	Bromoform	5U
591-78-6	2-Hexanone	10U
108-10-1	4-Methyl-2-Pentanone	10U
127-18-4	Tetrachloroethene	5U
108-88-3	Toluene	↓
108-90-7	Chlorobenzene	↓
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021, 4500
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kokenberger

Case #/SAS #: ——
QC Report #: —— CRDL - QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1l → 2ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

83-32-9	Acenaphthene	10u
51-28-5	2,4-Dinitrophenol	50u
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	10u
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	50u
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	50u
129-00-0	Pyrene	10u
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)anthracene	10u
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021, 4500
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirchberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 10 ml → 2 ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, (ug/L)

62-75-9	N-Nitrosodimethylamine	1000U
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	5000U
111-91-1	bis(2-Chloroethoxy)methane	1000U
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	5000U
91-58-7	2-Chloronaphthalene	1000U
88-74-4	2-Nitroaniline	5000U
131-11-3	Dimethyl phthalate	1000U
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	5000U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kolenkazi

Case #/SAS #: ——
QC Report #: —— CRDL - QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 2 of 2

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 10ml → 2ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

83-32-9	Acenaphthene	1000 U
51-28-5	2,4-Dinitrophenol	5000 U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	1000 U
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	5000 U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	1000 U
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	5000 U
85-01-8	Phenanthrene	1000 U
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	5000 U
129-00-0	Pyrene	1000 U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	2000 U
56-55-3	Benzo(a)anthracene	1000 U
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: ——
Sample Matrix: WATER
Data Release Authorized by: Linda R. Kirkenberger

Case #/SAS #: ——
QC Report #: —— CRDL-DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 10ml → 10ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

319-84-6	alpha-BHC	5U
319-85-7	beta-BHC	↓
319-86-8	delta-BHC	↓
58-89-9	gamma-BHC (Lindane)	↓
76-44-8	Heptachlor	↓
309-00-2	Aldrin	↓
1024-57-3	Heptachlor Epoxide	↓
959-98-8	Endosulfan I	↓
60-57-1	Dieldrin	10U
72-55-9	4,4'-DDE	↓
72-20-8	Endrin	↓
33213-65-9	Endosulfan II	↓
72-54-8	4,4'-DDD	↓
7421-93-4	Endrin Aldehyde	↓
1031-07-8	Endosulfan Sulfate	↓
50-29-3	4,4'-DDT	↓
72-43-5	Methoxychlor	50U
53494-70-5	Endrin Ketone	10U
57-74-9	Chlordane	50U
8001-35-2	Toxaphene	100U
12674-11-2	Arochlor-1016	50U
11104-28-2	Arochlor-1221	↓
11141-16-5	Arochlor-1232	↓
53469-21-9	Arochlor-1242	↓
12672-29-6	Arochlor-1248	↓
11097-69-1	Arochlor-1254	100U
11096-82-5	Arochlor-1260	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: ——
Sample Matrix: SOIL
Data Release Authorized by: Linda R. Kobelinger

Case #/SAS #: ——
QC Report #: —— CRDL - DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1g Sample + 5ml Water
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	↓
75-34-3	1,1-Dichloroethane	↓
156-60-5	trans-1,2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1,2-Dichloroethane	↓
78-93-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U
79-34-5	1,1,2,2-Tetrachloroethane	↓
78-87-5	1,2-Dichloropropane	↓
10061-02-6	trans-1,3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1,1,2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1,3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	↓
108-90-7	Chlorobenzene	↓
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: Method Detection Limits

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: —
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kohlenberger

Case #/SAS #: —
QC Report #: — QL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: low
Date Extracted: —
Date Analyzed: —
Spl->Extract: 50g → 1 ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

62-75-9	N-Nitrosodimethylamine	200 u
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	1000 u
111-91-1	bis(2-Chloroethoxy)methane	200 u
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	1000 u
91-58-7	2-Chloronaphthalene	200 u
88-74-4	2-Nitroaniline	1000 u
131-11-3	Dimethyl phthalate	200 u
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	1000 u

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: ——
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kobelnagin

Case #/SAS #: ——
QC Report #: —— QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 50g → 1ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

83-32-9	Acenaphthene	200U
51-28-5	2,4-Dinitrophenol	1000U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	200U
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	1000U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	200U
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	1000U
85-01-8	Phenanthrene	200U
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	1000U
129-00-0	Pyrene	200U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	400U
56-55-3	Benzo(a)anthracene	200U
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: ——
Sample Matrix: Soil
Data Release Authorized by: Linda R. Krokenberger

Case #/SAS #: ——
QC Report #: —— DL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: Low
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 50g → 10ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

319-84-6	alpha-BHC	1U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	2U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	10U
53494-70-5	Endrin Ketone	2U
57-74-9	Chlordane	10U
8001-35-2	Toxaphene	20U
12674-11-2	Arochlor-1016	10U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	20U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: OWA-1, OWA-2, OWA-3
Lab ID for Dil: ——
Sample Matrix: SOIL
Data Release Authorized by: Linda R. Kolanberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Volatile Compounds

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 4g Sample + 10ml Methanol
For Dilution: 100µl Methanol + 5ml Water
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

74-87-3	Chloromethane	1000U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	500U
67-64-1	Acetone	1000U
75-15-0	Carbon Disulfide	500U
75-35-4	1,1-Dichloroethene	↓
75-34-3	1,1-Dichloroethane	↓
156-60-5	trans-1,2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1,2-Dichloroethane	↓
78-93-3	2-Butanone	1000U
71-55-6	1,1,1-Trichloroethane	500U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	1000U
75-27-4	Bromodichloromethane	500U
79-34-5	1,1,2,2-Tetrachloroethane	↓
78-87-5	1,2-Dichloropropane	↓
10061-02-6	trans-1,3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1,1,2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1,3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	1000U
75-25-2	Bromoform	500U
591-78-6	2-Hexanone	1000U
108-10-1	4-Methyl-2-Pentanone	1000U
127-18-4	Tetrachloroethene	500U
108-88-3	Toluene	↓
108-90-7	Chlorobenzene	↓
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: 4021,4500
Lab ID for Dil: ——
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kokenberger

Case #/SAS #: ——
QC Report #: —— CRDL-QL
Contract #: ——
Date Rec'd: ——

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds
Page 1 of 2

Sample Level: MEDIUM
Date Extracted: ——
Date Analyzed: ——
Spl->Extract: 1g → 2ml
For Dilution: ——
pH: ——
% Moisture: ——
% Moisture (Decanted): ——
Lab Std ID: ——

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg ug/L

62-75-9	N-Nitrosodimethylamine	20,000U
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-Chloroisopropyl)ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-di-n-propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	100,000U
111-91-1	bis(2-Chloroethoxy)methane	20,000U
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	100,000U
91-58-7	2-Chloronaphthalene	20,000U
88-74-4	2-Nitroaniline	100,000U
131-11-3	Dimethyl phthalate	20,000U
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	100,000U

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

RECEIVED JUN 2 4 1986

Sample #: METHOD DETECTION LIMIT

Laboratory: IT/Cerritos
Lab ID: 4021, 4500
Lab ID for Dil: —
Sample Matrix: Soil
Data Release Authorized by: Linda R. Kolesinger

Case #/SAS #: —
QC Report #: — CRDL - QL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Base/Neutral and Acid Compounds

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 1g → 2ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: ug/Kg, ug/L

83-32-9	Acenaphthene	20,000U
51-28-5	2,4-Dinitrophenol	100,000U
100-01-7	4-Nitrophenol	↓
132-64-9	Dibenzofuran	20,000U
121-14-2	2,4-Dinitrotoluene	
606-20-2	2,6-Dinitrotoluene	
84-66-2	Diethyl phthalate	
7005-72-3	4-Chlorophenyl phenyl ether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	100,000U
534-52-1	4,6-Dinitro-2-methylphenol	↓
86-30-6	N-Nitrosodiphenylamine (1)	20,000U
101-55-3	4-Bromophenyl phenyl ether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	100,000U
85-01-8	Phenanthrene	20,000U
120-12-7	Anthracene	
84-74-2	Di-n-butyl phthalate	
206-44-0	Fluoranthene	↓
92-87-5	Benzidine	100,000U
129-00-0	Pyrene	20,000U
85-68-7	Butyl benzyl phthalate	↓
91-94-1	3,3'-Dichlorobenzidine	40,000U
56-55-3	Benzo(a)anthracene	20,000U
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-octyl phthalate	
205-99-2	Benzo(b)fluoranthene	
207-08-9	Benzo(k)fluoranthene	
50-32-8	Benzo(a)pyrene	
193-39-5	Indeno(1,2,3-cd)pyrene	
53-70-3	Dibenzo(a,h)anthracene	
191-24-2	Benzo(g,h,i)perylene	↓

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
B - Compound found in Blank. Sample results are not Blank Corrected.
NA - Not Analyzed

(1) Cannot be separated from Diphenylamine.

RECEIVED JUN 2 4 1988

Sample #: METHOD DETECTION LIMITS

Laboratory: IT/Cerritos
Lab ID: GC/EC
Lab ID for Dil: —
Sample Matrix: SOIL
Data Release Authorized by: Linda R. Kuhnberger

Case #/SAS #: —
QC Report #: — DL
Contract #: —
Date Rec'd: —

Organics Analysis Data Sheet
Pesticide/PCB's

Sample Level: MEDIUM
Date Extracted: —
Date Analyzed: —
Spl->Extract: 1g→10ml
For Dilution: —
pH: —
% Moisture: —
% Moisture (Decanted): —
Lab Std ID: —

ALL RESULTS ARE REPORTED ON WET WEIGHT BASIS.

Circle Units: (ug/Kg) ug/L

319-84-6	alpha-BHC	50U
319-85-7	beta-BHC	
319-86-8	delta-BHC	
58-89-9	gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	100U
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4'-DDT	
72-43-5	Methoxychlor	500U
53494-70-5	Endrin Ketone	100U
57-74-9	Chlordane	500U
8001-35-2	Toxaphene	1000U
12674-11-2	Arochlor-1016	500U
11104-28-2	Arochlor-1221	
11141-16-5	Arochlor-1232	
53469-21-9	Arochlor-1242	
12672-29-6	Arochlor-1248	
11097-69-1	Arochlor-1254	1000U
11096-82-5	Arochlor-1260	

U - Analyzed for but not detected (Reported Value is Detection Limit-DL)
J - Estimated Value (0 < Value < DL)
C - Confirmed by GC/MS-GC Quantitation
B - Compound found in Blank. Sample results are not Blank Corrected.
** - Detected below GC/MS DL-GC Quantitation
N - Not Confirmed by GC/MS-GC/MS DL
NA - Not Analyzed
NR - Not Reported

V_i = Volume of extract injected (ul)
V_s = Volume of water extracted (ml)
W_s = Weight of sample extracted (g)
V_t = Volume of total extract (ul)

V_s _____ ml or
W_s _____ g
V_t _____ ul
V_i _____ ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Lab ID	Fraction	Compound	Conc. Sample	Conc. Spiked	% Recovery
	Pest.	Dibutyl Chlorendate			

* - Asterisked Values are outside QC Limits. NS - Not Spiked
\# - _____ Recoveries due to Dilution.
§ - _____ Recoveries due to Matrix Effects.

86FG06S08

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH478

LABORATORY: IT/CERR
LABORATORY ID: 36569EC1
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	10. U
44V	75-09-2	METHYLENE CHLORIDE	14. B
13H	67-64-1	ACETONE	110. B
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	5. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. UJ
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. UJ
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. UJ
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. UJ
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. UJ
47V	75-25-2	BROMOFORM	5. U TC
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	2. JB
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
12H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5 U

22 May 86
TC

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH478

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI02
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH478

LABORATORY: IT/CERR
LABORATORY ID: 36569EI02
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20 U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH478

Laboratory: IT/Cerritos
Lab Sample ID: EH478
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1l → 10mL; 10mL → 10mL
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-111-1024
1° Std File ID: B11-PM-111-1005, 1006

2° Sample File ID: N/A
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.62	1°	1.0	62

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH478

ABORATORY: IT/CERR
ABORATORY ID: 36569EC1
ATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

ATA RELEASE AUTHORIZED BY: Todd Bocherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45	50.	90
36569EC1	4-BROMOFLUOROBENZENE	50.	50.	100
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH478

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI02
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	84	102.	82
	2-FLUOROBIPHENYL	78.	100.	78
36569EI02	P-TERPHENYL-D14	65.	103.	63
	PHENOL-D5	90.	206.	44
	2-FLUOROPHENOL	126.	203.	62
	2,4,6-TRIBROMOPHENOL	125.	205.	61

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	CAPROLACTAM	655	1000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86 FG06S09

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH479

LABORATORY: IT/CERR
LABORATORY ID: 36569EC2
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

RECEIVED JUN 2 4 1986

DATA RELEASE AUTHORIZED BY: Tod Bechtel

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP.	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	10. U
44V	75-09-2	METHYLENE CHLORIDE	10. B
13H	67-64-1	ACETONE	31. B
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	5. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U J
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U J
47V	75-25-2	BROMOFORM	5. U TL
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	5. U
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5 U

27 May 86

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH479

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI04
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	80. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	80. U
24A	95-57-8	2-CHLOROPHENOL	80. U
26B	541-73-1	1,3-DICHLOROBENZENE	80. U
27B	106-46-7	1,4-DICHLOROBENZENE	80. U
6H	100-51-6	BENZYL ALCOHOL	80. U
25B	95-50-1	1,2-DICHLOROBENZENE	80. U
2H	95-48-7	2-METHYLPHENOL	80. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	80. U
3H	106-44-5	4-METHYLPHENOL	80. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	80. U
12B	67-72-1	HEXACHLOROETHANE	80. U
56B	98-95-3	NITROBENZENE	80. U
54B	78-59-1	ISOPHORONE	80. U
57A	88-75-5	2-NITROPHENOL	80. U
34A	105-67-9	2,4-DIMETHYLPHENOL	80. U
1H	65-85-0	BENZOIC ACID	400. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	80. U
31A	120-33-2	2,4-DICHLOROPHENOL	80. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	80. U
55B	91-20-3	NAPHTHALENE	80. U
7H	106-47-8	4-CHLOROANILINE	80. U
52B	87-68-3	HEXACHLOROBUTADIENE	80. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	80. U
9H	91-57-6	2-METHYLNAPHTHALENE	80. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	80. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	80. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	400. U
20B	91-58-7	2-CHLORONAPHTHALENE	80. U
10H	88-74-4	2-NITROANILINE	400. U
71B	131-11-3	DIMETHYLPHTHALATE	80. U
77B	208-96-8	ACENAPHTHALENE	80. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH479

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI04
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	400. U
1B	83-32-9	ACENAPHTHENE	80. U
59A	51-28-5	2,4-DINITROPHENOL	400. U
58A	100-02-7	4-NITROPHENOL	400. U
8H	132-64-9	DIBENZOFURAN	80. U
35B	121-14-2	2,4-DINITROTOLUENE	80. U
36B	606-20-2	2,6-DINITROTOLUENE	80. U
70B	84-66-2	DIETHYLPHTHALATE	80. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	80. U
80B	86-73-7	FLUORENE	80. U
12H	100-01-6	4-NITROANILINE	400. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	400. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	80. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	80. U
9B	118-74-1	HEXACHLOROBENZENE	80. U
64A	87-86-5	PENTACHLOROPHENOL	400. U
81B	85-01-8	PHENANTHRENE	80. U
78B	120-12-7	ANTHRACENE	80. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	80. U
39B	206-44-0	FLUORANTHENE	80. U
84B	129-00-0	PYRENE	80. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	80. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	200. U
72B	56-55-3	BENZO (A) ANTHRACENE	80. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	80. U
76B	218-01-9	CHRYSENE	80. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	80. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	80. U
73B	50-32-8	BENZO (A) PYRENE	80. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	80. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	80. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	80. U

RECEIVED JUN 2 4 1986

Sample #: EH479

Laboratory: IT/Cerritos
Lab Sample ID: EH479
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1l → 10ml.; 10 ml → 10 ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: BIL PM-111-1025
1° Std File ID: BIL PM-111-1005, 1006

2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	1.1	1°	1.0	110

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH479

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EC2
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC2	4-BROMOFLUOROBENZENE	50.	50.	100
	1,2-DICHLOROETHANE-D4	50.	50.	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH479

LABORATORY: IT/CERR
LABORATORY ID: 36569EI04
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	74. J	102.	73
	2-FLUOROBIPHENYL	86.	100.	86
36569EI04	P-TERPHENYL-D14	53. J	103.	51
	PHENOL-D5	112.	206.	54
	2-FLUOROPHENOL	95.	203.	47
	2,4,6-TRIBROMOPHENOL	92.	205.	45

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	CAPROLACTAM	652	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match
Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/CERR

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH479
CONTRACT #: 68-01-7262
UNITS: UG/L

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
DICHLOROETHYLENE	50.	5. U	55.	110	57.	114	-4
TRICHLOROETHYLENE	50.	5. U	49.	98	49.	98	0
CHLOROBENZENE	50.	5. U	52.	104	54.	108	-4
TOLUENE	50.	5. U	51.	102	52.	104	-2
BENZENE	50.	5. U	51.	102	53.	106	-4
TOLUENE-D8	50.	45.	51.	102	51.	102	0
BROMOFLUOROBENZENE	50.	50.	53.	106	53.	106	0
DICHLOROETHANE-D4	50.	50.	48.	96	49.	98	-2

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: VOA'S 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: VOA'S 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Methylene Chloride	10 B	14 B	17 B	19
Acetone	31 B	26	31	18

86FG06S10

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EC3
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

RECEIVED JUN 2 4 1986

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	6. J
44V	75-09-2	METHYLENE CHLORIDE	11. B
13H	67-64-1	ACETONE	19 B
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	8. HRS
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5 U
23V	67-66-3	CHLOROFORM	5 U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5 U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U J
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U J
47V	75-25-2	BROMOFORM	5. U
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	5. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	2. J B
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U
20H	95-47-6	TOTAL XYLENES	5 U

22 May 86 TC

TC

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EI05
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLORDISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EI05
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH480

Laboratory: IT/Cerritos
Lab Sample ID: EH480
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1L → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-111-1026
1° Std File ID: B11-PM-111-1005, 1006

2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	1.1	1°	1.0	110

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EC3
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

RECEIVED JUN 2 4 1986

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50	90
36569EC3	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	49.	50.	98

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH480

LABORATORY: IT/CERR
LABORATORY ID: 36569EI05
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	78.	102.	76
	2-FLUOROBIPHENYL	81.	100.	81
36569EI05	P-TERPHENYL-D14	57.	103.	55
	PHENOL-D5	89.	206.	43
	2-FLUOROPHENOL	123.	203.	61
	2,4,6-TRIBROMOPHENOL	118.	205.	58

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	678	1,000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

RECEIVED JUN 2 4 1986

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103.	20. U	91.	88	86.	83	6
ACENAPHTHENE	100.	20. U	87.	87	91.	91	-4
2,4-DINITROTOLUENE	101.	20. U	87.	86	84.	83	4
PYRENE	103.	20. U	74.	72	75.	73	-1
NITROSOPROPYLAMINE	102.	20. U	85.	83	79.	77	7
1,4-DICHLOROBENZENE	101.	20. U	70.	69	69.	68	2
PENTACHLOROPHENOL	207.	100. U	110.	53	100. J	48	10
PHENOL	203.	20. U	59.	29	29.	14	68*
2-CHLOROPHENOL	213.	20. U	170.	80	120.	56	35
P-CHLORO-M-CRESOL	205.	20. U	200.	97	230.	112*	-14
4-NITROPHENOL	215.	100. U	150.	70	140.	65	7
NITROBENZENE-D5	102.	78.	92.	90	110.	108	-18
2-FLUOROBIPHENYL	100.	81.	86.	86	85.	85	1
P-TERPHENYL-D14	103.	57.	53.	51	56.	54	-5
PHENOL-D5	206.	89.	69.	33	33.	16	70
2-FLUOROPHENOL	203.	123.	129.	63	118.	58	9
TRIBROMOPHENOL	205.	118.	128.	62	122.	59	5

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 0 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 1 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	20U	38	25	41

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH480RI

LABORATORY: IT/CERR
LABORATORY ID. 36569EI22
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200. U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200. U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200. U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EM480B1

RECEIVED JUN 24 1986

LABORATORY. IT/CERR
LABORATORY ID: 36569EI22
MATRIX. WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--100UL:1ML		
PH	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI674		
SENSITIVITY ID.	DFTEI092		
UNITS	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200 U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200. U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200. U
39B	206-44-0	FLUORANTHENE	200. U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH480RI

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI22
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L. 2ML--100UL: 1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC).	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	82. J	102.	80
	2-FLUOROBIPHENYL	110. J	100.	110
36569EI22	P-TERPHENYL-D14	51. J	103.	50
	PHENOL-D5	174 J	206.	84
	2-FLUOROPHENOL	146. J	203.	72
	2,4,6-TRIBROMOPHENOL	101. J	205.	49

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	609	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

QUALITY CONTROL REPORT
MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: IT/WCTS

CASE #/SAS #: 5840
LEVEL: LOW
MATRIX: WATER
Q.C. REPORT #: 7262-3

SAMPLE #: EH480RI
CONTRACT #: 68-01-7262
UNITS: UG/L

BASE/NEUTRAL AND ACID COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

COMPOUND	CONC SPKD (UG/L)	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	103.	200. U	110. J	107*	98. J	95	12
ACENAPHTHENE	100.	200. U	100. J	100	100. J	100	0
2,4-DINITROTOLUENE	101.	200. U	58. J	57	66. J	65	-13
PYRENE	103.	200. U	79. J	77	78. J	76	1
NITROSOPROPYLAMINE	102.	200. U	71. J	70	72. J	70	-1
1,4-DICHLOROBENZENE	101.	200. U	85. J	84	84. J	83	1
PENTACHLOROPHENOL	206.	1000. U	66. J	32	62. J	30	7
PHENOL	202.	200. U	180. J	89	160. J	79	12
2-CHLOROPHENOL	212.	200. U	170. J	80	120. J	57	35
P-CHLORO-M-CRESOL	205.	200. U	170. J	83	140. J	68	19
4-NITROPHENOL	215.	1000. U	32. J	15	38. J	18	-16
NITROBENZENE-D5	102.	82. J	80. J	78	75. J	73	7
2-FLUOROBIPHENYL	100.	110. J	113. J	113	109. J	109	4
P-TERPHENYL-D14	103.	51. J	47. J	46	50. J	48	-6
PHENOL-D5	206.	174. J	185. J	90	153. J	74	19
2-FLUOROPHENOL	203.	146. J	140. J	69	119. J	59	16
TRIBROMOPHENOL	205.	101. J	104. J	51	90. J	44	15

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS

RPD=(MS-MSD)/((MS+MSD)/2)*100

RECOVERY: B/N'S 1 OUT OF 12 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: B/N'S 0 OUT OF 6 OUTSIDE QC LIMITS
ACIDS 0 OUT OF 5 OUTSIDE QC LIMITS

Summary of Unspiked HSL's

Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Di-n-butyl phthalate	200u	21 J	8 J	90

86FG06511

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481

RECEIVED JUN 2 4 19

ABORATORY: IT/CERR
ABORATORY ID: 36569EC13
ATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

ATA RELEASE AUTHORIZED BY: Tod Bechere

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	2.5ML: 5MLS
PH.	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	20 U
46V	74-83-9	BROMOMETHANE	20. U
88V	75-01-4	VINYL CHLORIDE	20. U
16V	75-00-3	CHLOROETHANE	20. U
44V	75-09-2	METHYLENE CHLORIDE	33. B
13H	67-64-1	ACETONE	250. B
15H	75-15-0	CARBON DISULFIDE	10. U
29V	75-35-4	1,1-DICHLOROETHENE	10. U
13V	75-34-3	1,1-DICHLOROETHANE	15.
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	10. U
23V	67-66-3	CHLOROFORM	10. U
10V	107-06-2	1,2-DICHLOROETHANE	10. U
14H	78-93-3	2-BUTANONE	20. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	10. U
6V	56-23-5	CARBON TETRACHLORIDE	10. U
19H	108-05-4	VINYL ACETATE	20. U
48V	75-27-4	BROMODICHLOROMETHANE	10. U
32V	78-87-5	1,2-DICHLOROPROPANE	10. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	10. U
87V	79-01-6	TRICHLOROETHENE	10. U
51V	124-48-1	CHLORODIBROMOMETHANE	10. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	10. U J
4V	71-43-2	BENZENE	10. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	10. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	20. U J
47V	75-25-2	BROMOFORM	10. U
16H	519-78-6	2-HEXANONE	20. U
17H	108-10-1	4-METHYL-2-PENTANONE	20. U
85V	127-18-4	TETRACHLOROETHENE	10. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	10. U
86V	108-88-3	TOLUENE	10 U
7V	108-90-7	CHLOROBENZENE	10. U
38V	100-41-4	ETHYLBENZENE	10. U
18H	100-42-5	STYRENE	10. U
20H	95-47-6	TOTAL XYLENES	10 U

22 May 86

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481

LABORATORY: IT/CERR
LABORATORY ID: 36569EI10
MATRIX. WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	80. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	80. U
24A	95-57-8	2-CHLOROPHENOL	80. U
26B	541-73-1	1,3-DICHLOROBENZENE	80. U
27B	106-46-7	1,4-DICHLOROBENZENE	80. U
6H	100-51-6	BENZYL ALCOHOL	80. U
25B	95-50-1	1,2-DICHLOROBENZENE	80. U
2H	95-48-7	2-METHYLPHENOL	80. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	80. U
3H	106-44-5	4-METHYLPHENOL	80. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	80. U
12B	67-72-1	HEXACHLOROETHANE	80. U
56B	98-95-3	NITROBENZENE	80. U
54B	78-59-1	ISOPHORONE	80. U
57A	88-75-5	2-NITROPHENOL	80. U
34A	105-67-9	2,4-DIMETHYLPHENOL	80. U
1H	65-85-0	BENZOIC ACID	400. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	80. U
31A	120-33-2	2,4-DICHLOROPHENOL	80. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	80. U
55B	91-20-3	NAPHTHALENE	80. U
7H	106-47-8	4-CHLOROANILINE	80. U
52B	87-68-3	HEXACHLOROBUTADIENE	80. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	80. U
9H	91-57-6	2-METHYLNAPHTHALENE	80. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	80. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	80. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	400. U
20B	91-58-7	2-CHLORONAPHTHALENE	80. U
10H	88-74-4	2-NITROANILINE	400. U
71B	131-11-3	DIMETHYLPHTHALATE	80. U
77B	208-96-8	ACENAPHTHALENE	80. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481

.ABORATORY: IT/CERR
.ABORATORY ID: 36569EI10
1ATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

)ATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	400. U
1B	83-32-9	ACENAPHTHENE	80. U
59A	51-28-5	2,4-DINITROPHENOL	400. U
58A	100-02-7	4-NITROPHENOL	400. U
8H	132-64-9	DIBENZOFURAN	80. U
35B	121-14-2	2,4-DINITROTOLUENE	80. U
36B	606-20-2	2,6-DINITROTOLUENE	80. U
70B	84-66-2	DIETHYLPHTHALATE	80. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	80. U
80B	86-73-7	FLUORENE	80. U
12H	100-01-6	4-NITROANILINE	400. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	400. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	80. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	80. U
9B	118-74-1	HEXACHLOROBENZENE	80. U
64A	87-86-5	PENTACHLOROPHENOL	400. U
81B	85-01-8	PHENANTHRENE	80. U
78B	120-12-7	ANTHRACENE	80. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	80. U
39B	206-44-0	FLUORANTHENE	80. U
84B	129-00-0	PYRENE	80. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	80. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	200. U
72B	56-55-3	BENZO (A) ANTHRACENE	80. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	80. U
76B	218-01-9	CHRYSENE	80. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	80. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	80. U
73B	50-32-8	BENZO (A) PYRENE	80. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	80. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	80. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	80. U

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Sample #: EH481

Laboratory: IT/Cerritos
Lab Sample ID: EH481
Sample Matrix: Water
Data Release Authorized by: PH/MO

Case #/SAS #: 58401
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-22-86
Spl->Extract: 1l → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-111-1027
1° Std File ID: B11-PM-111-1005, 1004
2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	1.0	1°	1.0	100

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH481

LABORATORY: IT/CERR
LABORATORY ID: 36569EC13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becheres

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	2.5ML:5MLS
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	91.	100	91
36569EC13	4-BROMOFLUOROBENZENE	101.	100.	101
	1,2-DICHLOROETHANE-D4	101.	100	101

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET SAMPLE #. EH481

LABORATORY: IT/CERR
LABORATORY ID: 36569EI10
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--250UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	69. J	102.	68
	2-FLUOROBIPHENYL	80	100.	80
36569EI10	P-TERPHENYL-D14	57. J	103.	55
	PHENOL-D5	121.	206.	59
	2-FLUOROPHENOL	118.	203.	58
	2,4,6-TRIBROMOPHENOL	94.	205.	46

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		Unknown	390	30
2	105-60-2	Caprolactam	652	3,000
3				
4				
5				
6				
7				
8				
9				
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RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI25
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--50UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 7-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	400. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	400. U
24A	95-57-8	2-CHLOROPHENOL	400. U
26B	541-73-1	1,3-DICHLOROBENZENE	400. U
27B	106-46-7	1,4-DICHLOROBENZENE	400. U
6H	100-51-6	BENZYL ALCOHOL	400. U
25B	95-50-1	1,2-DICHLOROBENZENE	400. U
2H	95-48-7	2-METHYLPHENOL	400. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	400. U
3H	106-44-5	4-METHYLPHENOL	400. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	400. U
12B	67-72-1	HEXACHLOROETHANE	400. U
56B	98-95-3	NITROBENZENE	400. U
54B	78-59-1	ISOPHORONE	400. U
57A	88-75-5	2-NITROPHENOL	400. U
34A	105-67-9	2,4-DIMETHYLPHENOL	400. U
1H	65-85-0	BENZOIC ACID	2000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	400. U
31A	120-33-2	2,4-DICHLOROPHENOL	400. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	400. U
55B	91-20-3	NAPHTHALENE	400. U
7H	106-47-8	4-CHLOROANILINE	400. U
52B	87-68-3	HEXACHLOROBUTADIENE	400. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	400. U
9H	91-57-6	2-METHYLNAPHTHALENE	400. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	400. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	400. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	2000. U
20B	91-58-7	2-CHLORONAPHTHALENE	400. U
10H	88-74-4	2-NITROANILINE	2000. U
71B	131-11-3	DIMETHYLPHTHALATE	400. U
77B	208-96-8	ACENAPHTHALENE	400. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH481RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI25
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--50UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution reqd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	2000. U
1B	83-32-9	ACENAPHTHENE	400. U
59A	51-28-5	2,4-DINITROPHENOL	2000. U
58A	100-02-7	4-NITROPHENOL	2000. U
8H	132-64-9	DIBENZOFURAN	400. U
35B	121-14-2	2,4-DINITROTOLUENE	400. U
36B	606-20-2	2,6-DINITROTOLUENE	400. U
70B	84-66-2	DIETHYLPHTHALATE	400. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	400. U
80B	86-73-7	FLUORENE	400. U
12H	100-01-6	4-NITROANILINE	2000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	2000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	400. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	400. U
9B	118-74-1	HEXACHLOROBENZENE	400. U
64A	87-86-5	PENTACHLOROPHENOL	2000. U
81B	85-01-8	PHENANTHRENE	400. U
78B	120-12-7	ANTHRACENE	400. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	400. U
39B	206-44-0	FLUORANTHENE	400. U
84B	129-00-0	PYRENE	400. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	400. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	800. U
72B	56-55-3	BENZO (A) ANTHRACENE	400. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	400. U
76B	218-01-9	CHRYSENE	400. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	400. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	400. U
73B	50-32-8	BENZO (A) PYRENE	400. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	400. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	400. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	400. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH481RI

LABORATORY: IT/CERR
LABORATORY ID. 36569EI25
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT	1L:2ML--50UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI674		
SENSITIVITY ID.	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	57. J	102.	56
	2-FLUOROBIPHENYL	102. J	100.	102
36569EI25	P-TERPHENYL-D14	39 J	103.	38
	PHENOL-D5	130. J	206.	63
	2-FLUOROPHENOL	106. J	203.	52
	2,4,6-TRIBROMOPHENOL	47. J	205.	23

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	611	4000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86F606S12

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH482

RECEIVED JUN 2 4 19

LABORATORY: IT/CERR
LABORATORY ID: 36569EC5
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL: LOW
DATE EXT/PREP: 04/23/86
DATE ANALYZED: 04/23/86
SPL-->EXTRACT: 5 ML
PH: NA
% MOISTURE (NOT DEC.): N/A
% MOISTURE (DEC.): N/A
STANDARD ID: LWVEC014
SENSITIVITY ID: BFBEC023
UNITS: UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	6.	B
13H	67-64-1	ACETONE	28.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	20 May 86
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5 U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J 22 May 86
47V	75-25-2	BROMOFORM	5. U	TC
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	2.	JB
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	
20H	95-47-6	TOTAL XYLENES	5 U	

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH482

RECEIVED JUN 2 4 198

LABORATORY: IT/CERR
LABORATORY ID: 36569EI09
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI667		
SENSITIVITY ID:	DFTEI078		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH482

LABORATORY: IT/CERR
LABORATORY ID: 36569EI09
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

RECEIVED JUN 2 4 1986

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH482

Laboratory: IT/Cerritos
Lab Sample ID: EH482
Sample Matrix: Water
Data Release Authorized by: PH/MBA

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1l → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1017
1° Std File ID: B11-PM-112.1005, 1006
2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.66	1°	10	66

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
$ - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH482

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EC5
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS.	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC5	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	50.	50.	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH482

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID. 36569EI09
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI667			
SENSITIVITY ID:	DFTEI078			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	93.	102.	91
	2-FLUOROBIPHENYL	90.	100.	90
36569EI09	P-TERPHENYL-D14	46	103.	45
	PHENOL-D5	151.	206.	73
	2-FLUOROPHENOL	127.	203.	63
	2,4,6-TRIBROMOPHENOL	147.	205.	72

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		Unknown	356	20
2	105-60-2	Caprolactam	633	50
3		Unknown	744	30
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986
86FG06D12

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EC6
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
45V	74-87-3	CHLOROMETHANE	10. U
46V	74-83-9	BROMOMETHANE	10. U
88V	75-01-4	VINYL CHLORIDE	10. U
16V	75-00-3	CHLOROETHANE	10. U
44V	75-09-2	METHYLENE CHLORIDE	4. JB
13H	67-64-1	ACETONE	10 U
15H	75-15-0	CARBON DISULFIDE	5. U
29V	75-35-4	1,1-DICHLOROETHENE	5. U
13V	75-34-3	1,1-DICHLOROETHANE	5. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
23V	67-66-3	CHLOROFORM	5. U
10V	107-06-2	1,2-DICHLOROETHANE	5. U
14H	78-93-3	2-BUTANONE	10. U J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U
6V	56-23-5	CARBON TETRACHLORIDE	5. U
19H	108-05-4	VINYL ACETATE	10. U
48V	75-27-4	BROMODICHLOROMETHANE	5. U
32V	78-87-5	1,2-DICHLOROPROPANE	5. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
87V	79-01-6	TRICHLOROETHENE	5. U
51V	124-48-1	CHLORODIBROMOMETHANE	5. U J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U J
4V	71-43-2	BENZENE	5. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U J
47V	75-25-2	BROMOFORM	5. U
16H	519-78-6	2-HEXANONE	10. U
17H	108-10-1	4-METHYL-2-PENTANONE	10. U
85V	127-18-4	TETRACHLOROETHENE	1. J
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
86V	108-88-3	TOLUENE	2. JB
7V	108-90-7	CHLOROBENZENE	5. U
38V	100-41-4	ETHYLBENZENE	5. U
18H	100-42-5	STYRENE	5. U

22 May 86
TC

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EI13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH.	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI668			
SENSITIVITY ID:	DFTEI079			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE.	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EI13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI668			
SENSITIVITY ID:	DFTEI079			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20 U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH483

Laboratory: IT/Cerritos
Lab Sample ID: EH483
Sample Matrix: Water
Data Release Authorized by: PM/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10mL; 10mL → 10mL
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11.PM-112-1018
1° Std File ID: B11-PM-112-1005, 1004

2° Sample File ID: ____
2° Std File ID: ____

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries

Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.65	1°	10	65

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I Rev 4/86

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EC6
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Bocherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC6	4-BROMOFLUOROBENZENE	52.	50.	104
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH483

LABORATORY: IT/CERR
LABORATORY ID: 36569EI13
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/06/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI668			
SENSITIVITY ID:	DFTEI079			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	60.	102.	59
	2-FLUOROBIPHENYL	56.	100.	56
36569EI13	P-TERPHENYL-D14	45.	103.	44
	PHENOL-D5	98.	206.	48
	2-FLUOROPHENOL	112.	203.	55
	2,4,6-TRIBROMOPHENOL	105.	205.	51

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		Unknown	342	20
2	105-60-2	Caprolactam	630	50
3		Unknown	734	20
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86FG06513 RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EC7
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	6.	B
13H	67-64-1	ACETONE	80	B
15H	75-15-0	CARBON DISULFIDE	5 U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5 U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10 U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	

22 May 86
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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EI14
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EI14
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH484

Laboratory: IT/Cerritos
Lab Sample ID: EH484
Sample Matrix: Water
Data Release Authorized by: RH/MS

Case #/SAS #: 58401
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1019
1° Std File ID: B11-PM-112-1005, 1001

2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.62	1°	10	62

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
$ - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EC7
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Bechere

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC7	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH484

LABORATORY: IT/CERR
LABORATORY ID: 36569EI14
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	87.	102.	85
	2-FLUOROBIPHENYL	84.	100.	84
36569EI14	P-TERPHENYL-D14	73.	103.	71
	PHENOL-D5	42.	206.	20
	2-FLUOROPHENOL	148.	203.	73
	2,4,6-TRIBROMOPHENOL	126.	205.	61

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	—	unknown	366	10
2	105-60-2	caprolactam	646	1000
3	—	hydrocarbon	1113	10
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
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15				
16				
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18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986 5840-11-A

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EC8
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	5.	B
13H	67-64-1	ACETONE	17.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	2.	JB
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EI16
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML--400UL:1ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	50. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	50. U
24A	95-57-8	2-CHLOROPHENOL	50. U
26B	541-73-1	1,3-DICHLOROBENZENE	50. U
27B	106-46-7	1,4-DICHLOROBENZENE	50. U
6H	100-51-6	BENZYL ALCOHOL	50. U
25B	95-50-1	1,2-DICHLOROBENZENE	50. U
2H	95-48-7	2-METHYLPHENOL	50. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	50. U
3H	106-44-5	4-METHYLPHENOL	50. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	50. U
12B	67-72-1	HEXACHLOROETHANE	50. U
56B	98-95-3	NITROBENZENE	50. U
54B	78-59-1	ISOPHORONE	50. U
57A	88-75-5	2-NITROPHENOL	50. U
34A	105-67-9	2,4-DIMETHYLPHENOL	50. U
1H	65-85-0	BENZOIC ACID	300. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	50. U
31A	120-33-2	2,4-DICHLOROPHENOL	50. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	50. U
55B	91-20-3	NAPHTHALENE	50. U
7H	106-47-8	4-CHLOROANILINE	50. U
52B	87-68-3	HEXACHLOROBUTADIENE	50. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	50. U
9H	91-57-6	2-METHYLNAPHTHALENE	50. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	50. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	50. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	300. U
20B	91-58-7	2-CHLORONAPHTHALENE	50. U
10H	88-74-4	2-NITROANILINE	300. U
71B	131-11-3	DIMETHYLPHTHALATE	50. U
77B	208-96-8	ACENAPHTHALENE	50. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EI16
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--400UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	300. U
1B	83-32-9	ACENAPHTHENE	50. U
59A	51-28-5	2,4-DINITROPHENOL	300. U
58A	100-02-7	4-NITROPHENOL	300. U
8H	132-64-9	DIBENZOFURAN	50. U
35B	121-14-2	2,4-DINITROTOLUENE	50. U
36B	606-20-2	2,6-DINITROTOLUENE	50. U
70B	84-66-2	DIETHYLPHTHALATE	50. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	50. U
80B	86-73-7	FLUORENE	50. U
12H	100-01-6	4-NITROANILINE	300. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	300. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	50. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	50. U
9B	118-74-1	HEXACHLOROBENZENE	50. U
64A	87-86-5	PENTACHLOROPHENOL	300. U
81B	85-01-8	PHENANTHRENE	50. U
78B	120-12-7	ANTHRACENE	50. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	50. U
39B	206-44-0	FLUORANTHENE	50. U
84B	129-00-0	PYRENE	50. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	50. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	100. U
72B	56-55-3	BENZO (A) ANTHRACENE	50. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	50. U
76B	218-01-9	CHRYSENE	50. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	50. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	50. U
73B	50-32-8	BENZO (A) PYRENE	50. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	50. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	50. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	50. U

RECEIVED JUN 2 4 1986

Sample #: EH485

Laboratory: IT/Cerritos
Lab Sample ID: EH485
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 58401
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1020
1° Std File ID: B11-PM-112-1005, 1006

2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, ug/L

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, ug/L

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.61	1°	1.0	61

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

IT/Cerritos Form I — Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EC8
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC8	4-BROMOFLUOROBENZENE	50.	50.	100
	1,2-DICHLOROETHANE-D4	51.	50.	102

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485

LABORATORY: IT/CERR
LABORATORY ID: 36569EI16
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--400UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	83.	102.	81
	2-FLUOROBIPHENYL	90.	100.	90
36569EI16	P-TERPHENYL-D14	62.	103.	60
	PHENOL-D5	142.	206.	69
	2-FLUOROPHENOL	129.	203.	64
	2,4,6-TRIBROMOPHENOL	99.	206.	48

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	641	2000
2				
3				
4				
5				
6				
7				
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12				
13				
14				
15				
16				
17				
18				
19				
20				

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Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

5840-11-A

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT.	1L:2ML--100UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200. U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200. U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200. U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

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LABORATORY ID: 36569EI20
MATRIX: WATER

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DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200. U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200. U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200. U
39B	206-44-0	FLUORANTHENE	200. U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

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ORGANICS ANALYSIS DATA SHEET

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CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: [signature]

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
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SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	45. J	102.	44
	2-FLUOROBIPHENYL	71. J	100.	71
36569EI20	P-TERPHENYL-D14	46. J	103.	45
	PHENOL-D5	68. J	206.	33
	2-FLUOROPHENOL	99. J	203.	49
	2,4,6-TRIBROMOPHENOL	78. J	205.	38

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

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Laboratory: IT/Cerritos

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NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

LABORATORY: IT/CERR
LABORATORY ID 36569EI20
MATRIX: WATER

CASE #/SAS #: 5840
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SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP.	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID.	DFTEI080		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200. U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200 U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200. U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200. U
34A	105-67-9	2,4-DIMETHYLPHENOL	200. U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200. U
55B	91-20-3	NAPHTHALENE	200. U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH485RI

LABORATORY IT/CERR
LABORATORY ID. 36569EI20
MATRIX: WATER

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SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
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DATE ANALYZED	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
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PP #	CAS #		CONC
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73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200 U

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ORGANICS ANALYSIS DATA SHEET

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%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

86FG06S15

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EC9
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10. U	
44V	75-09-2	METHYLENE CHLORIDE	5.	B
13H	67-64-1	ACETONE	70.	B
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5. U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	

22 May 86

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EI17
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EI17
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

RECEIVED JUN 2 4 1986

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20 U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

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Sample #: EH486

Laboratory: IT/Cerritos
Lab Sample ID: EH486
Sample Matrix: Water
Data Release Authorized by: RH/MS

Case #/SAS #: 5940 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # — (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10ml ; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1021
1° Std File ID: B11-PM-112-1005, 1006
2° Sample File ID:
2° Std File ID:

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan Sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221		
11141-16-5	Arochlor-1232		
53469-21-9	Arochlor-1242		
12672-29-6	Arochlor-1248		
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260		

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:
BNS - Buzcl was not spiked into this sample. It was re-extracted for this reason. See EH436RE

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.2U		BNS	BNS

* - Asterisked Values are outside QC Limits.
\# - _____ Recoveries due to Dilution.
S - _____ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH486

LABORATORY: IT/CERR
LABORATORY ID: 36569EC9
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC9	4-BROMOFLUOROBENZENE	50.	50.	100
	1,2-DICHLOROETHANE-D4	50.	50.	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH486

RECEIVED JUN 2 4 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI17
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	89.	102.	87
	2-FLUOROBIPHENYL	84.	100.	84
36569EI17	P-TERPHENYL-D14	63.	103.	61
	PHENOL-D5	21.	206.	10
	2-FLUOROPHENOL	150.	203.	74
	2,4,6-TRIBROMOPHENOL	145.	205.	71

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	caprolactam	651	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486RI

LABORATORY: IT/CERR
LABORATORY ID 36569EI26
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution req'd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	200. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	200. U
24A	95-57-8	2-CHLOROPHENOL	200 U
26B	541-73-1	1,3-DICHLOROBENZENE	200. U
27B	106-46-7	1,4-DICHLOROBENZENE	200. U
6H	100-51-6	BENZYL ALCOHOL	200. U
25B	95-50-1	1,2-DICHLOROBENZENE	200. U
2H	95-48-7	2-METHYLPHENOL	200 U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	200. U
3H	106-44-5	4-METHYLPHENOL	200. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	200. U
12B	67-72-1	HEXACHLOROETHANE	200. U
56B	98-95-3	NITROBENZENE	200 U
54B	78-59-1	ISOPHORONE	200. U
57A	88-75-5	2-NITROPHENOL	200 U
34A	105-67-9	2,4-DIMETHYLPHENOL	200. U
1H	65-85-0	BENZOIC ACID	1000. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	200. U
31A	120-33-2	2,4-DICHLOROPHENOL	200. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	200 U
55B	91-20-3	NAPHTHALENE	200 U
7H	106-47-8	4-CHLOROANILINE	200. U
52B	87-68-3	HEXACHLOROBUTADIENE	200. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	200. U
9H	91-57-6	2-METHYLNAPHTHALENE	200. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	200. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	200. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	1000. U
20B	91-58-7	2-CHLORONAPHTHALENE	200. U
10H	88-74-4	2-NITROANILINE	1000. U
71B	131-11-3	DIMETHYLPHTHALATE	200. U
77B	208-96-8	ACENAPHTHALENE	200. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH486RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI26
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED.	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution reqd.

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	1000. U
1B	83-32-9	ACENAPHTHENE	200. U
59A	51-28-5	2,4-DINITROPHENOL	1000. U
58A	100-02-7	4-NITROPHENOL	1000. U
8H	132-64-9	DIBENZOFURAN	200. U
35B	121-14-2	2,4-DINITROTOLUENE	200. U
36B	606-20-2	2,6-DINITROTOLUENE	200. U
70B	84-66-2	DIETHYLPHTHALATE	200. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	200. U
80B	86-73-7	FLUORENE	200. U
12H	100-01-6	4-NITROANILINE	1000. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	1000. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	200. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	200. U
9B	118-74-1	HEXACHLOROBENZENE	200. U
64A	87-86-5	PENTACHLOROPHENOL	1000. U
81B	85-01-8	PHENANTHRENE	200. U
78B	120-12-7	ANTHRACENE	200. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	200. U
39B	206-44-0	FLUORANTHENE	200. U
84B	129-00-0	PYRENE	200. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	200. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	400. U
72B	56-55-3	BENZO (A) ANTHRACENE	200. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	200. U
76B	218-01-9	CHRYSENE	200. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	200. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	200. U
73B	50-32-8	BENZO (A) PYRENE	200. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	200. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	200. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	200. U

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH486RI

LABORATORY: IT/CERR
LABORATORY ID: 36569EI26
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/12/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML--100UL:1ML		
PH:	NA		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI674		
SENSITIVITY ID:	DFTEI092		
UNITS:	UG/L		

Sample Originally Analyzed: 4-19-86
Re-Analyzed Due To: dilution reqd.

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	87. J	102.	85
	2-FLUOROBIPHENYL	122. J	100.	122 *
36569EI26	P-TERPHENYL-D14	48 J	103.	47
	PHENOL-D5	194. J	206.	94
	2-FLUOROPHENOL	168 J	203.	83
	2,4,6-TRIBROMOPHENOL	111. J	205.	54

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	caprolactam	610	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 2 4 1986

86FG06516

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EC10
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10 U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	14. J	
44V	75-09-2	METHYLENE CHLORIDE	7. B	
13H	67-64-1	ACETONE	170. B	
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	7.	HRS
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10 U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5 U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	
20H	95-47-6	TOTAL XYLENES	5. U	

22 May 86

RECEIVED JUN 24 1988

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EI18
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_ N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID:	BDCEI669		
SENSITIVITY ID:	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20. U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH487

RECEIVED JUN 24 1986

LABORATORY: IT/CERR
LABORATORY ID: 36569EI18
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

RECEIVED JUN 2 4 1986

Sample #: EH427

Laboratory: IT/Cerritos
Lab Sample ID: EH427
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: LOW
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 500ml → 5ml ; 5ml → 5ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: BIL PM-112-1023
1° Std File ID: BIL PM-112-1005,1006
2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 500 ml or
W_s N/A g
V_t 5,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	10	1°	10	100

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
$ - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EC10
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID.	BFBEC023
UNITS.	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC10	4-BROMOFLUOROBENZENE	50.	50	100
	1,2-DICHLOROETHANE-D4	50.	50	100

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		NONE FOUND		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH487

LABORATORY: IT/CERR
LABORATORY ID: 36569EI18
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: [signature]

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	91.	102.	89
	2-FLUOROBIPHENYL	87.	100.	87
36569EI18	P-TERPHENYL-D14	51.	103.	50
	PHENOL-D5	178.	206.	86
	2-FLUOROPHENOL	156.	203.	77
	2,4,6-TRIBROMOPHENOL	161.	205.	79

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	105-60-2	Caprolactam	6116	2000
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted

RECEIVED JUN 24 1986

Case #/SAS #: 5840
Level: Low
Matrix: Water
QC Report #: 7262-3

Laboratory: IT/Cerritos
Quality Control Report
Matrix Spike(MS and MSD)
% Recovery and RPD Summary

Contract #: 68-01-7262
Sample #: EH487
Units: ug/L

Fraction	Compound	ug/L Spiked	Conc. Sample	Conc. MS	% Rec. MS	Conc. MSD	% Rec. MSD	RPD	QC Limits * RPD	QC Limits * Recovery
Pest. SMO Sample # EH487	Lindane (gamma-BHC)	0.200	0 (0.054)	0.22	110	0.22	110	0	<15	56-123
	Heptachlor	0.205	↓	0.17	83	0.17	83	0	<20	40-131
	Aldrin	0.204	↓	0.15	74	0.15	74	0	<22	40-120
	Dieldrin	0.509	0 (0.14)	0.38	75	0.41	81	8	<18	52-126
	Endrin	0.523	↓	0.47	90	0.50	96	6	<21	56-121
	4,4'-DDT	0.504	↓	0.54	107	0.55	109	2	<27	38-127
	Dibutyl chlorendate **	1.0	1.0	0.90	90	0.91	91	1	—	24-154

* Asterisked Values are outside QC Limits.
** Advisory Limits.
\# _____ Recoveries due to Dilution.
$ _____ Recoveries due to Matrix Effects.

$$RPD = \frac{|MS - MSD|}{\left(\frac{MS + MSD}{2}\right)} \times 100$$

NA - Not Analyzed
NR - (Spiked but) Not Reported
NS - Not Spiked

RPD: Pests 0 out of 7 outside QC Limits

Recovery: Pests 0 out of 14 outside QC Limits

Comments: _____

Summary of Unspiked HSL's

Fraction	Compound	Conc. Sample	Conc. MS	Conc. MSD	RPD
Pest.	None found	0 (0.054)	0 (0.24)	0 (0.24)	0

Note: This section lists compounds on the HSL which were found in the Sample, MS, and/or MSD. It does not include Tentatively Identified compounds which may have been found in the Sample.

Rev 8/85

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86FG06R03

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EC11
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #. 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC	
45V	74-87-3	CHLOROMETHANE	10. U	
46V	74-83-9	BROMOMETHANE	10. U	
88V	75-01-4	VINYL CHLORIDE	10. U	
16V	75-00-3	CHLOROETHANE	10 U	
44V	75-09-2	METHYLENE CHLORIDE	5. U	
13H	67-64-1	ACETONE	33.	B —
15H	75-15-0	CARBON DISULFIDE	5. U	
29V	75-35-4	1,1-DICHLOROETHENE	5. U	
13V	75-34-3	1,1-DICHLOROETHANE	5. U	
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	5. U	
23V	67-66-3	CHLOROFORM	5. U	
10V	107-06-2	1,2-DICHLOROETHANE	5. U	
14H	78-93-3	2-BUTANONE	10. U	J
11V	71-55-6	1,1,1-TRICHLOROETHANE	5. U	
6V	56-23-5	CARBON TETRACHLORIDE	5. U	
19H	108-05-4	VINYL ACETATE	10. U	
48V	75-27-4	BROMODICHLOROMETHANE	5. U	
32V	78-87-5	1,2-DICHLOROPROPANE	5. U	
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U	
87V	79-01-6	TRICHLOROETHENE	5. U	
51V	124-48-1	CHLORODIBROMOMETHANE	5 U	J
14V	79-00-5	1,1,2-TRICHLOROETHANE	5. U	J
4V	71-43-2	BENZENE	5. U	
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U	J
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	10. U	J
47V	75-25-2	BROMOFORM	5. U	
16H	519-78-6	2-HEXANONE	10. U	
17H	108-10-1	4-METHYL-2-PENTANONE	10. U	
85V	127-18-4	TETRACHLOROETHENE	5. U	
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U	
86V	108-88-3	TOLUENE	5. U	
7V	108-90-7	CHLOROBENZENE	5. U	
38V	100-41-4	ETHYLBENZENE	5. U	
18H	100-42-5	STYRENE	5. U	

22 May 86
TC

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EI19
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: _____

SEMIVOLATILE COMPOUNDS (PAGE 1)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_ N✓
DATE EXT/PREP:	04/19/86	SEP FUNNEL	Y_ N✓
DATE ANALYZED.	05/07/86	CONT. EXT.	Y✓ N_
SPL-->EXTRACT:	1L:2ML		
PH:	N/A		
% MOISTURE (NOT DEC.):	N/A		
% MOISTURE (DEC.):	N/A		
STANDARD ID.	BDCEI669		
SENSITIVITY ID·	DFTEI080		
UNITS:	UG/L		

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
65A	108-95-2	PHENOL	20. U
18B	111-44-4	BIS (2-CHLOROETHYL) ETHER	20. U
24A	95-57-8	2-CHLOROPHENOL	20. U
26B	541-73-1	1,3-DICHLOROBENZENE	20. U
27B	106-46-7	1,4-DICHLOROBENZENE	20. U
6H	100-51-6	BENZYL ALCOHOL	20. U
25B	95-50-1	1,2-DICHLOROBENZENE	20. U
2H	95-48-7	2-METHYLPHENOL	20. U
42B	39638-32-9	BIS (2-CHLOROISOPROPYL) ETHER	20. U
3H	106-44-5	4-METHYLPHENOL	20. U
63B	621-64-7	N-NITROSO-DI-N-PROPLYAMINE	20. U
12B	67-72-1	HEXACHLOROETHANE	20. U
56B	98-95-3	NITROBENZENE	20 U
54B	78-59-1	ISOPHORONE	20. U
57A	88-75-5	2-NITROPHENOL	20. U
34A	105-67-9	2,4-DIMETHYLPHENOL	20. U
1H	65-85-0	BENZOIC ACID	100. U
43B	111-91-1	BIS (2-CHLOROETHOXY) METHANE	20. U
31A	120-33-2	2,4-DICHLOROPHENOL	20. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	20. U
55B	91-20-3	NAPHTHALENE	20. U
7H	106-47-8	4-CHLOROANILINE	20. U
52B	87-68-3	HEXACHLOROBUTADIENE	20. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	20. U
9H	91-57-6	2-METHYLNAPHTHALENE	20. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	20. U
21A	88-06-2	2,4,6-TRICHLOROPHENOL	20. U
4H	95-95-4	2,4,5-TRICHLOROPHENOL	100. U
20B	91-58-7	2-CHLORONAPHTHALENE	20. U
10H	88-74-4	2-NITROANILINE	100. U
71B	131-11-3	DIMETHYLPHTHALATE	20. U
77B	208-96-8	ACENAPHTHALENE	20. U

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ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH488

LABORATORY: IT/CERR
LABORATORY ID. 36569EI19
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY:

SEMIVOLATILE COMPOUNDS (PAGE 2)

ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL-->EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

PP #	CAS #		CONC
11H	99-09-2	3-NITROANILINE	100. U
1B	83-32-9	ACENAPHTHENE	20. U
59A	51-28-5	2,4-DINITROPHENOL	100. U
58A	100-02-7	4-NITROPHENOL	100. U
8H	132-64-9	DIBENZOFURAN	20. U
35B	121-14-2	2,4-DINITROTOLUENE	20. U
36B	606-20-2	2,6-DINITROTOLUENE	20. U
70B	84-66-2	DIETHYLPHTHALATE	20. U
40B	7005-72-3	4-CHLOROPHENYLPHENYL ETHER	20. U
80B	86-73-7	FLUORENE	20. U
12H	100-01-6	4-NITROANILINE	100. U
60A	534-52-1	4,6-DINITRO-O-CRESOL	100. U
62B	86-30-6	N-NITROSODIPHENYLAMINE	20. U
41B	101-55-3	4-BROMOPHENOXYBENZENE	20. U
9B	118-74-1	HEXACHLOROBENZENE	20. U
64A	87-86-5	PENTACHLOROPHENOL	100. U
81B	85-01-8	PHENANTHRENE	20. U
78B	120-12-7	ANTHRACENE	20. U
68B	84-74-2	DI-N-BUTYLPHTHALATE	20. U
39B	206-44-0	FLUORANTHENE	20. U
84B	129-00-0	PYRENE	20. U
67B	85-68-7	BUTYLBENZYLPHTHALATE	20. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	40. U
72B	56-55-3	BENZO (A) ANTHRACENE	20. U
66B	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE	20. U
76B	218-01-9	CHRYSENE	20. U
69B	117-84-0	DI-N-OCTYLPHTHALATE	20. U
74B	205-99-2	BENZO (B & K) FLUORANTHENE	20. U
73B	50-32-8	BENZO (A) PYRENE	20. U
83B	193-39-5	INDENO-1,2,3 (C,D) PYRENE	20. U
82B	53-70-3	DIBENZO (A,H) ANTHRACENE	20. U
79B	191-24-2	BENZO (G,H,I) PERYLENE	20. U

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Sample #: EH488

Laboratory: IT/Cerritos
Lab Sample ID: EH488
Sample Matrix: Water
Data Release Authorized by: PH/MS

Case #/SAS #: 5840 1
QC Report #: 7262-3
Contract #: 68-01-7262
Date Rec'd: 4-17-86

Organics Analysis Data Sheet
Pesticide/PCB's

Column # ___ (for MB's)

Sample Level: Low
Date Extracted: 4-17-86
Date 1° Analyzed: 4-23-86
Spl->Extract: 1L → 10 ml; 10ml → 10ml
For Dilution: Hg
pH: N/A
% Moisture (Not Dec.): N/A
% Moisture (Decanted): N/A

1° Sample File ID: B11-PM-112-1024
1° Std File ID: B11-PM-112-1005, 1006

2° Sample File ID: ___
2° Std File ID: ___

GPC Clean-up ___ Y ✓ N
Sep. Funnel Ext. ✓ Y ___ N
Cont. L-L Ext. ___ Y ✓ N
Sonication Ext. ___ Y ✓ N

Circle Units: ug/Kg, (ug/L)

			Q
319-84-6	alpha-BHC	0.05U	
319-85-7	beta-BHC	↓	
319-86-8	delta-BHC	↓	
58-89-9	gamma-BHC (Lindane)	↓	
76-44-8	Heptachlor	↓	
309-00-2	Aldrin	↓	
1024-57-3	Heptachlor Epoxide	↓	
959-98-8	Endosulfan I	↓	
60-57-1	Dieldrin	0.1U	
72-55-9	4,4'-DDE	↓	
72-20-8	Endrin	↓	
33213-65-9	Endosulfan II	↓	
72-54-8	4,4'-DDD	↓	
1031-07-8	Endosulfan Sulfate	↓	
50-29-3	4,4'-DDT	↓	
72-43-5	Methoxychlor	0.5U	
53494-70-5	Endrin Ketone	0.1U	
57-74-9	Chlordane	0.5U	
8001-35-2	Toxaphene	1U	
12674-11-2	Arochlor-1016	0.5U	
11104-28-2	Arochlor-1221	↓	
11141-16-5	Arochlor-1232	↓	
53469-21-9	Arochlor-1242	↓	
12672-29-6	Arochlor-1248	↓	
11097-69-1	Arochlor-1254	1U	
11096-82-5	Arochlor-1260	↓	

ALL SOLID RESULTS ARE REPORTED ON DRY WEIGHT BASIS

Additional Sample Specific Qualifiers:

1° - Primary Analysis
2° - Secondary Analysis
Q - (1° or 2°) Column used for Quantitation

V_i = Vol of ext inj (ul)
V_s = Vol of water ext'd (ml)
W_s = Wt of sample ext'd (g)
V_t = Vol of total ext (ul)

V_s 1000 ml or
W_s N/A g
V_t 10,000 ul
V_i 5 ul

Surrogate Spike Recoveries — Circle Units: ug/Kg, (ug/L)

Compound	Conc. Sample	Q	Conc. Spiked	% Recovery
Dibutyl Chlorendate	0.98	1°	1.0	98

* - Asterisked Values are outside QC Limits.
\# - ___ Recoveries due to Dilution.
§ - ___ Recoveries due to Matrix Effects.

NA - Not Analyzed
NR - Not Reported
NS - Not Spiked

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #: EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EC11
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: Tod Becherer

VOLATILE COMPOUNDS

(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW
DATE EXT/PREP:	04/23/86
DATE ANALYZED:	04/23/86
SPL-->EXTRACT:	5 ML
PH:	NA
% MOISTURE (NOT DEC.):	N/A
% MOISTURE (DEC.):	N/A
STANDARD ID:	LWVEC014
SENSITIVITY ID:	BFBEC023
UNITS:	UG/L

* - USED FOR DRY WEIGHT CALCULATION

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	TOLUENE-D8	45.	50.	90
36569EC11	4-BROMOFLUOROBENZENE	51.	50.	102
	1,2-DICHLOROETHANE-D4	52.	50.	104

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1	75-28-5	2-Methyl propane	76	70
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET SAMPLE #: EH488

LABORATORY: IT/CERR
LABORATORY ID: 36569EI19
MATRIX: WATER

CASE #/SAS #: 5840
QC REPORT #: 7262-3
CONTRACT #: 68-01-7262
DATE RECEIVED: 04/17/86

DATA RELEASE AUTHORIZED BY: [signature]

SEMIVOLATILE COMPOUNDS
(ALL SOLID RESULTS REPORTED ON A DRY WEIGHT BASIS)

LEVEL:	LOW	GPC	Y_	N✓
DATE EXT/PREP:	04/19/86	SEP. FUNNEL	Y_	N✓
DATE ANALYZED:	05/07/86	CONT. EXT.	Y✓	N_
SPL--:EXTRACT:	1L:2ML			
PH:	N/A			
% MOISTURE (NOT DEC.):	N/A			
% MOISTURE (DEC.):	N/A			
STANDARD ID:	BDCEI669			
SENSITIVITY ID:	DFTEI080			
UNITS:	UG/L			

* - USED FOR DRY WEIGHT CALCULATION

SURROGATE SPIKE RECOVERIES

LAB ID	COMPOUND	SAMPLE	SPIKED	% RECOVERY
	NITROBENZENE-D5	91.	102.	89
	2-FLUOROBIPHENYL	84.	100.	84
36569EI19	P-TERPHENYL-D14	56.	103.	54
	PHENOL-D5	148.	206.	72
	2-FLUOROPHENOL	141.	203.	69
	2,4,6-TRIBROMOPHENOL	139.	205.	68

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS NS - NOT SPIKED
# - _____ RECOVERIES DUE TO DILUTION
$ - _____ RECOVERIES DUE TO MATRIX EFFECTS

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	SCAN #	CONC(J)
1		none found		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

RECEIVED JUN 2 4 1986

Laboratory: IT/Cerritos

Organics Analysis Data Sheet
Data Reporting Qualifiers

General Data Qualifiers:

Value - Concentration Found (Value ≥ DL)
DL - Detection Limit
U - Analyzed for but not detected (Reported Value is Detection Limit)
J - Estimated Value: Target Compound - 0 < Value < DL; or
Tent. ID's - A 1:1 response is assumed for Quantitation.
B - Compound found in Blank. Sample results are not Blank Corrected.
N/A - Not Analyzed
NR - Not Reported
NS - Not Spiked

Pesticide Qualifiers:

C - Confirmed by GC/MS; GC Quantitation Reported
** - Detected and Confirmed by GC below GC/MS DL;
GC Quantitation Reported
N - Not Confirmed by GC/MS; Attempted and unsuccessful
**N - GC/MS Confirmation attempted and unsuccessful because concentration is < GC/MS DL; GC Quantitation reported
UN - GC/MS Confirmation attempted and unsuccessful although suspect compound concentration is >GC/MS DL; GC/MS DL Reported
UNI - GC/MS Confirmation attempted and unsuccessful due to interferences although suspect compound concentration is >GC/MS DL;
Adjusted GC/MS DL Reported
LID - Lost In Dilution; Sample was diluted so much that Dibutyl chlorendate was Lost In Dilution.
CEP - Co-Eluting Peak; An apparent shift in Dibutyl chlorendate RT was caused by a Co-Eluting Peak, not a true unacceptable RT Shift.

Surrogate and Spike Qualifiers:

* - Asterisked Values are outside QC Limits
# - High/Low Recoveries due to Dilution.
$ - High/Low Recoveries due to Matrix Effects.

Soil Sample Result Qualifiers:

% Moisture * - % Moisture value used for Dry Weight Calculations
NOTE: % Moisture(type) used in caluclation should match Sample weight(type).

NSW - No Standing Water
%M(n) - % Moisture (Not Decanted)
%M(d) - % Moisture (Decanted)
g(n) - Sample weight taken from sample which was Not Decanted
g(d) - Sample weight taken from sample which was Decanted