REFERENCE 17
SITE NAME Northeast Gravel Company
US EPA RECORDS CENTER REGION 5 36821
544684
936840

SITE INSPECTION REPORT
FOR
NORTHEAST GRAVEL COMPANY
BELMONT, MI
MID049236821
F5-8611-302

DECEMBER 18, 1986

SITE INSPECTION MEMO 1

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SITE MAPS 3

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ANALYTICAL DATA 5

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

MEMORANDUM

DATE: December 12, 1986
TO: File
FROM: Gerald F. Goode G.F.G
SUBJECT: Michigan/F05-8611-302/MI0282SI
Belmont/Northeast Gravel Company
MID049236821

The Northeast Gravel Company is located in a rural area approximately eight miles north-northeast of Grand Rapids, Michigan in Kent County. The 20-acre disposal site is situated at the northern end of a 150-acre parcel. Extensive sand and gravel deposits underlie the site and adjoining area. The site is approximately 7000 feet east of the confluence of the Grand and Rogue rivers. The site was orginally identifed by the Michigan Department of Natural Resources (MDNR) in a Preliminary Assessment submitted to the U.S. EPA.

The site history prior to 1966 is unclear. Northeast Gravel Company purchased the property in 1966, at which time some landfilling of waste had already occurred. After acquisition of the property, the company proceeded to landfill sludge and electroplating wastes. Due to numerous violations, MDNR halted landfilling operations at the site in 1976. The property is currently being used by Northeast Gravel Company as a gravel wash process center.

During landfilling, Northeast Gravel Company accepted dewatered sludge from Wolverine Worldwide Company, a leather tanner located in Rockford, Michigan. This sludge was landfilled in previously unlined trenches in the extreme northern portion of the site.

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
NORTHEAST GRAVEL COMPANY	4300 CANNONSBURG ROAD				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
BELMONT	MI	49306	KENT	081	5

09 COORDINATES — LATITUDE: 43° 03' 50.0" — LONGITUDE: 085° 33' 51.8"

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 12 / 20 / 85 (MONTH DAY YEAR)

02 SITE STATUS: ☒ ACTIVE ☐ INACTIVE

03 YEARS OF OPERATION (LANDFILLING OCCURRED BEFORE 1966): 1966 (BEGINNING YEAR) / 1977 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ☒ B. EPA CONTRACTOR ECOLOGY AND ENVIRONMENT, INC. (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm) ☐ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER ___ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
GERALD F. GOODE	HYDROGEOLOGIST	E & E	(312) 663-9415
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
LARRY LUMEH	HYDROGEOLOGIST	E & E	(312) 663-9415
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
DON LONG	MANAGER	SEE ABOVE	(616) 361-6192
LESTER BAUER	PREVIOUS MANAGER	—	(616) 364-9611
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	10:00 am	CLOUDY AND OVERCAST, 20° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
GERALD HEYT	MICHIGAN DEPARTMENT OF NATURAL RESOURCES - GRAND RAPIDS	(616) 456-5071

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
GERALD F. GOODE	U.S. EPA REGION V	E & E	(312) 663-9415	12 / 18 / 86 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

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

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

TONS UNKNOWN

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	UNKNOWN	(PLATING WASTES)
OLW	OILY WASTE	UNKNOWN	UNKNOWN	SUBSTANTIAL QUANTITIES
SOL	SOLVENTS			OF OIL NOTED IN SLUDGE
PSD	PESTICIDES			DEWATERING PITS 8/31/73
OCC	OTHER ORGANIC CHEMICALS			* COMPANY EXCEEDED PERMIT
IOC	INORGANIC CHEMICALS			REQUIREMENTS (GROUNDWATER
ACD	ACIDS			DISCHARGE) FOR Ni, Cu, Cr, Zn, CN
BAS	BASES			AND OIL AND GREASE 1974-1980.
MES	HEAVY METALS	UNKNOWN	UNKNOWN	PLATING WASTES

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	CHROMIUM	7440-47-3	LANDFILL (FIT	MONITORING WELL	
OCC	CHLOROMETHANE	74-87-3	LANDFILL } SAMPLING 4/16/86		
OCC	1-1-DICHLOROETHANE	75-35-3	LANDFILL		
OCC	PERCHLOROETHYLENE	127-18-4	LANDFILL (SAMPLED 11/12/80 3)		ppb
OCC	1,1-TRICHLOROETHANE	71-55-6	(MDNR SAMPLING OF POND 11/12/80) 4		ppb
			NO BACKGROUND DATA COLLECTED		FROM
			11/12/80 SAMPLING		
MES	NICKEL	—	LAGOON CELL 6/5/75	.26	mg/l
MES	COPPER	—	LAGOON CELL 6/5/75	.15	mg/l
IOC	CYANIDE	—	LAGOON CELL 11/25/75	3.8	mg/l
MES	CHROMIUM	7440-47-3	LAGOON CELL 6/5/75	4.78	
			(LAGOON CELLS SAMPLED		
			(BY MDNR).		

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	UNKNOWN		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

REMFIT FILE
ECOLOGY AND ENVIRONMENT, INC
CHICAGO, IL.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MI D049236821

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ■ OBSERVED (DATE: 4/16/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5,200 — 04 NARRATIVE DESCRIPTION HIGH CONDUCTIVITY VALUES AND THE PRESENCE OF COPPER, CHROMIUM, CHLOROMETHANE, AND 1-1 DICHLOROETHANE IN THE MONITORING WELL GROUNDWATER SUGGEST POTENTIAL HAZARDS TO LOCAL WELLS. THE PLAINFIELD MUNICIPAL WATER SUPPLY WELL FIELD IS LOCATED APPROXIMATELY 1 MILE SOUTHWEST OF THE SITE. MOST PRIVATE WELLS TAP INTO SAND AND GRAVEL DEPOSITS WHICH CONSTITUTE THE AQUIFER OF CONCERN.

01 ■ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
GROUNDWATER DISCHARGE IS TOWARD THE GRAND RIVER. THE GRAND RIVER IS LOCATED 2,000 FT. FROM THE SITE. GROUNDWATER CONTAMINANTS (SEE 'A' ABOVE) COULD MIGRATE INTO THE GRAND RIVER. THE GRAND RIVER IS NOT USED AS A DRINKING WATER SOURCE, HOWEVER, IT IS USED FOR RECREATIONAL PURPOSES WITHIN THE 3-MILE RADIUS.

01 ■ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,000 — 04 NARRATIVE DESCRIPTION
STRONG ODOR PRESENT AT SOUTHERN END OF NORTHERN FILL AREA. THE ODOR HAS A DETERGENT LIKE AROMA WHICH IS AN IRRITANT TO NASAL PASSAGES.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
NONE REPORTED

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 830 — 04 NARRATIVE DESCRIPTION
SITE IS NOT COMPLETELY FENCED. MAIN GATE IS FENCED AND LOCKED; HOWEVER, THE FENCE ON THE NORTH AND WEST PROPERTY LINE IS DOWN. EROSION BY INTERMITTANT STREAM FLOWING OVER NORTHERN FILL IS EXPOSING WASTE.

01 ■ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 20 (Acres) — 04 NARRATIVE DESCRIPTION
LEACHATE OBSERVED AT NORTHERN FILL AREA. DISPOSAL AREAS COVER AN AREA OF APPROXIMATELY 20 ACRES.

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5,200 — 04 NARRATIVE DESCRIPTION
SEE "A" ABOVE

01 ■ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ~10 — 04 NARRATIVE DESCRIPTION
GRAVEL WASHING OPERATIONS STILL PERFORMED ON SITE. NO WORKER EXPOSURE/INJURY HAVE BEEN REPORTED.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,000 — 04 NARRATIVE DESCRIPTION
GROUNDWATER CONTAMINATION IS A MAJOR CONCERN. PRIVATE DOMESTIC WELLS TAP INTO SAND AND GRAVEL DEPOSITS WHICH CONSTITUTE THE AQUIFER OF CONCERN. THE CITY OF PLAINFIELD MAINTAINS A WELL FIELD WHICH DRAWS WATER FROM SAND AND GRAVEL DEPOSITS AND FROM LIMESTONE WHICH IS OVERLAIN BY PERMEABLE SANDS AND GRAVELS.

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION NONE REPORTED OR OBSERVED DURING SITE INSPECTION 12/20/85

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species) CONTAMINATED GROUNDWATER DISCHARGING INTO THE GRAND RIVER COULD AFFECT RIVER WILDLIFE. SEE "A" ABOVE

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION CONTAMINATED GROUNDWATER DISCHARGING INTO THE GRAND RIVER COULD POTENTIALLY CONTAMINATED FISH. GRAND RIVER IS USED FOR FISHING.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ■ OBSERVED (DATE: 3/12/86 3/16/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,000 — 04 NARRATIVE DESCRIPTION DEGRADATION OF STREAM OVER NORTHERN FILL AREA EXPOSING WASTE INCLUDING CRUSHED DRUMS. LEACHATE SEEPS ALSO OBSERVED 3/12/86 (DURING MONITORING WELL INSTALLATION) GROUNDWATER CONTAMINATION CITED (SEE "A" ABOVE).

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION NONE REPORTED OR OBSERVED DURING SITE INSPECTION 12/20/85.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION N.A.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION NONE REPORTED.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS NORTHERN LANDFILL (TRENCHES) BEGINNING TO ERODE DUE TO INTERMITTANT STREAM FLOWING OVER FILL AREA. DEGRADATION BY THE STREAM IS EXPOSING WASTE (LEACHATE SEEPS, RUBBISH, AND CRUSHED DRUMS) IN AREA WHERE WASTE IS EXPOSED STRONG DETERGENT LIKE ODOR IS PRESENT. THIS MAY INDICATE WASTE OTHER THAN NON HAZARDOUS TANNERY WASTE BEING PLACED IN THE NORTHERN LANDFILL.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 40,000

IV. COMMENTS

GROUNDWATER CONTAMINATION IS A MAJOR CONCERN. GROUNDWATER IS USED FOR DRINKING BY PRIVATE AND MUNICIPAL SUPPLIES WITHIN THE 3-MILE RADIUS. (SEE "A" ABOVE). POTENTIAL FOR CONTAMINANTS TO REACH THE GRAND RIVER THROUGH GROUNDWATER DISCHARGE IS ALSO A CONCERN.

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

REM FIT FILE
ECOLOGY AND ENVIRONMENT, INC
CHICAGO, IL

"HYDROGEOLOGIC REPORT ON THE NORTHEAST GRAVEL COMPANY SITE, BELMONT, MI
OCTOBER 28, 1986
(E&E CHICAGO)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID 049236821

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				COMPANY OFTEN EXCEEDED
☐ C. AIR				GROUNDWATER DISCHARGE
☐ D. RCRA				PERMIT FOR Ni, Cu, Cr,
☐ E. RCRA INTERIM STATUS				Zn, CN AND OIL AND
☐ F. SPCC PLAN				GREASE 1974-1977.
☐ G. STATE (Specify) GROUNDWATER DISCHARGE	M00288	10/19/76	CLOSED 1980	STATE (MDNR) SHUT
☐ H. LOCAL (Specify)			BY MDNR.	DOWN OPERATIONS,
☐ I. OTHER (Specify)				IN 1977 BECAUSE OF
☐ J. NONE				NON COMPLIANCE WITH
				GROUNDWATER DISCHARGE PERMIT

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
■ A. SURFACE IMPOUNDMENT	(HAS BEEN REMOVED)	
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
■ F. LANDFILL	UNKNOWN	UNKNOWN
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ■ A. BUILDINGS ON SITE

06 AREA OF SITE: 20 (Acres)

07 COMMENTS DURING LANDFILLING, NORTHEAST GRAVEL COMPANY ACCEPTED DEWATERED SLUDGE FROM WOLVERINE WORLD WIDE, INC. THIS SLUDGE WAS LANDFILLED IN PREVIOUSLY EXCAVATED TRENCHES IN EXTREME NORTHERN PORTION OF THE SITE. WOLVERINE WORLD WIDE DISPOSED NON HAZARDOUS TANNERY SLUDGE. THE TANNERY SLUDGE WAS DEWATERED TO APPROXIMATELY 30-35% SOLIDS. THE ONLY METAL IT CONTAINED WAS TRIVALENT CHROMIUM. 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 HYDRIXIDES AND WASTE PLATING BATHS, WERE DISPOSED. THESE WASTES WERE ACCEPTED FROM SEVERAL NEARBY ELECTROPLATING COMPANIES, INCLUDING GULF AND WESTERN AND KNAPP AND BOLT.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC. SITE HAS BEEN COVERED BUT GROUNDWATER SAMPLES HAVE SHOWN CONTAMINATION. WASTE LANDFILLED IN UNLINED PITS. NORTHERN LANDFILL AREA HEAVILY ERODED, CRUSHED DRUMS AND MIC TRASH EXPOSED.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS SITE IS LOCATED IN A RURAL AREA. SITE IS NOT COMPLETELY FENCED. MAIN ENTRANCE IS FENCED AND LOCKED; HOWEVER, THE FENCE IS DOWN ALONG THE NORTH AND WEST PROPERTY LINE. NORTHERN LANDFILL IS HEAVILY ERODED BY INTERMITTANT STREAM FLOWING OVER FILL. WASTE INCLUDING CRUSHED DRUMS AND GENERAL REFUSE IS EXPOSED.

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

REMFIT FILE
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. ~1 (mi)
B. ~.28 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING
☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 5,200

03 DISTANCE TO NEAREST DRINKING WATER WELL ~.24 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~25 (ft)	NORTHEAST TO SOUTHWEST	25 (ft)	108,000 (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)
PRIVATE DOMESTIC WELLS TAP INTO SAND AND GRAVEL (AQUIFER OF CONCERN). THE CITY OF PLAINFIELD MAINTAINS A WELL FIELD (WELLS 50 - 100 FEET DEEP) WATER BLENDED PRIOR TO DISTRIBUTION.

10 RECHARGE AREA
☒ YES ☐ NO
COMMENTS: PERMEABLE SANDS AND GRAVELS ALLOW INFILTRATION OF PRECIPITATION

11 DISCHARGE AREA
☒ YES ☐ NO
COMMENTS: AQUIFER DISCHARGING TOWARD THE GRAND RIVER.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
GRAND RIVER	☐	~.3 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 830 NO. OF PERSONS	B. 3,320 NO. OF PERSONS	C. 32,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION ~.24 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 873

04 DISTANCE TO NEAREST OFF-SITE BUILDING ~.24 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)
THE SITE IS LOCATED IN 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 GRAVEL IS BEING MINED BY NORTHEAST GRAVEL COMPANY. THE POPULATION IS MAINLY RURAL AND APPROXIMATELY 32,000 PEOPLE LIVE IN THE 3-MILE RADIUS. THE POPULATION WITHIN 1 MILE OF THE SITE IS 830. EXCEPT FOR A TRAILER PARK ½ MILE SOUTHEAST OF SITE, THE LAND USE IS PRIMARILY AGRICULTURAL. BELMONT (pop. 11,400) IS LOCATED ABOUT 2 MILES NORTHWEST OF SITE. TO THE SOUTH AND WEST, THE FAR NORTHEAST PORTION OF THE CITY OF GRAND RAPIDS FALLS WITHIN THE 3-MILE RADIUS

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE *(Check one)*

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK *(Check one)*

☐ A. IMPERMEABLE *(Less than 10^{-6} cm/sec)* ☒ B. RELATIVELY IMPERMEABLE *($10^{-4} - 10^{-6}$ cm/sec)* ☐ C. RELATIVELY PERMEABLE *($10^{-2} - 10^{-4}$ cm sec)* ☐ D. VERY PERMEABLE *(Greater than 10^{-2} cm/sec)*

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
~175 (ft)	~20 (ft)	SITE SOIL UNKNOWN

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
3.5 (in)	2.2 (in)	2 %	SW	(NATURAL) 2 %

09 FLOOD POTENTIAL NONE

SITE IS IN — YEAR FLOODPLAIN

10 N.A.

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS *(5 acre minimum)*

ESTUARINE: A. _____ (mi)

OTHER: B. 2.5 (mi)

12 DISTANCE TO CRITICAL HABITAT *(of endangered species)*

NONE (mi)

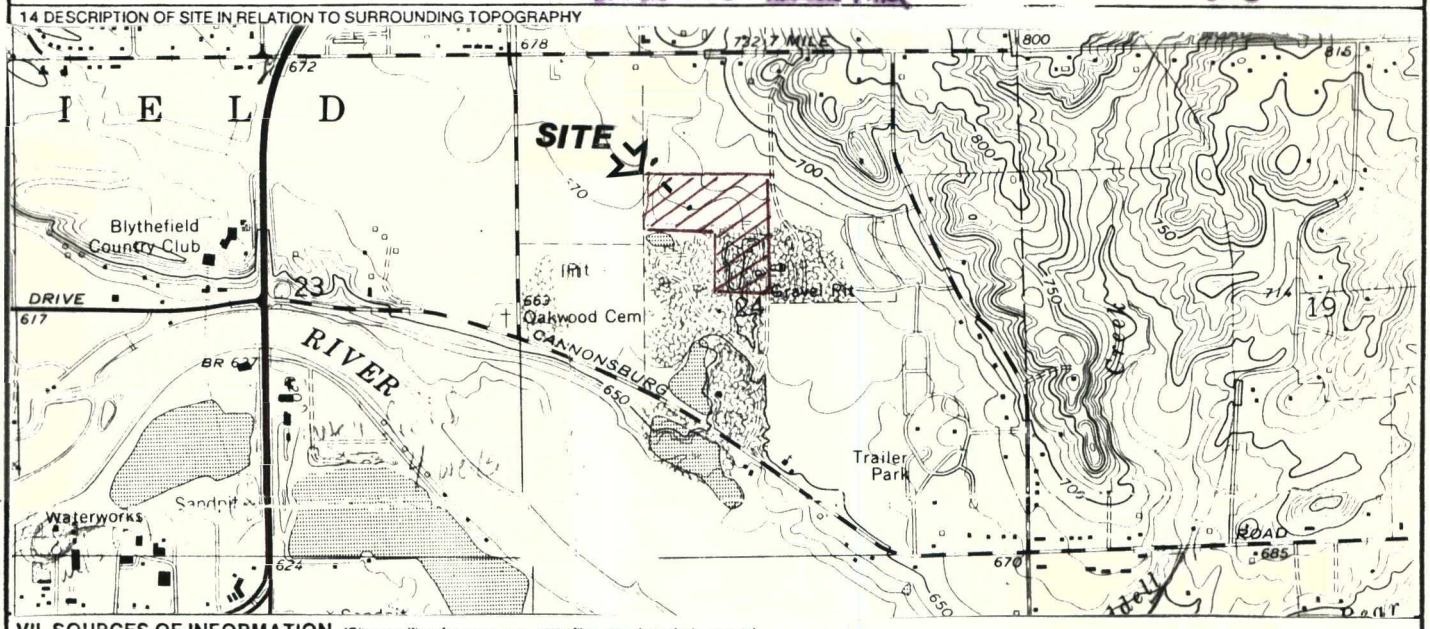
ENDANGERED SPECIES: N.A.

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 1 (mi)	B. 1/4 < (mi) BORDER SITE TRAILER PARK	C. _____ (mi)	D. 1/4 < BORDER SITE (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



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

U.S.G.S TOPOGRAPHIC MAP 1967, REVISED 1981.
WATER WELL RECORDS.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	9 MONITORING WELLS 1 RESIDENTIAL WELL	ORGANICS - IT ANALYTICAL SERVICES, CERRITOS, CALIFORNIA	AVAILABLE
SURFACE WATER		INORGANIC AND VOLATILE ORGANICS - U.S. EPA, REGION V, CENTRAL REGIONAL LABRATORY, CHICAGO, ILLINOIS	AVAILABLE
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
SLUG TESTS	- AQUIFER CHARACTERISTICS
HNU / OVA	- BORE HOLE MONITORING < BACKGROUND
RAD MINI	- BORE HOLE MONITORING < BACKGROUND
WATER LEVEL MEASUREMENTS -	

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☑ GROUND ☑ AERIAL

02 IN CUSTODY OF ECOLOGY AND ENVIRONMENT, INC
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS ECOLOGY AND ENVIRONMENT, INC CHICAGO, IL

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

SEE "HYDROGEOLOGIC REPORT ON THE NORTHEAST GRAVEL COMPANY SITE, BELMONT, MICHIGAN OCTOBER 28, 1986" FOR WELL LOGS, GROUNDWATER ANALYTICAL RESULTS, PIEZOMETER TEST ANALYSIS, AND SURFACE WATER FLOW MAP.

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT,
CHICAGO, IL

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
NORTHEAST GRAVEL COMPANY	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
4300 CANNONSBURGH ROAD	

05 CITY	06 STATE	07 ZIP CODE
BELMONT	MI	49306

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

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

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

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

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

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

REM FIT FILES
ECOLOGY AND ENVIRONMENT, INC
CHICAGO, IL

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (If applicable)			
01 NAME SAME AS OWNER		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER						

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)			
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
GULF AND WESTERN		WOLVERINE WORLDWIDE	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
"GRAND RAPIDS VICINITY"		9341 COURTLAND DR.	

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
			ROCKFORD	MI	

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
KNAPP & BOLT			

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

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

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
APPROVED INDUSTRIAL REMOVAL CO.			

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

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

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

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

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

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

REM FIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO IL

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ H. ON SITE BURIAL — 02 DATE 1976 — 03 AGENCY MDNR
04 DESCRIPTION WASTE HAS BEEN COVERED BY ORDER OF THE MDNR.

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY MDNR
04 DESCRIPTION WASTE HAS BEEN COVERED BY ORDER OF THE MDNR. ORIGINAL LANDFILL AND METAL HYDROXIDE AND PLATING BATH DISPOSAL AREAS HAS GOOD COVER (VEGETATION). GOOD SURFACE SLOPE, NO SURFACE WATER PONDING. NORTHERN FILL AREA HEAVILY ERODED SURFACE WATER PONDING.

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ■ YES ☐ NO

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

THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES SAMPLED THE "LAGOON CELLS" (1974-1980) THE LAGOON CELLS WERE LOCATED IN THE VICINITY OF THE METAL HYDROXIDE AND PLATING BATH DISPOSAL AREA. LAGOON SAMPLES SHOWED HIGHER THAN ALLOWABLE PERMIT REQUIRMENTS FOR NICKEL, COPPER, CHROMIUM, CYANIDE, ZINC AND OIL AND GREASE. NUMEROUS NON COMPLIANCE VIOLATIONS CONCERNING THE GROUNDWATER DISCHARGE PERMIT # M00288 FORCED NORTHEAST GRAVEL COMPANY TO BE SHUT DOWN BY THE STATE IN 1977. GRAVEL WASHING OPERATIONS STILL OPERATING ON SITE.

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL.

MI-282-01

ecology and environment, inc.

223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415

International Specialists in the Environmental Sciences

DATE: March 3, 1983

TO: File/USEPA Region V

FROM: Lisa Perenchio LP/ACS

SUBJECT: Preliminary Assessment

Michigan/TDD#R05-8212-03A,282
Belmont/Northeast Gravel Company
MID980609333

Attached is EPA's Preliminary Assessment Form 2070-12 for the above referenced site.

Primary information was gathered from the following source(s):

1. Michigan Department of Natural Resources files
2.
3.

Information indicates the following responsible parties should be listed. They are listed here because of space limitations:

1. Approved Industrial Removal (Generator/Transporter)
2. Wolverine Worldwide of Rockford (Generator)
3. Harold E. Neitzel, President of Northeast Gravel until 1971.

Presently, data gaps or no verification exists in the following key area(s):

1. Extent of groundwater contamination
2.
3.

A review of the available data indicates that additional information will be necessary to assess the impact(s) on:

1. Surface water
2.
3.
4.
5.

Suggested methods/sources for obtaining additonal information are:

1. Ground and surface water sampling
2.
3.

Notice of an apparent need for emergency action was transmitted to N/A on N/A by N/A.

recycled paper

Dm

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE: MI | 02 SITE NUMBER: MID980609333

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): NORTHEAST GRAVEL COMPANY

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER: 4300 CANNONSBURG ROAD

03 CITY: BELMONT | 04 STATE: MI | 05 ZIP CODE: 49306 | 06 COUNTY: KENT | 07 COUNTY CODE: 081 | 08 CONG DIST: 5

09 COORDINATES LATITUDE: 43°03'50.0" | LONGITUDE: 085°33'51.8"

ROCKFORD QUADRANGLE T8N R11W Sect. 24

10 DIRECTIONS TO SITE (Starting from nearest public road): STATE RT. 44 TO CANNONSBURG RD. CANNONSBURG RD. EAST ~1 MILE (JUST PAST OAKWOOD CEMETARY) ON NORTH SIDE OF ROAD

III. RESPONSIBLE PARTIES

01 OWNER (If known): LESTER BAUER

02 STREET (Business, mailing, residential): 2683 5 MILE RD. NE

03 CITY: GRAND RAPIDS | 04 STATE: MI | 05 ZIP CODE: 49502 | 06 TELEPHONE NUMBER: (616) 361-6192 OR 616 361-0255

07 OPERATOR (If known and different from owner): SAME AS ABOVE

08 STREET (Business, mailing, residential):

09 CITY: | 10 STATE: | 11 ZIP CODE: | 12 TELEPHONE NUMBER: ( )

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: NONE (MONTH DAY YEAR) ☒ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 6/9/81 (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 8/5/71 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)

☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

BEFORE 1971 (BEGINNING YEAR) | 1980 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

METAL HYDROXIDES (TOXIC/PERSISTENT)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

PERCOLATION INTO GROUNDWATER (ENVIRONMENT / POPULATION)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT: BRIAN MONROE

02 OF (Agency/Organization): Lansing Office MICH. Dept. of Natural Resources

03 TELEPHONE NUMBER: (517) 383-7917

04 PERSON RESPONSIBLE FOR ASSESSMENT:

05 AGENCY:

06 ORGANIZATION:

07 TELEPHONE NUMBER: ( )

08 DATE: / / (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID980609333

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

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

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

TONS _____

CUBIC YARDS 12,000

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	12,000	CY	MOSTLY PLATING WASTES

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Michigan Dept. of Natural Resources, Lansing, files.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID980609333

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 1200
02 ☒ OBSERVED (DATE: SEVERAL-) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION 1974-1980
COMPANY OFTEN EXCEDED GROUNDWATER DISCHARGE PERMIT #M00288 REQUIREMENTS IN NICKEL, COPPER, CHROMIUM, ZINC, CYANIDE, AND OIL & GREASE

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 100
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
GRAND RIVER IS WITHIN 1 MILE OF SITE AND DOWNGRADIENT OF SITE.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

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

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 20 (Acres)
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
WASTE IS IN UNLINED PITS

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 500
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
SEVERAL RESIDENTS USE PRIVATE WELLS.

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

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID980609333

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/runoff/standing liquids/leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
LAGOONS ARE UNLINED AND SIT ON PERMEABLE GRAVEL AND SAND

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 1200

IV. COMMENTS

COMPANY EXCEEDED PERMIT REQUIREMENTS & RECEIVED NOTICES OF NONCOMPLIANCE SEVERAL TIMES FROM 1974-1980. COMPANY FINALLY SHUT DOWN IN 1980. COMPANY HAD BEEN VERY COOPERATIVE WITH DNR W REGARDS TO ALLOWING SAMPLES TO BE TAKEN, ETC.

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

MICH. DEPT. OF NATURAL RESOURCES Files, Lansing Office

At the present time, the northern landfill is being heavily eroded by an intermittant stream flowing over the fill area. Waste including crushed drums and general refuse is exposed in this area. A strong "detergent like" odor is also present. Leachate seeps are observed at the southern toe of the northern landfill.

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. Waste in the original landfill was placed in unlined excavations. 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. The area concerning the original landfill and metal hydroxide and plating bath disposal area has maintained a stable ground cover and surface slope for runoff. No ponding of water was observed in this area.

On September 22, 1983, an Ecology and Environment FIT team conducted a site inspection interview with Lester Bauer, Manager of the Northeast Gravel Company. On December 20, 1985, FIT performed a follow-up site visit to identify the waste disposal areas and the proposed placement of monitoring wells. Nine monitoring wells were installed by FIT during March 1986. The wells are screened in the sand and gravel aquifer. On April 16, 1986, the wells were sampled. The Graceland Church well located south- southeast of the site was also sampled. The downgradient wells MI0282-4 and MI0282-10 were contaminated with chloromethane and 1-1-dichloroethane. Downgradient well MI0282-6 was contaminated with chromium. Water samples collected from the Graceland Church contained copper at a concentration of 36.2 ug/L. Private domestic wells within the 3-mile radius are screened in sand and gravel deposits. The Plainfield well field is located approximately 1 mile southwest of the facility and also obtain water from glacial sands and gravels. Groundwater flow is toward the south. High conductivity values for the sand and gravels recorded at the site will promote the migration of contaminants.

The Northeast Gravel Company is not completely fenced. The main entrance is fenced and locked; however, the fence is down along the north and west property lines.

50G:2F

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): NORTHEAST GRAVEL COMPANY

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER: 4300 CANNONSBURG ROAD

03 CITY: BELMONT

04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
MI	49306	KENT	081	5

09 COORDINATES: LATITUDE 43° 03' 50.0" LONGITUDE 085° 33' 51.8"

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 12 / 20 / 85 (MONTH DAY YEAR)

02 SITE STATUS: ☒ ACTIVE ☐ INACTIVE

03 YEARS OF OPERATION (LANDFILLING OCCURRED BEFORE 1966): 1966 / 1977 (BEGINNING YEAR / ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ☒ B. EPA CONTRACTOR ECOLOGY AND ENVIRONMENT, INC. (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm) ☐ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER ___ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
GERALD F. GOODE	HYDROGEOLOGIST	E & E	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
LARRY LUMEH	HYDROGEOLOGIST	E & E	(312) 663-9415
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
DON LONG	MANAGER	SEE ABOVE	(616) 361-6192
LESTER BAUER	PREVIOUS MANAGER	—	(616) 364-9611
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one): ☒ PERMISSION ☐ WARRANT

18 TIME OF INSPECTION: 10:00 am

19 WEATHER CONDITIONS: CLOUDY AND OVERCAST, 20° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
GERALD HEYT	MICHIGAN DERTMENT OF NATURAL RESOURCES - GRAND RAPIDS	(616) 456-5071

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
GERALD F. GOODE	U.S. EPA REGION V	E & E	(312) 663-9415	12 / 18 / 86 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS UNKNOWN

CUBIC YARDS —

NO. OF DRUMS —

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	UNKNOWN	(PLATING WASTES)
OLW	OILY WASTE	UNKNOWN	UNKNOWN	SUBSTANTIAL QUANTITIES
SOL	SOLVENTS			OF OIL NOTED IN SLUDGE
PSD	PESTICIDES			DEWATERING PITS 7/31/73
OCC	OTHER ORGANIC CHEMICALS			* COMPANY EXCEEDED PERMIT
IOC	INORGANIC CHEMICALS			REQUIREMENTS (GROUNDWATER
ACD	ACIDS			DISCHARGE) FOR Ni, Cu, Cr, Zn, CN
BAS	BASES			AND OIL AND GREASE 1974-1980.
MES	HEAVY METALS	UNKNOWN	UNKNOWN	PLATING WASTES

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	CHROMIUM	7440-47-3	LANDFILL (FIT	MONITORING WELL	
OCC	CHLOROMETHANE	74-87-3	LANDFILL SAMPLING	4/16/86	
OCC	1-1-DICHLOROETHANE	75-35-3	LANDFILL		
OCC	PERCHLOROETHYLENE	127-18-4	LANDFILL (SAMPLED	11/12/80 3)	ppb
OCC	1,1,1-TRICHLOROETHANE	71-55-6	(MDNR SAMPLING OF POND	11/12/80) 4	ppb
			NO BACKGROUND DATA COLLECTED		FROM
			11/12/80 SAMPLING		
MES	NICKEL	—	LAGOON CELL	6/5/75 .26	mg/l
MES	COPPER	—	LAGOON CELL	6/5/75 .15	mg/l
IOC	CYANIDE	—	LAGOON CELL	11/25/75 3.8	mg/l
MES	CHROMIUM	7440-47-3	LAGOON CELL	6/5/75 4.78	
			(LAGOON CELLS SAMPLED		
			BY MDNR).		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	UNKNOWN		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

REM FIT FILE
ECOLOGY AND ENVIRONMENT, INC
CHICAGO, IL.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MI D049236821

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ■ OBSERVED (DATE: 4/16/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5,200 — 04 NARRATIVE DESCRIPTION HIGH CONDUCTIVITY VALUES AND THE PRESENCE OF COPPER, CHROMIUM, CHLOROMETHANE, AND 1-1 DICHLOROETHANE IN THE MONITORING WELL GROUNDWATER SUGGEST POTENTIAL HAZARDS TO LOCAL WELLS. THE PLAINFIELD MUNICIPAL WATER SUPPLY WELL FIELD IS LOCATED APPROXIMATELY 1 MILE SOUTHWEST OF THE SITE. MOST PRIVATE WELLS TAP INTO SAND AND GRAVEL DEPOSITS WHICH CONSTITUTE THE AQUIFER OF CONCERN.

01 ■ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
GROUNDWATER DISCHARGE IS TOWARD THE GRAND RIVER. THE GRAND RIVER IS LOCATED 2,000 FT. FROM the SITE. GROUNDWATER CONTAMINANTS (SEE 'A' ABOVE) COULD MIGRATE INTO THE GRAND RIVER. THE GRAND RIVER IS NOT USED AS A DRINKING WATER SOURCE, HOWEVER, IT IS USED FOR RECREATIONAL PURPOSES WITHIN THE 3-MILE RADIUS.

01 ■ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,000 — 04 NARRATIVE DESCRIPTION
STRONG ODOR PRESENT AT SOUTHERN END OF NORTHERN FILL AREA. THE ODOR HAS A DETERGENT LIKE AROMA WHICH IS AN IRRITANT TO NASAL PASSAGES.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
NONE REPORTED

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 830 — 04 NARRATIVE DESCRIPTION
SITE IS NOT COMPLETELY FENCED. MAIN GATE IS FENCED AND LOCKED; HOWEVER, THE FENCE ON THE NORTH AND WEST PROPERTY LINE IS DOWN. EROSION BY INTERMITTANT STREAM FLOWING OVER NORTHERN FILL IS EXPOSING WASTE.

01 ■ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 20 (Acres) — 04 NARRATIVE DESCRIPTION
LEACHATE OBSERVED AT NORTHERN FILL AREA. DISPOSAL AREAS COVER AN AREA OF APPROXIMATELY 20 ACRES.

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5,200 — 04 NARRATIVE DESCRIPTION
SEE "A" ABOVE

01 ■ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ~10 — 04 NARRATIVE DESCRIPTION
GRAVEL WASHING OPERATIONS STILL PERFORMED ON SITE. NO WORKER EXPOSURE/INJURY HAVE BEEN REPORTED.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,000 — 04 NARRATIVE DESCRIPTION
GROUNDWATER CONTAMINATION IS A MAJOR CONCERN. PRIVATE DOMESTIC WELLS TAP INTO SAND AND GRAVEL DEPOSITS WHICH CONSTITUTE THE AQUIFER OF CONCERN. THE CITY OF PLAINFIELD MAINTAINS A WELL FIELD WHICH DRAWS WATER FROM SAND AND GRAVEL DEPOSITS AND FROM LIMESTONE WHICH IS OVERLAIN BY PERMEABLE SANDS AND GRAVELS.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION NONE REPORTED OR OBSERVED DURING SITE INSPECTION 12/20/85

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)* CONTAMINATED GROUNDWATER DISCHARGING INTO THE GRAND RIVER COULD AFFECT RIVER WILDLIFE. SEE "A" ABOVE

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION CONTAMINATED GROUNDWATER DISCHARGING INTO THE GRAND RIVER COULD POTENTIALLY CONTAMINATED FISH. GRAND RIVER IS USED FOR FISHING.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/Runoff/Standing liquids, Leaking drums)* — 02 ■ OBSERVED (DATE: ~~3/12/86~~ 4/16/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,000 — 04 NARRATIVE DESCRIPTION DEGRADATION OF STREAM OVER NORTHERN FILL AREA EXPOSING WASTE INCLUDING CRUSHED DRUMS. LEACHATE SEEPS ALSO OBSERVED 3/12/86 (DURING MONITORING WELL INSTALLATION) GROUNDWATER CONTAMINATION CITED (SEE "A" ABOVE).

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION NONE REPORTED OR OBSERVED DURING SITE INSPECTION 12/20/85.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION N.A.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION NONE REPORTED.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS NORTHERN LANDFILL (TRENCHES) BEGINNING TO ERODE DUE TO INTERMITTANT STREAM FLOWING OVER FILL AREA. DEGRADATION BY THE STREAM IS EXPOSING WASTE (LEACHATE SEEPS, RUBBISH, AND CRUSHED DRUMS) IN AREA WHERE WASTE IS EXPOSED STRONG DETERGENT LIKE ODOR IS PRESENT. THIS MAY INDICATE WASTE OTHER THAN NON HAZARDOUS TANNERY WASTE BEING PLACED IN THE NORTHERN LANDFILL.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 40,000

IV. COMMENTS

GROUNDWATER CONTAMINATION IS A MAJOR CONCERN. GROUNDWATER IS USED FOR DRINKING BY PRIVATE AND MUNICIPAL SUPPLIES WITHIN THE 3-MILE RADIUS. (SEE "A" ABOVE). POTENTIAL FOR CONTAMINANTS TO REACH THE GRAND RIVER THROUGH GROUNDWATER DISCHARGE IS ALSO A CONCERN.

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

REM FIT FILE
ECOLOGY AND ENVIRONMENT, INC
CHICAGO, IL

"HYDROGEOLOGIC REPORT ON THE NORTHEAST GRAVEL COMPANY SITE, BELMONT, MI
OCTOBER 28, 1986
(E&E CHICAGO)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID 049236821

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				COMPANY OFTEN EXCEEDED
☐ C. AIR				GROUNDWATER DISCHARGE
☐ D. RCRA				PERMIT FOR Ni, Cu, Cr,
☐ E. RCRA INTERIM STATUS				Zn, CN AND OIL AND
☐ F. SPCC PLAN				GREASE 1974-1977.
☐ G. STATE (Specify) GROUNDWATER DISCHARGE	M00288	10/19/76	CLOSED 1980	STATE (MDNR) SHUT
☐ H. LOCAL (Specify)			BY MDNR.	DOWN OPERATIONS,
☐ I. OTHER (Specify)				IN 1977 BECAUSE OF
☐ J. NONE				NON COMPLIANCE WITH
				GROUNDWATER DISCHARGE PERMIT

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
■ A. SURFACE IMPOUNDMENT	(HAS BEEN	REMOVED)
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
■ F. LANDFILL	UNKNOWN	UNKNOWN
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ■ A. BUILDINGS ON SITE

06 AREA OF SITE: 20 (Acres)

07 COMMENTS DURING LANDFILLING, NORTHEAST GRAVEL COMPANY ACCEPTED DEWATERED SLUDGE FROM WOLVERINE WORLD WIDE, INC. THIS SLUDGE WAS LANDFILLED IN PREVIOUSLY EXCAVATED TRENCHES IN EXTREME NORTHERN PORTION OF THE SITE. WOLVERINE WORLD WIDE DISPOSED NON HAZARDOUS TANNERY SLUDGE. THE TANNERY SLUDGE WAS DEWATERED TO APPROXIMATELY 30-35% SOLIDS. THE ONLY METAL IT CONTAINED WAS TRIVALENT CHROMIUM. 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 HYDRIXIDES AND WASTE PLATING BATHS, WERE DISPOSED. THESE WASTES WERE ACCEPTED FROM SEVERAL NEARBY ELECTROPLATING COMPANIES, INCLUDING GULF AND WESTERN AND KNAPP AND BOHT.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC. SITE HAS BEEN COVERED BUT GROUNDWATER SAMPLES HAVE SHOWN CONTAMINATION. WASTE LANDFILLED IN UNLINED PITS. NORTHERN LANDFILL AREA HEAVILY ERODED, CRUSHED DRUMS AND MIC TRASH EXPOSED.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS SITE IS LOCATED IN A RURAL AREA. SITE IS NOT COMPLETELY FENCED. MAIN ENTRANCE IS FENCED AND LOCKED; HOWEVER, THE FENCE IS DOWN ALONG THE NORTH AND WEST PROPERTY LINE. NORTHERN LANDFILL IS HEAVILY ERODED BY INTERMITTANT STREAM FLOWING OVER FILL. WASTE INCLUDING CRUSHED DRUMS AND GENERAL REFUSE IS EXPOSED.

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

REMEDIAL FILE
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY *(Check as applicable)*

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. ~1 (mi)
B. ~.28 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY *(Check one)*

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING *(Other sources available)* COMMERCIAL, INDUSTRIAL, IRRIGATION *(No other water sources available)* ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION *(Limited other sources available)* ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 5,200

03 DISTANCE TO NEAREST DRINKING WATER WELL ~.24 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~25 (ft)	NORTHEAST TO SOUTHWEST	25 (ft)	102,000 (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS *(including useage, depth, and location relative to population and buildings)* PRIVATE DOMESTIC WELLS TAP INTO SAND AND GRAVEL (AQUIFER OF CONCERN). THE CITY OF PLAINFIELD MAINTAINS A WELL FIELD (WELLS. 50 - 100 FEET DEEP) WATER BLENDED PRIOR TO DISTRIBUTION.

10 RECHARGE AREA ☒ YES ☐ NO COMMENTS PERMEABLE SANDS AND GRAVELS ALLOW INFILTRATION OF PRECIPITATION

11 DISCHARGE AREA ☒ YES ☐ NO COMMENTS AQUIFER DISCHARGING TOWARD THE GRAND RIVER.

IV. SURFACE WATER

01 SURFACE WATER USE *(Check one)*

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
GRAND RIVER	☐	~.3 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 830 NO. OF PERSONS	B. 3,320 NO. OF PERSONS	C. 32,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION ~.24 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 873

04 DISTANCE TO NEAREST OFF-SITE BUILDING ~.24 (mi)

05 POPULATION WITHIN VICINITY OF SITE *(Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)* THE SITE IS LOCATED IN 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 GRAVEL IS BEING MINED BY NORTHEAST GRAVEL COMPANY. THE POPULATION IS MAINLY RURAL AND APPROXIMATELY 32,000 PEOPLE LIVE IN THE 3-MILE RADIUS. THE POPULATION WITHIN 1 MILE OF THE SITE IS 830. EXCEPT FOR A TRAILER PARK ½ MILE SOUTHEAST OF SITE, THE LAND USE IS PRIMARILY AGRICULTURAL. BELMONT (pop. 11,400) IS LOCATED ABOUT 2 MILES NORTHWEST OF SITE. TO THE SOUTH AND WEST, THE FAR NORTHEAST PORTION OF THE CITY OF GRAND RAPIDS FALLS WITHIN THE 3-MILE RADIUS

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE *(Check one)*

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK *(Check one)*

☐ A. IMPERMEABLE *(Less than 10^{-6} cm/sec)* ☒ B. RELATIVELY IMPERMEABLE *($10^{-4} - 10^{-6}$ cm/sec)* ☐ C. RELATIVELY PERMEABLE *($10^{-2} - 10^{-4}$ cm/sec)* ☐ D. VERY PERMEABLE *(Greater than 10^{-2} cm/sec)*

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
~175 (ft)	~20 (ft)	SITE SOIL UNKNOWN

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
3.5 (in)	2.2 (in)	2 %	SW	(NATURAL) 2 %

09 FLOOD POTENTIAL NONE

SITE IS IN — YEAR FLOODPLAIN

10 N.A.

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS *(5 acre minimum)*

ESTUARINE: A. _____ (mi)

OTHER: B. 2.5 (mi)

12 DISTANCE TO CRITICAL HABITAT *(of endangered species)*

NONE (mi)

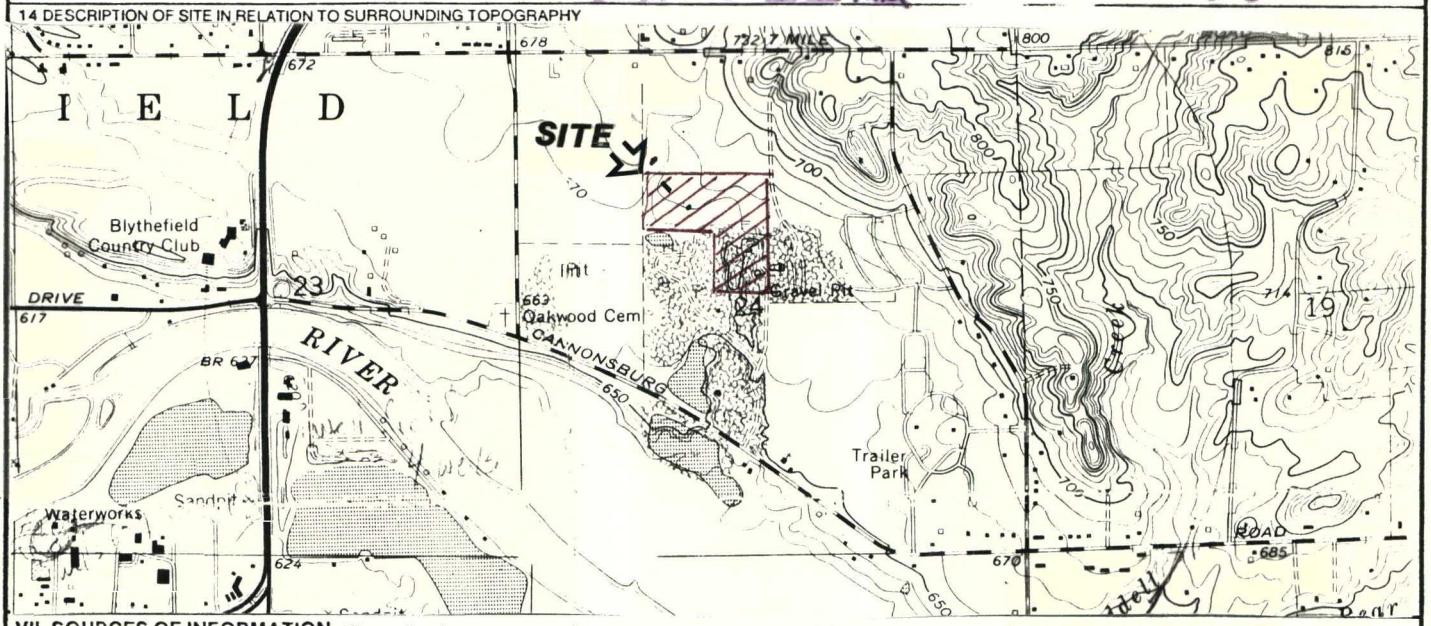
ENDANGERED SPECIES: N.A.

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 1 (mi)	B. 1/4 < (mi) BORDER SITE TRAILER PARK	C. _____ (mi)	D. 1/4 < BORDER SITE (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



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

U.S.G.S TOPOGRAPHIC MAP 1967, REVISED 1981.

WATER WELL RECORDS

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	9 MONITORING WELLS 1 RESIDENTIAL WELL	ORGANICS - IT ANALYTICAL SERVICES, CERRITOS, CALIFORNIA	AVAILABLE
SURFACE WATER		INORGANIC AND VOLATILE ORGANICS - U.S. EPA, REGION V, CENTRAL REGIONAL LABORATORY, CHICAGO, ILLINOIS	AVAILABLE
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
SLUG TESTS	- AQUIFER CHARACTERISTICS
HNU / OVA	- BORE HOLE MONITORING < BACKGROUND
RAD MINI	- BORE HOLE MONITORING < BACKGROUND
WATER LEVEL MEASUREMENTS -	

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☑ GROUND ☑ AERIAL

02 IN CUSTODY OF ECOLOGY AND ENVIRONMENT, INC
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS ECOLOGY AND ENVIRONMENT, INC CHICAGO, IL

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

SEE "HYDROGEOLOGIC REPORT ON THE NORTHEAST GRAVEL COMPANY SITE, BELMONT, MICHIGAN OCTOBER 28, 1986" FOR WELL LOGS, GROUNDWATER ANALYTICAL RESULTS, PIEZOMETER TEST ANALYSIS, AND SURFACE WATER FLOW MAP.

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT,
CHICAGO, IL

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
NORTHEAST GRAVEL COMPANY	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
4300 CANNONSBURGH ROAD	

05 CITY	06 STATE	07 ZIP CODE
BELMONT	MI	49306

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

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

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

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

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

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

REM FIT FILES
ECOLOGY AND ENVIRONMENT, INC
CHICAGO, IL

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (If applicable)			
01 NAME SAME AS OWNER		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER						

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)			
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		14 CITY	15 STATE	16 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
GULF AND WESTERN		WOLVERINE WORLDWIDE	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
"GRAND RAPIDS VICINITY"		9341 COURTLAND DR.	

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
			ROCKFORD	MI	

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
KNAPP & BORT			

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

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

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
APPROVED INDUSTRIAL REMOVAL CO.			

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

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

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

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

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

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

REM FIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO IL

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ H. ON SITE BURIAL — 02 DATE 1976 — 03 AGENCY MDNR
04 DESCRIPTION WASTE HAS BEEN COVERED BY ORDER OF THE MDNR.

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID049236821

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY MDNR
04 DESCRIPTION WASTE HAS BEEN COVERED. BY ORDER OF THE MDNR. ORIGINAL LANDFILL AND METAL HYDROXIDE AND PLATING BATH DISPOSAL AREAS HAS GOOD COVER (VEGETATION). GOOD SURFACE SLOPE / NO SURFACE WATER PONDING. NORTHERN FILL AREA HEAVILY ERODED SURFACE WATER PONDING.

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED.

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE REPORTED

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID049236821

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ■ YES ☐ NO

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

THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES SAMPLED THE "LAGOON CELLS" (1974-1980) THE LAGOON CELLS WERE LOCATED IN THE VICINITY OF THE METAL HYDROXIDE AND PLATING BATH DISPOSAL AREA. LAGOON SAMPLES SHOWED HIGHER THAN ALLOWABLE PERMIT REQUIRMENTS FOR NICKEL, COPPER, CHROMIUM, CYANIDE, ZINC AND OIL AND GREASE. NUMEROUS NON COMPLIANCE VIOLATIONS CONCERNING THE GROUNDWATER DISCHARGE PERMIT # MOO288 FORCED NORTHEAST GRAVEL COMPANY TO BE SHUT DOWN BY THE STATE IN 1977. GRAVEL WASHING OPERATIONS STILL OPERATING ON SITE.

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

REMFIT FILES
ECOLOGY AND ENVIRONMENT, INC.
CHICAGO, IL.

MI-282-01

ecology and environment, inc.

223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415

International Specialists in the Environmental Sciences

DATE: March 3, 1983

TO: File/USEPA Region V

FROM: Lisa Perenchio LP/ACS

SUBJECT: Preliminary Assessment
Michigan/TDD#R05-8212-03A,282
Belmont/Northeast Gravel Company
MID980609333

Attached is EPA's Preliminary Assessment Form 2070-12 for the above referenced site.

Primary information was gathered from the following source(s):

1. Michigan Department of Natural Resources files
2.
3.

Information indicates the following responsible parties should be listed. They are listed here because of space limitations:

1. Approved Industrial Removal (Generator/Transporter)
2. Wolverine Worldwide of Rockford (Generator)
3. Harold E. Neitzel, President of Northeast Gravel until 1971.

Presently, data gaps or no verification exists in the following key area(s):

1. Extent of groundwater contamination
2.
3.

A review of the available data indicates that additional information will be necessary to assess the impact(s) on:

1. Surface water
2.
3.
4.
5.

Suggested methods/sources for obtaining additonal information are:

1. Ground and surface water sampling
2.
3.

Notice of an apparent need for emergency action was transmitted to N/A on N/A by N/A.

recycled paper

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EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE: MI | 02 SITE NUMBER: MID980609333

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): NORTHEAST GRAVEL COMPANY

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER: 4300 CANNONSBURG ROAD

03 CITY: BELMONT | 04 STATE: MI | 05 ZIP CODE: 49306 | 06 COUNTY: KENT | 07 COUNTY CODE: 081 | 08 CONG DIST: 5

09 COORDINATES LATITUDE: 43°03'50.0" | LONGITUDE: 085°33'51.8"

ROCKFORD QUADRANGLE T8N R11W Sect. 24

10 DIRECTIONS TO SITE (Starting from nearest public road)
STATE RT. 44 TO CANNONSBURG RD. CANNONSBURG RD. EAST ~1 MILE (JUST PAST OAKWOOD CEMETARY) ON NORTH SIDE OF ROAD

III. RESPONSIBLE PARTIES

01 OWNER (If known): LESTER BAUER

02 STREET (Business, mailing, residential): NON RESPONSIVE [redacted]

03 CITY: GRAND RAPIDS

07 OPERATOR (If known and different from owner): SAME AS ABOVE

08 STREET (Business, mailing, residential):

09 CITY | 10 STATE | 11 ZIP CODE | 12 TELEPHONE NUMBER ( )

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: NONE (MONTH DAY YEAR) ☒ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 6/9/81 (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 8/5/71 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
BEFORE 1971 (BEGINNING YEAR) | 1980 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
METAL HYDROXIDES (TOXIC/PERSISTENT)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
PERCOLATION INTO GROUNDWATER (ENVIRONMENT/POPULATION)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT: BRIAN MONROE

02 OF (Agency/Organization): Lansing Office MICH. Dept. of Natural Resources

03 TELEPHONE NUMBER: (517) 383-7917

04 PERSON RESPONSIBLE FOR ASSESSMENT | 05 AGENCY | 06 ORGANIZATION | 07 TELEPHONE NUMBER ( ) | 08 DATE / / (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID980609333

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

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

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

TONS _____

CUBIC YARDS 12,000

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	12,000	CY	MOSTLY PLATING WASTES

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Michigan Dept. of Natural Resources, Lansing, files.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MI	MID980609333

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 1200
02 ☒ OBSERVED (DATE: SEVERAL-) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION 1974-1980
COMPANY OFTEN EXCEDED GROUNDWATER DISCHARGE PERMIT #M00288 REQUIREMENTS IN NICKEL, COPPER, CHROMIUM, ZINC, CYANIDE, AND OIL & GREASE

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 100
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
GRAND RIVER IS WITHIN 1 MILE OF SITE AND DOWNGRADIENT OF SITE.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

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

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 20 (Acres)
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
WASTE IS IN UNLINED PITS

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 500
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
SEVERAL RESIDENTS USE PRIVATE WELLS.

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

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	MID980609333

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/runoff/standing liquids/leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
LAGOONS ARE UNLINED AND SIT ON PERMEABLE GRAVEL AND SAND

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 1200

IV. COMMENTS

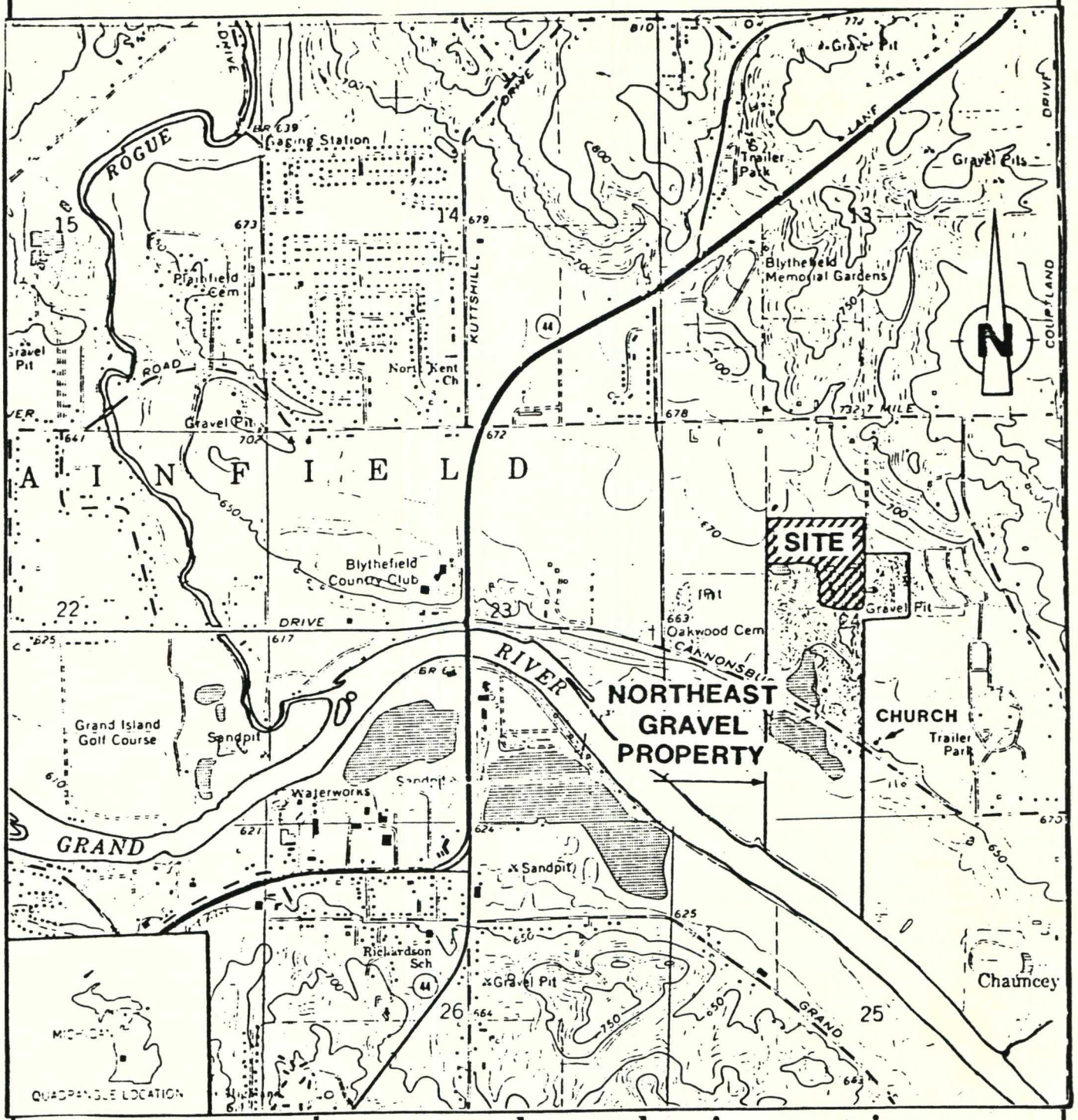
COMPANY EXCEEDED PERMIT REQUIREMENTS & RECEIVED NOTICES OF NONCOMPLIANCE SEVERAL TIMES FROM 1974-1980. COMPANY FINALLY SHUT DOWN IN 1980. COMPANY HAD BEEN VERY COOPERATIVE WITH DNR W REGARDS TO ALLOWING SAMPLES TO BE TAKEN, ETC.

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

MICH. DEPT. OF NATURAL RESOURCES Files, Lansing Office

3

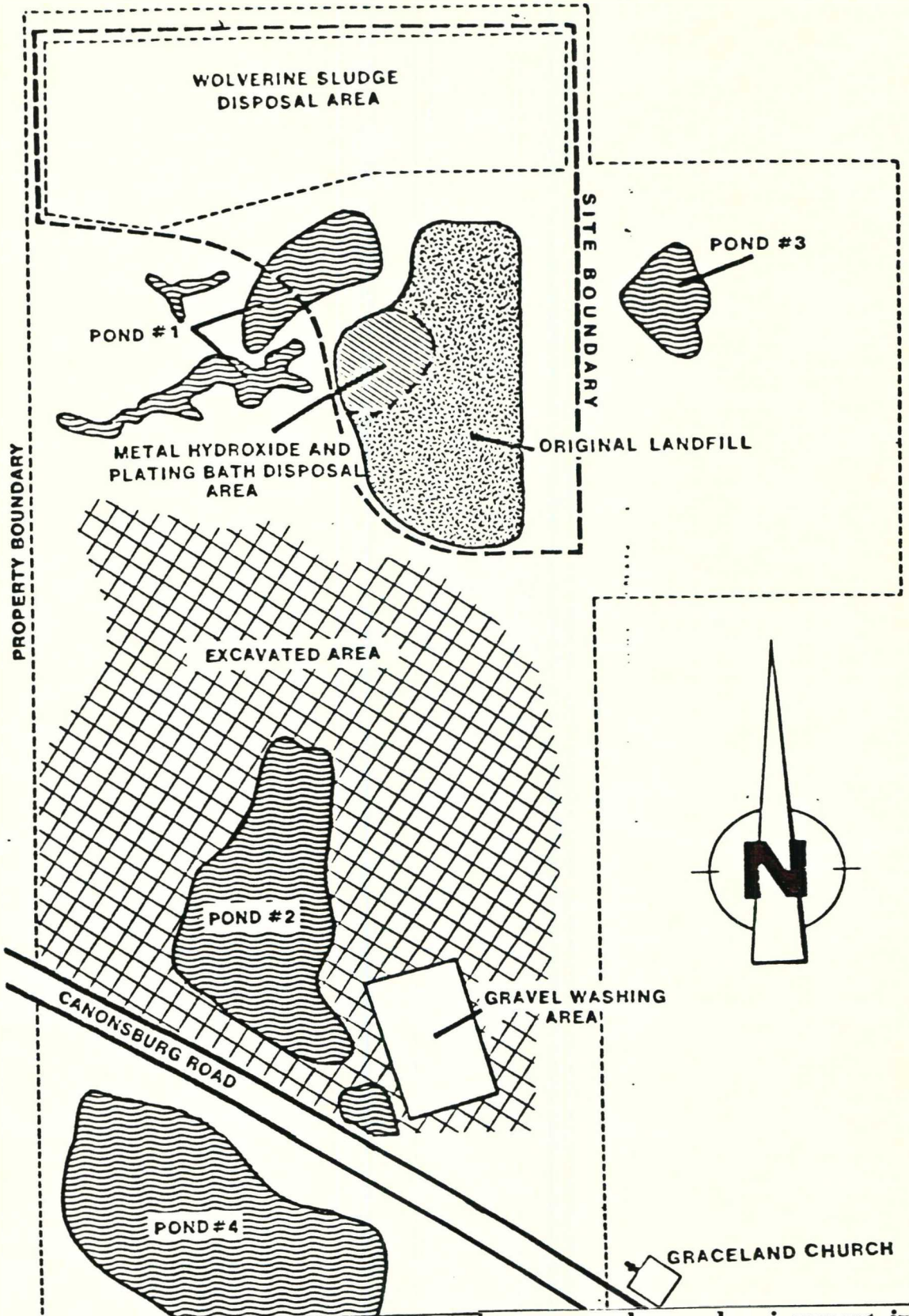
Cardinal®



ecology and environment, inc.

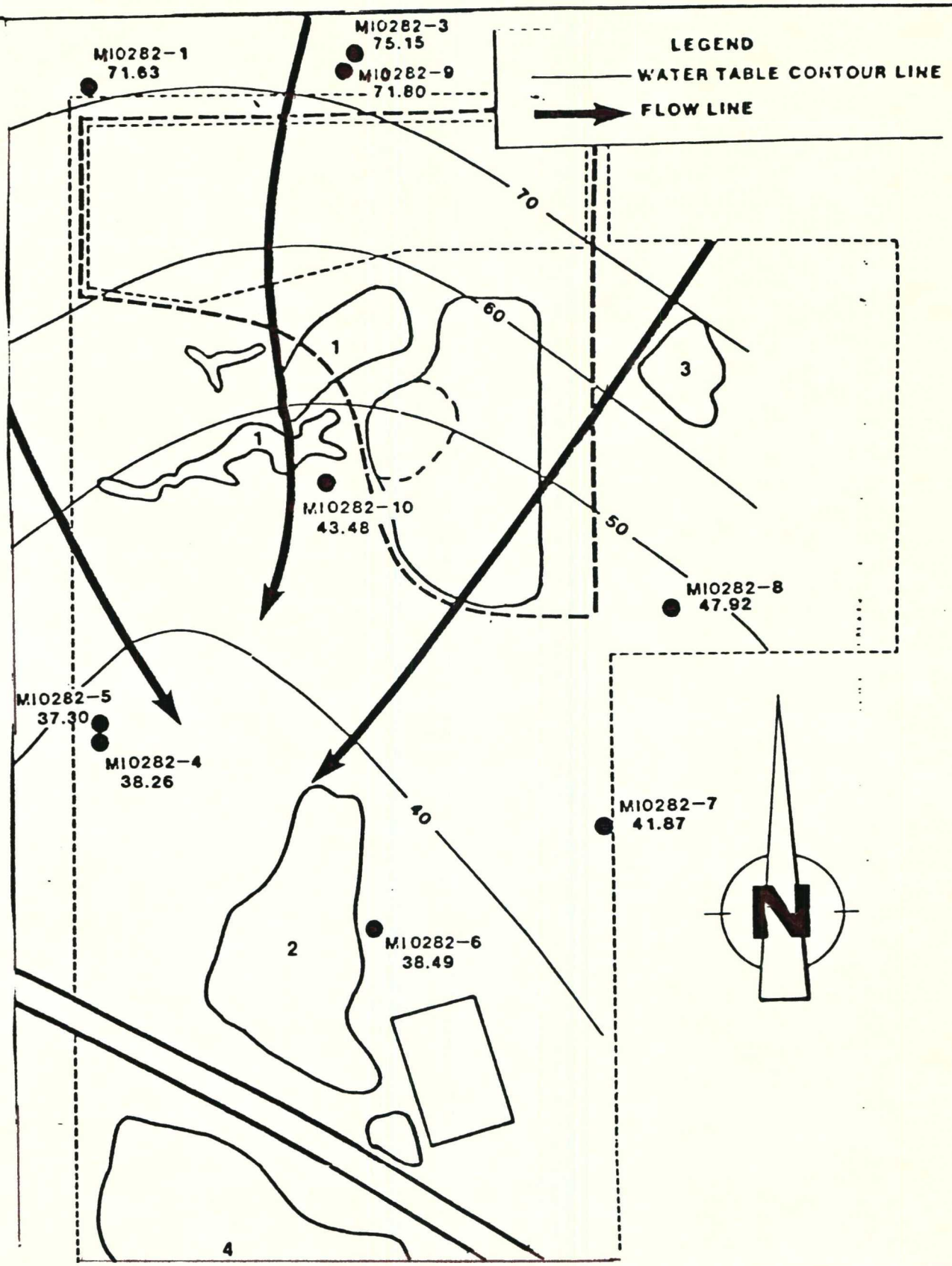
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

TITLE: SITE LOCATION MAP	FIGURE #: 1
SITE: NORTHEAST GRAVEL COMPANY	SCALE: 1/24000
CITY: BELMONT STATE: MI	TDD #: F5-8611-302
SOURCE: TOPOGRAPHIC MAP USGS	DATE: 1967 REVISED: 1981



ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

TITLE: SITE LOCATION MAP	FIGURE #: 2
SITE: NORTHEAST GRAVEL COMPANY	SCALE: 1 INCH=500 FT
CITY: BELMONT STATE: MI	TDD #: F5-8611-302
SOURCE: ECOLOGY AND ENVIRONMENT, INC.	DATE: 1986 REVISED:



ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

TITLE: WATER TABLE CONTOUR MAP, APRIL 3, 1986	FIGURE #: 3
SITE: NORTHEAST GRAVEL COMPANY	SCALE: 1 INCH=500 FT
CITY: BELMONT STATE: MI	TDD #: F5-8611-302
SOURCE: ECOLOGY AND ENVIRONMENT, INC.	DATE: 1986 REVISED:

DRAWING NUMBER

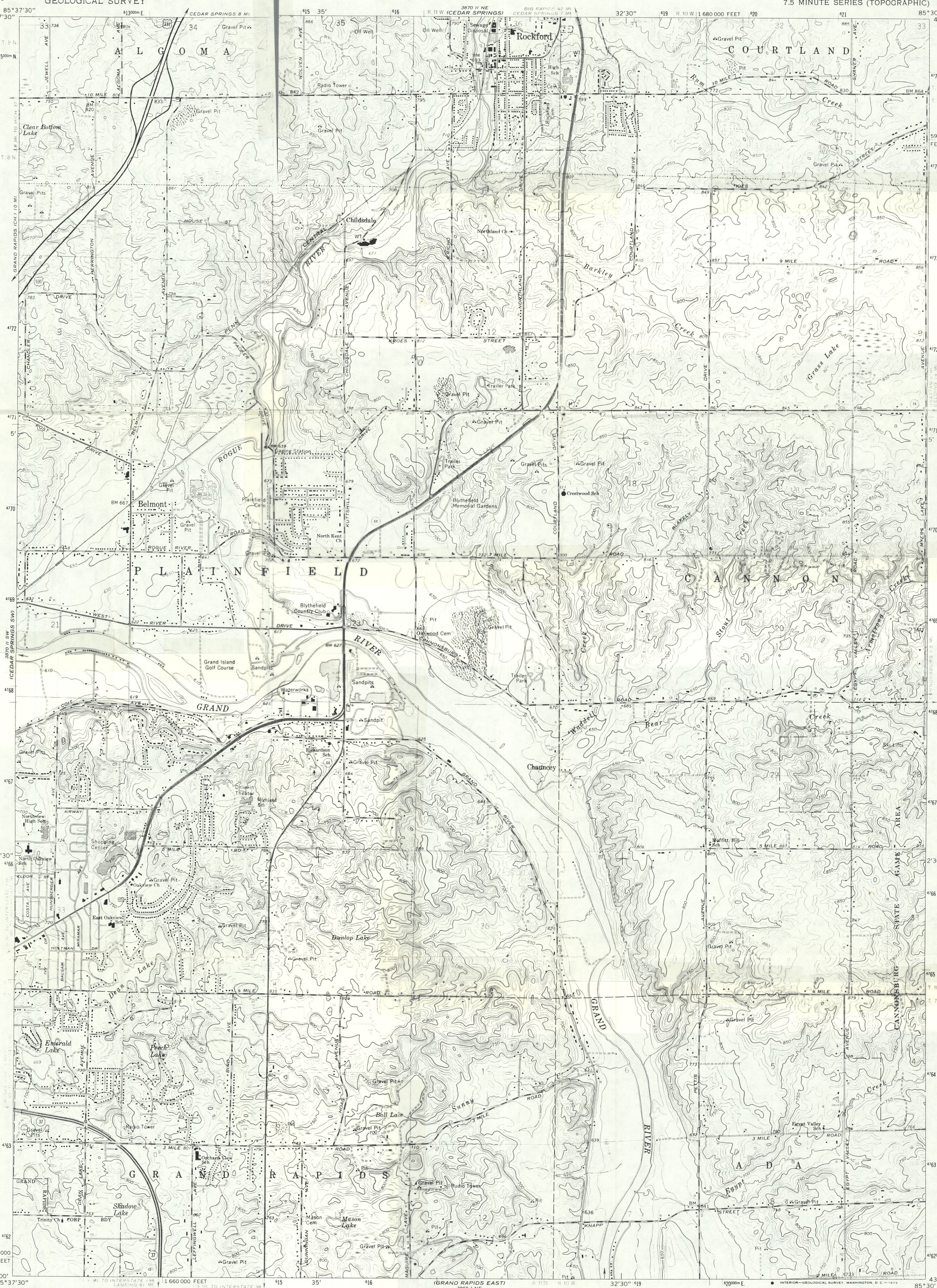
ROCKFORD

PLAN HOLD CORPORATION · IRVINE CALIFORNIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF MICHIGAN

ROCKFORD QUADRANGLE
MICHIGAN—KENT CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey in cooperation with State of Michigan agencies

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1965. Field checked 1967

Polyconic projection. 1927 North American datum
10,000-foot grid based on Michigan coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue

Red tint indicates area in which only landmark buildings are shown

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

Revisions shown in purple compiled from aerial photographs taken 1972. This information not field checked

UTM GRID AND 1972 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy-duty — Light-duty
Medium-duty — Unimproved dirt

Interstate Route — U. S. Route — State Route

ROCKFORD, MICH.
N4300—W8530/7.5

1967

PHOTOREVISED 1972

AMS 3870 II SE—SERIES V862

4

nal

DATE 4/16/86

TIME 12:00 - 4:00 A.M. (P.M.)

DIRECTION: N NNE NE ENE
E ESE (SE) SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, 45° F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY:
STEVE VEVANG

SAMPLE ID# (if applicable)

DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELL MI0282-8

DATE 4/16/86

TIME 12:00 - 4:00 A.M. (P.M.)

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W (WNW) NW NNW

WEATHER OVERCAST, 45° F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY:
STEVE VEVANG

SAMPLE ID# (if applicable)

DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELL MI0282-10

D PHOTOGRAPHY LOG SHEET

DATE 4/16/86

TIME 12:00 - 4:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: STEVE UEVANG

SAMPLE ID# (if applicable)

PHOTO

DESCRIPTION: PHOTOGRAPH SHOWING LOCATION FOR MONITORING WELL MI0282-6 WAS OF VERY POOR QUALITY.

DATE 4/16/86

TIME 12:00 - 4:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, 45° F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: STEVE UEVANG

SAMPLE ID# (if applicable)

DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELL MI0282-7

D PHOTOGRAPHY LOG SHEET

DATE 4/16/86

TIME 12:00 - 4:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY:
STEVE VEVANG

SAMPLE ID# (if applicable)

DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELL MI0282-4

DATE 4/16/86

TIME 12:00 - 4:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY:
STEVE VEVANG

SAMPLE ID# (if applicable)

DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELL MI0282-5

FIELD PHOTOGRAPHY LOG SHEET

DATE 4/16/86

TIME 12:00 - 4:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY:
STEVE VEVANG

SAMPLE ID# (if applicable)

DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELL MI0282-1.

DATE 4/16/86

TIME 12:00-4:00. A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

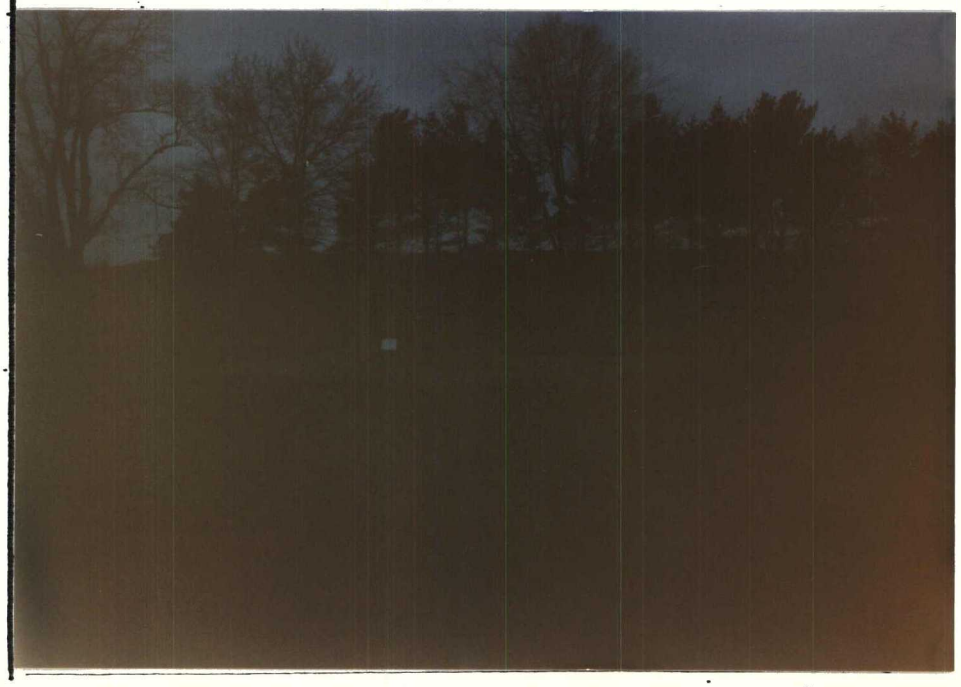
WEATHER OVERCAST, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY:
STEVE VEVANG

SAMPLE ID# (if applicable)



DESCRIPTION: REFERENCE SHOWING LOCATION OF MONITORING WELLS MI0282-3 AND MI0282-9. WELL MI0282-9 IS LOCATED DIRECTLY BEHIND WELL MI0282-3.

DATE 3/12/86

TIME 4:30 - 5:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD F. GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: STREAM EROSION NORTHERN FILL AREA. EROSIONAL CUT ~ 12 FT. DEEP. STRONG ODOR (DETERGENT SMELL) PRESENT IN AREA.

DATE 3/12/86

TIME 4:30 - 5:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD F. GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: METAL HYDROXIDE PLATING BATH AND ORIGINAL LANDFILL SHOWN AS ELONGATED MOUND (BACKGROUND CENTER OF PHOTOGRAPH).

DATE 3/12/86

TIME 4:30 - 5:00 A.M. (P.M.)

DIRECTION: (N) NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD GOODE

SAMPLE ID# (if applicable) N.A.

DESCRIPTION: LEACHATE SEEPAGE FROM NORTHERN LANDFILL (TRENCH) (AREA OF WOLVERINE DISPOSAL).

DATE 3/12/86

TIME 4:30 - 5:00 A.M. (P.M.)

DIRECTION: (N) NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: CRUSHED DRUMS EXPOSED NEAR STREAM CUT. STREAM IS FLOWING ACROSS (NORTH → SOUTH) NORTHERN LANDFILL EXPOSING WASTE. STRONG ODOR PRESENT, CAUSING IRRITATION TO NASAL MEMBRANES/EYES (DETERGENT LIKE SMELL).

DATE 3/12/86

TIME 4:30 - 5:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: INTERMITTENT STREAM FLOWING ACROSS NORTHERN LANDFILL AREA OF (WOLVERINE DISPOSAL)

DATE 3/12/86

TIME 4:30 - 5:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST. CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: EROSION OF NORTHERN LANDFILL CAUSED BY INTERMITTENT STREAM FLOWING ACROSS FILL AREA. PERMEABLE SANDS AND GRAVELS BEING TRANSPORTED BY STREAM DEPOSITED IN ALLUVIAL FAN (FOREGROUND). NOTICE WASTE BEING EXPOSED IN BACKGROUND.

D PHOTOGRAPHY LOG SHEET

DATE 3/12/86

TIME 4:30 - 5:00 A.M. (P.M.)

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW (NW) NNW

WEATHER OVERCAST, CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD F. GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: SOUTHERN SLOPE OF NORTHERN LANDFILL SHOWING SIGNS OF SLOPE FAILURE AND STREAM EROSION. WASTE BEING EXPOSED. (AREA OF WOLVERINE DISPOSAL).

DATE 3/12/86

TIME 4:30-5:00 A.M. (P.M.)

DIRECTION: N NNE NE ENE
E ESE SE SSE
(S) SSW SW WSW
W WNW NW NNW

WEATHER OVERCAST, CHANCE OF RAIN, 45°F

SITE NORTHEAST GRAVEL COMPANY

TDD# F5-8611-302

PHOTOGRAPHED BY: GERALD F. GOODE

SAMPLE ID# (if applicable)

DESCRIPTION: LEACHATE FLOWING FROM BASE OF NORTHERN LANDFILL (SOUTH SLOPE). LEACHATE HAS A RUSTY BROWN COLOR AND OILY. (AREA OF WOLVERINE DISPOSAL)

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH480R1 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 [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.	05/12/86	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

LABORATORY:	IT/CERR	CASE #/SAS #	5840
LABORATORY ID	36569EC13	QC REPORT #	7262-3
MATRIX.	WATER	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:	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
4V	71-43-2	BENZENE	10 U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	10. U
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

.ABORATORY: IT/CERR
.ABORATORY ID. 36569EI10
1ATRIX. WATER

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

RECEIVED JUN 2 4 1986

)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 #. EH481

ABORATORY	IT/CERR	CASE #/SAS #	5840
ABORATORY ID·	36569EI10	QC REPORT #:	7262-3
ATRIX.	WATER	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/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, 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.
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 #. 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. Ted Becheer

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.

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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				
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

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ORGANICS ANALYSIS DATA SHEET SAMPLE # EH481RI

LABORATORY	IT/CERR	CASE #/SAS #:	5840
LABORATORY ID	36569EI25	QC REPORT #:	7262-3
MATRIX	WATER	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

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ORGANICS ANALYSIS DATA SHEET SAMPLE # EH481RI

LABORATORY	IT/CERR	CASE #/SAS #	5840
LABORATORY ID	36569EI25	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--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

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
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

86F6065/2

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	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

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.
§ - ___ 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

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 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

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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

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Sample #: EH483

Laboratory: IT/Cerritos
Lab Sample ID: EH483
Sample Matrix: Water
Date 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: 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.112-1005,1006
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	0.65	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

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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 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:	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.
S - 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 #: EH484

LABORATORY:	IT/CERR	CASE #/SAS #	5840
LABORATORY ID.	36569EC7	QC REPORT #:	7262-3
MATRIX:	WATER	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	

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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 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
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				
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 24 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 24 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

RECEIVED JUN 24 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: 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				
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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.	205.	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				
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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

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

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

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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 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				
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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
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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

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH485RI

LABORATORY IT/CERR
LABORATORY ID 36569EI20
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--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
GC 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 JUL 24 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE # EH485RI

LABORATORY	IT/CERR	CASE #/SAS #	5840
LABORATORY ID	36569EI20	QC REPORT #.	7262-3
MATRIX	WATER	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
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	600
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
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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

86F906S15

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH486

LABORATORY	IT/CERR	CASE #/SAS #:	5840
LABORATORY ID.	36569EC9	QC REPORT #:	7262-3
MATRIX:	WATER	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	

28 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	CASE #/SAS #.	5840
LABORATORY ID	36569EI17	QC REPORT #.	7262-3
MATRIX	WATER	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: PH/MS

Case #/SAS #: 5240 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, 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:
BNS - Buzel was not spiked into this sample. It was unextracted 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

IT/Cerritos Form I — Rev 4/86

RECEIVED JUN 2 4 1986

ORGANICS ANALYSIS DATA SHEET

SAMPLE #. EH486

LABORATORY	IT/CERR	CASE #/SAS #	5840
LABORATORY ID	36569EC9	QC REPORT #	7262-3
MATRIX.	WATER	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. [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	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				
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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
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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	CASE #/SAS #.	5840
LABORATORY ID	36569EI26	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 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

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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

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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 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

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ORGANICS ANALYSIS DATA SHEET SAMPLE # EH487

LABORATORY	IT/CERR	CASE #/SAS #	5840
LABORATORY ID	36569EI18	QC REPORT #	7262-3
MATRIX:	WATER	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. 36569EI1B
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 #: 5340 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.
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 # 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 Bacherer

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				
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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

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 # EH437	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.

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	
20V	95-47-6	TOTAL XYLENES	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

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

RECEIVED JUN 2 4 1986

Sample #: EH488

Laboratory: IT/Cerritos
Lab Sample ID: EH488
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 → 10 mL; 10 uL → 10 uL
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 KOL

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	0.97	1°	10	97

* - 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 # 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				

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
(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

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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED MAY 1 4 1986

DATE: 5-9-86

SUBJECT: Precision and Accuracy of Analyses for Data Set SF 3151
Site: NORTHEAST CRAOR (

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

Griffin

MAY 12 1986

U.S. EPA CENTRAL REGIONAL LAB
BY S. CLARK
CHICAGO, ILLINOIS 60605

RECEIVED ... 1 4 1990

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:

Corrected Copy

RECEIVED MAR 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
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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	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

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.
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*** 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,
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 2 1 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:

RECEIVED MAY 21 1986

DIVISION/BRANCH: ESD Sampling Date: 1/16/86 (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.

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																	LF	5-14-86		
7																				
8																				
9																				
10																				
11																				
12																				

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

DIVISION/BRANCH: CSD 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										[illegible]	
6											
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RECEIVED MAY 21 1986

RECEIVED MAY 1 4 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, SP
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

Griffin
MAY 15 1986

RECEIVED MAY 1 4 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	"	115-125% *	"	"

COMMENT: * BIASED HIGH BUT NO Hg DETECTED IN SAMPLES
∴ DATA ACCEPTED

QC FLAGS:

5/6/86
ACTIVITY # C48100 AJ
OK-BS
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 74616	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. Qutub			
			4-29-86			[illegible]
						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
C481ZZ 6JFAOTWDZZ
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		13.7
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~~ HWL	<0.2	0.84 HWL
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: 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

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.

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Attachment

Griffin

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	0.7µg/L	≤ 2µg/L	CONTROL STANDARD	92-95%	90-110%	CONTROL STANDARD
Pb	0.4µg/L	"	"	105-106%	90-110%	"
Sb	0.5µg/L	"	"	99-104%	"	"
Se	0.6µg/L	"	"	91-97%	"	"
~~Tl~~						

COMMENT:

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

Griffin

APR 28 1986

U.S. EPA CENTRAL REGIONAL LAB
5350 S. CLARK ST.
CHICAGO ILLINOIS 60605

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:

8/4-25-86 4/21/86 AS

ACTIVITY # C48177

6TFA05WUZZ

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

RECEIVED APR 29 1986

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

DU NUMBER Y905 DATA SET NUMBER 3151 STUDY NORTHEAST GRAVEL PRIORITY N CONTRACTOR CRL

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	GRACELAND CHURCH 5-93901	✓	✓ <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-He anone	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 APR 29 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 # : 86FG05R07

Data Set #: SF-3151
Matrix : WATER

BLANK

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

RECEIVED APR 2 9 1986

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 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

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: Fit

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

SITE NAME: Northeast Gravel SMO Case No. 5840

EPA Data Set No. SF3171 No. of Samples: 11 D.U./Activity Numbers 4905 | C48500

CRL No. 86FG06S08 - 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 Levin
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 1320-8 (REV 3-78)

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														
[redacted]														
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														
% Solids														

RECEIVED [illegible] 1 4 1986

RECEIVED ... 1 4 1986

00002

Form I

86FG06508

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

Lab Manager [signature]

RECEIVED MAY 14 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]

MI-0282-07

ecology and environment, inc.

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

✓ 24 June 86

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 6/18/86

RECEIVED JUN 2 4 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 Jun 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.

RECEIVED JUL 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

In Reference to Case No(s):

[illegible]

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

RECEIVED JUN 2 4 1986

Telephone Record Log

Date of Call: [illegible]

Laboratory Name: [illegible]

Lab Contact: [illegible]

Region: [illegible]

Regional Contact: [illegible]

Call Initiated By: ____ Laboratory ____ Region

In reference to data for the following sample number(s):

[illegible]

Summary of Questions/Issues Discussed:

[illegible]

Summary of Resolution:

[illegible]

Signature [illegible] Date [illegible]

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

IT CORPORATION

IT ANALYTICAL SERVICES

17605 Fabrica Way • Cerritos California 90701 • 213-921-9831 / 714-523-9200

SF 3171

CERTIFICATE OF ANALYSIS

Prepared For	USEPA Region V 536 South Clark Street Tenth Floor, CRL Chicago, IL 60605 Attn: Curtis Ross	Date	May 16, 1986 RECEIVED JUN 2 4 1986 Page 1 of 3

Date Received	P O Number	Job Number
April 16, 1986	68-01-7262	36569

Enclosures

Enclosed are results for samples in Case 5840.

The results enclosed are for samples numbered EH478 through EH488. This shipment also contains one complete set of Low Water QC Data and one set of Low Water Re-Injected BNA QC Data.

The Chain of Custody Record for these samples is enclosed with the copy of this data sent to the Region.

The copy of this data sent to SMO includes an extra set of the Case Summary and Data Summary sections of this Case Data Package.

Sample Receipt

This Case was received in one shipment. This shipment, received April 16, 1986, contained eleven Water samples labeled Low concentration.

All of the above samples were received packaged as Low concentration samples.

All of the above samples were received to be analyzed for full Organic HSL's.

RECEIVED

MAY 19 1986

U S E P A CENTRAL REGIONAL LAB
536 S CLARK STREET
CHICAGO, ILLINOIS 60605

Approved by: Geoffrey Binns
Geoffrey Binns
Data Auditor

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.

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
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	Ø/13	Ø/13	Ø/13	Ø/19	1/19	Ø/19	Ø/19	Ø/19	Ø/19	Ø/13

Comments:

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

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

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

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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 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	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: _____

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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

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 (0.05U)	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 (0.1U)	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 (0.05U)	0 (0.2U)	0 (0.2U)	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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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	110 J	107*	98 J	95	12	<28	39- 98
B/N	Acenaphthene	100.	200u	100 J	100	100 J	100	Ø	<31	46-118
SMO	2,4-Dinitrotoluene	101.	200u	58 J	57	66 J	65	13	<38	24- 96
Sample #	Pyrene	103.	200u	79 J	77	78 J	76	1	<31	26-127
EH480RI	N-Nitroso-di-n-propylamine	102.	200u	71 J	70	72 J	70	1	<38	41-116
	1,4-Dichlorobenzene	101.	200u	85 J	84	84 J	83	1	<28	36- 97
Acid	Pentachlorophenol	206.	1000u	66 J	32	62 J	30	7	<50	9-103
SMO	Phenol	202.	200u	180 J	89	160 J	79	12	<42	12- 89
Sample #	2-Chlorophenol	212.	200u	170 J	80	120 J	57	35	<40	27-123
EH480RI	4-Chloro-3-methylphenol	205.	200u	170 J	83	140 J	68	19	<42	23- 97
	4-Nitrophenol	215.	1000u	32 J	15	38 J	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: _____

Rev 8/85

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

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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	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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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 Weisel

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 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: 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

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	4 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

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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 D. Hatt

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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

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 D Hatt

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Sample Management Office
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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]

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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

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

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
8 are hits

Lab Manager [signature]

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Sample Management Office
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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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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]

QC EXCEPTION SUMMARY REPORT

CASE # 5840
DATA SET # SF3171
LAB Q.C.# 55887
DATE:

SITE Northeast Gravel
LAB RMAL
REVIEWED BY [illegible]

MATRIX: 11W
CONC. : 11L

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 Diln AQ	Ser Diln 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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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		

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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. 55887 RECEIVED M... 1 4 1986

DUPLICATES

LAB NAME ROCKY MOUNTAIN ANALYTICAL

CASE NO. 5840

EPA Sample No. MEJ096

DATE 5-2-86

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

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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 Lusuhl

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

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

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.

RECEIVED JUN 2 4 1986

Sample #: Instrument Detection Limits

Laboratory: IT/Cerritos
Lab ID: OWA 3
Lab ID for Dil: ——
Sample Matrix: ——
Data Release Authorized by: Cheryl Lu Suhl

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 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.
@ - ____ Recoveries due to Matrix Effects.

NS - Not Spiked

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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.
@ - ____ 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 Lutzuhl

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 1,000 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
Sample #: Detection Limits

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

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

Rev 8/85

RECEIVED JUN 2 4 1986

Sample #: GC/EC B Instrument Detection Limits

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

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 1,000 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

Rev 8/85

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GC#12B
Instrument
Sample #: Detection Limits

Laboratory: IT/Cerritos
Lab ID: GC/EC GC#12B
Lab ID for Dil: ———
Sample Matrix: ———
Data Release Authorized by: Chrysler 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.
\# - _____ Recoveries due to Dilution.
$ - _____ Recoveries due to Matrix Effects.

NS - Not Spiked

Rev 8/85

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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. Kokenberger

Case #/SAS #: ——
QC Report #: —— CRDL- QL
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

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

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.

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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. Kirkenbey

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. 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	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	5000U
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	5000U
91-58-7	2-Chloronaphthalene	10000U
88-74-4	2-Nitroaniline	5000U
131-11-3	Dimethyl phthalate	10000U
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. Kobelanzi

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 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. Krokenberger

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. Kirkenberger

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. Kolodziej

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

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

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
Date Release Authorized by: Linda R. Kickenberger

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. Kohenberger

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. Kokenberger

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. Kokenberger

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.
s - _____ 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. 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 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
TC

ORGANICS ANALYSIS DATA SHEET SAMPLE # EH478

RECEIVED JUN 2 4 1986

LABORATORY	IT/CERR	CASE #/SAS #.	5840
LABORATORY ID.	36569EI02	QC REPORT #.	7262-3
MATRIX:	WATER	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 → 10,ml
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. 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
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

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 FG06509

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 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

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	CASE #/SAS #	5840
LABORATORY ID.	36569EI04	QC REPORT #	7282-3
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	05/06/86	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 #: 5340 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-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 24 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				
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	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	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

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 24 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 JUL 24 1986

Sample #: EH490

Laboratory: IT/Cerritos
Lab Sample ID: EH490
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 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-111-1026
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 #: 58/0 SAMPLE #: EH480
LEVEL LOW CONTRACT #: 68-01-7262
MATRIX: WATER UNITS: UG/L
Q C REPORT #. 7262-3

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

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ORGANICS ANALYSIS DATA SHEET SAMPLE # EH480RI

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 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 # EH4801

RECEIVED JUL 2 4 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: [signature]

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

COMPOUND											
ITC	MEE606	86FB05574									
OTC	EH488	CRL # 86FB05574									
SAMPLE	BLANK	BRACELAND CHURCH									
pentachlorophenol											
phenanthrene											
anthracene											
di-n-butylphthalate											
fluoranthene											
benzidine											
pyrene											
butylbenzylphthalate											
3,3'-dichlorobenzidine											
benzo(a)anthracene											
bis(2-ethylhexyl)phthlate											
chrysene											
di-n-octyl phthlate											
benzo(b&k)fluoranthene											
benzo(a)pyrene											
indeno(1,2,3-cd)pyrene											
dibenzo(a,h)anthracene											
benzo(g,h,i)perylene											
alpha-BHC											
beta-BHC											
delta-BHC											
gamma-BHC(lindane)											
heptachlor											
aldrin											
heptachlor epoxide											
endosulfan I											
dieldrin											
4,4'-DDE											
endrin											
endosulfan II											
4,4'-DDD											
endrin aldehyde											
endosulfan sulfate											
4,4'-DDT											
methoxychlor											
endrin ketone											
chlorodane											
toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
ELEMENT											
aluminum											
antimony											
arsenic											
barium		13.7									
beryllium											
cadmium											
calcium		56.6									
chromium											
cobalt											
copper	[4]	36.2									
iron		135									
lead											
magnesium		20.2									
manganese											
mercury											
nickel											
potassium		0.84									
selenium											
silver											
sodium	[1030]	1.71									
thallium											
tin											
vanadium											
zinc	[6.3]	343									
cyanide CHECK IF ANALYZED ( )											
~~TENTATIVELY IDENTIFIED ORGANICS~~											
SR METALS		41.8									

STATE MICHIGAN SITE NORTHEAST GRAVEL COMPANY TDD FS-2611-302 PAGE 2 OF 2, SET # 2

COMPOUND											
ITC	MEE606	86FG05574									
OTC	EH488	CRL# 86FG05574									
SAMPLE	BLANK	GRAVELAND CHURCH									
chloromethane											
bromomethane											
vinyl chloride											
chloroethane											
methylene chloride											
acetone	33 B										
carbon disulfide											
1,1-dichloroethene											
1,1-dichloroethane											
trans-1,2,-dichloroethene											
chloroform											
1,2-dichloroethane											
2-butanone	10U.J										
1,1,1-trichloroethane											
carbon tetrachloride											
vinyl acetate											
bromodichloromethane											
1,1,2,2-tetrachloroethane											
1,2-dichloropropane											
trans-1,3-dichloropropene											
trichloroethene											
dibromochloromethane	5U.J										
1,1,2-trichloroethane	5U J										
benzene											
cis-1,3-dichloropropene	5U J										
2-chloroethylvinylether	5U.J										
bromoform											
2-hexanone											
4-methyl-2-pentanone											
tetrachloroethene											
toluene											
chlorobenzene											
ethylbenzene											
styrene											
total xylenes											
N-nitrosodimethylamine											
phenol											
aniline											
bis(2-chloroethyl)ether											
2-chlorophenol											
1,3-dichlorobenzene											
1,4-dichlorobenzene											
benzyl alcohol											
1,2-dichlorobenzene											
2-methylphenol											
bis(2-chloroisopropyl)ether											
4-methylphenol											
N-nitroso-di-n-propylamine											
hexachloroethane											
nitrobenzene											
isophrone											
2-nitrophenol											
2,4-dimethylphenol											
benzoic acid											
bis(2-chloroethoxy)methane											
2,4-dichlorophenol											
1,2,4-trichlorobenzene											
napthalene											
4-chloroaniline											
hexachlorobutadiene											
4-chloro-3-methylphenol											
2-methylnapthalene											
hexachlorocyclopentadiene											
2,4,6-trichlorophenol											
2,4,5-trichlorophenol											
2-chloronaphthalene											
2-nitroaniline											
dimethyl phthalate											
acenapthylene											
3-nitroaniline											
acenaphthene											
2,4-dinitrophenol											
4-nitrophenol											
dibenzofuran											
2,4-dinitrotoluene											
2,6-dinitrotoluene											
diethylphthalate											
4-chlorophenyl-phenylether											
flourene											
4-nitroaniline											
4,6-dinitro-2-methylphenol											
N-nitrosodiphenylamine											
4-bromophenyl-phenylether											
hexachlorobenzene											

STATE MICHIGAN SITE NORTHEAST GRAVEL COMPANY TDD FC-2611-302 PAGE 1 OF 2, SET # 2

	ITC	MEJ096	MEJ097	MEJ098	MEJ098	MEJ099	MEJ100	MEE601	MEE602	MEE603	MEE604	MEE605
	OTC	EH478	EH479	EH480	EH480	EH481	EH482	EH483	EH484	EH485	EH486	EH487
COMPOUND	SAMPLE	MI0282-1	MI0282-3	MI0282-4	MI0282-4 MATRIX SPIKE DUP.	MI0282-5	MI0282-6	MI0282-6 DUP.	MI0282-7	MI0282-8	MI0282-9	MI0282-10
pentachlorophenol												
phenanthrene												
anthracene												
di-n-butylphthalate												
fluoranthene												
benzidine												
pyrene												
butylbenzylphthalate												
3,3'-dichlorobenzidine												
benzo(a)anthracene												
bis(2-ethylhexyl)phthlate												
chrysene												
di-n-octyl phthlate												
benzo(bak)fluoranthene												
benzo(a)pyrene												
indeno(1,2,3-cd)pyrene												
dibenzo(a,h)anthracene												
benzo(g,h,i)perylene												
alpha-BHC												
beta-BHC												
delta-BHC												
gamma-BHC(lindane)												
heptachlor												
aldrin												
heptachlor epoxide												
endosulfan I												
dieldrin												
4,4'-DDE												
endrin												
endosulfan II												
4,4'-DDD												
endrin aldehyde												
endosulfan sulfate												
4,4'-DDT												
methoxychlor												
endrin ketone												
chlorodane												
toxaphene												
Aroclor-1016												
Aroclor-1221												
Aroclor-1232												
Aroclor-1242												
Aroclor-1248												
Aroclor-1254												
Aroclor-1260												
ELEMENT												
aluminum						[20]			[46]			
antimony												
arsenic												
barium		[26]	[64]	[35]		[63]	[41]		[23]	[24]	[21]	[7.2]
beryllium												
cadmium												
calcium		67900	18500	70900		70500	76100		84000	27300	57800	75700
chromium							43	43				
cobalt												
copper		[6.7]	[7.1]	[7.6]		[11]	[7.9]	[7.3]	[9.4]	[9.6]	[9.2]	[5.1]
iron				[20]		[17]		[32]	[8]	[20]	[20]	
lead												
magnesium		22700	24900	25200		25400	27300	28000	24600	24500	21800	25600
manganese		[7.4]	63	[6.6]		240	[2.6]	[4.8]	[13]	[7.8]		[3.7]
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	33200
thallium												
tin												
vanadium												
zinc		23	[15]	[14]		30	[11]	[13] 11	[20]	22	[18]	[15]
cyanide CHECK IF ANALYZED ( )												
TENTATIVELY IDENTIFIED ORGANICS												

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COMPOUND	ITC	MEJ09	MEJ098	MEJ097	MEJ098	MEJ099	MEJ100	MEE601	MEE602	MEE603	MEE604	MEE605
	OTC	EH478	EH479	EH480	EH480	EH481	EH482	EH483	EH484	EH485	EH486	EH487
	SAMPLE	MI0282-2	MI0282-3	MI0282-4	MI0282-4 MATRIX SPIKE DUP.	MI0282-5	MI0282-6	MI0282-6 DUP.	MI0282-7	MI0282-8	MI0282-9	MI0282-10
chloromethane												
bromomethane												
vinyl chloride												
chloroethane				6. J								4 J
methylene chloride		14 B	10 B-	11 B-		33 B-	6 B-	4 JB-	6 B-	5 B-	5 B-	7. B
acetone		110 B	31 B-	19 B-		250 B-	28 B-		80 B-	17. B	70 B	170 B
carbon disulfide												
1,1-dichloroethene												
1,1-dichloroethane				8								7
trans-1,2,-dichloroethene												
chloroform												
1,2-dichloroethane												
2-butanone		10.U J	10.U.J	10.U J		20.U J	10.U.J	10U.J			10U.J	10 U.J
1,1,1-trichloroethane												
carbon tetrachloride												
vinyl acetate				10.U								
bromodichloromethane												
1,1,2,2-tetrachloroethane												
1,2-dichloropropane												
trans-1,3-dichloropropene												
trichloroethene												
dibromochloromethane		5.U. J.	5.U J	5.U J		10 U.J	5U.J	5U.J			5U.J	5U J
1,1,2-trichloroethane		5 U J	5 U J	5.U.J		10U.J	5U J	5.U.J			5U.J	5 U.J
benzene												
cis-1,3-dichloropropene		5.U.J	5.U J	5.U.J				5U.J			5.U J	5U.J
2-chloroethylvinylether		5.U J	10.U J	10U.J				10U.J			10U.J	10U.J
bromoform		5 U TC	5.U TC	5U.TC								
2-hexanone												
4-methyl-2-pentanone												
tetrachloroethene								1. J				
toluene		2 JB		2.JB			2.JB	2.JB	2 JB			
chlorobenzene												
ethylbenzene												
styrene												
total xylenes												
N-nitrosodimethylamine												
phenol												
aniline												
bis(2-chloroethyl)ether												
2-chlorophenol												
1,3-dichlorobenzene												
1,4-dichlorobenzene												
benzyl alcohol												
1,2-dichlorobenzene												
2-methylphenol												
bis(2-chloroisopropyl)ether												
4-methylphenol												
N-nitroso-di-n-propylamine												
hexachloroethane												
nitrobenzene												
isophrone												
2-nitrophenol												
2,4-dimethylphenol												
benzoic acid												
bis(2-chloroethoxy)methane												
2,4-dichlorophenol												
1,2,4-trichlorobenzene												
napthalene												
4-chloroaniline												
hexachlorobutadiene												
4-chloro-3-methylphenol												
2-methylnapthalene												
hexachlorocyclopentadiene												
2,4,6-trichlorophenol												
2,4,5-trichlorophenol												
2-chloronaphthalene												
2-nitroaniline												
dimethyl phthalate												
acenapthylene												
3-nitroaniline												
acenaphthene												
2,4-dinitrophenol												
4-nitrophenol												
dibenzofuran												
2,4-dinitrotoluene												
2,6-dinitrotoluene												
diethylphthalate												
4-chlorophenyl-phenylether												
flourene												
4-nitroaniline												
4,6-dinitro-2-methylphenol												
N-nitrosodiphenylamine												
4-bromophenyl-phenylether												
hexachlorobenzene												

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INTRODUCTION TO DATA TABLES

A SUMMARY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED, HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC INFORMATION IS PROVIDED IN THE ATTACHED DATA SHEETS.

I) REPORTING UNITS
- A) ORGANICS
  - 1) Water Samples - ug/l or ppb (parts per billion)
  - 2) Soils or Sediments - ug/kg or ppb (parts per billion)
- B) METALS
  - 1) Water Samples - ug/l or ppb
  - 2) Soils or sediments - mg/kg or ppm

II) DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A) ORGANICS

Footnote	Definition	Interpretation
UJ	Detection Limit (D.L.) is estimated because of a Quality Control (QC) protocol. D.L. is possibly above or below Contract Required Detection Limit (CRDL).	Compound was not detected
UB	Compound found in laboratory blank. No Value above CRDL.	Compound was not detected
UJB	Compound found in laboratory blank, but not detected in sample. CRDL is estimated because of a QC protocol.	Compound was not detected
B	Compound found in blank. Two interpretations are possible:	
	a) If sample value is equivalent to D.L. to 5x blank concentration	Compound value is semi-quantitative.
	b) If sample value is greater than 5x the blank concentration	Compound value is quantitative
JB	Compound found in blank, value is estimated because of QC protocol.	Compound value is semi-quantitative
R	Do Not Use Value. Major Violation of QC Protocol	Compound value is not usable.
C	Value adjusted for blank (an unacceptable procedure)	Compound value is semi-quantitative
J	Value is above CRDL and is an estimated value because of a QC protocol	Compound value is semi-quantitative
Q	No Analytical Result	Compound was not detected
N	Presumptive evidence for the presence of a compound as used for a Tentatively Identified Compound (TIC)	Compound value is semi-quantitative

B) METALS

FOOTNOTE	DEFINITION	INTERPRETATION
E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value is semi-quantitative
s	Analysis by Method of Standard Additions (Look for a "+" Footnote)	Value is quantative
R	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semiquantitative
*	Duplicate value outside QC protocols which indicates a possible matrix problem	Value is semiquantitative
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value is biased
[ ]	Value is real, but is above instrument D.L. and below CRDL	Value may be quantitative or semiquantitative
UJ	D.L. is estimated because of a QC protocol. D.L. is possibly above or below CRDL.	Compound or element was not detected
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value is semiquantitative

MONITORING WELL INVENTORY DATA SHEET

I. Site Information

Site Name: Northeast Gravel
WSTS/PAN: MI0282
TDD: F5-8504-12
Address: 4300 Cannonsburg Rd
City: Grand Rapids
State: MI
Zip Code: 49306
County: Kent

II. Subcontracting Information

Subcontractor: Mateco
Cost (optional):
Address: Grand Rapids

III. NPL Listing

Yes ☐
No ☒
Date of Listing:

IV Monitoring Well Information

Well #	Installation Date	Abandonment Date	Well Depth	Well Material	Screen Length	Screened Interval	Geologic Unit Monitored
1	3/10/86		36	PVC	10'	24.5 - 35.4	
2	3/14/86		73	↓	↓	60 - 70	
4	3/17/86		46			33 - 43	
5	3/19/86		80.5			68 - 78	
6	3/24/86		20.8			8.3 - 18.3	
7	"		37.5			25 - 35	
8	3/25/86		33			22 - 32	
9	"		39.5			29 - 39	
10	?		38	↓	↓	28 - 38	

Lock Number(s) ?

V. Last Sampling Date 4/16/86 Noted as of 1/2/90
/ / Noted as of / /
/ / Noted as of / /
/ / Noted as of / /
/ / Noted as of / /