SITE INSPECTION REPORT FOR
SYSTECH LIQUID TREATMENT CORP.
FRANKLIN, OHIO
OHD030935852
F05-8704-033
PAN: FOH0574SA

September 8, 1987

US EPA RECORDS CENTER REGION 5
469080

#00322

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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: September 8, 1987
TO: File
FROM: Thomas C. Sullivan
SUBJECT: Ohio/F05-8704-033/F0H0574SA
Franklin/Systech Liquid Treatment Corp.
OHD030935852

The Systech Liquid Treatment Corp. site is located at the northeastern corner of Baxter Road and Highway 73, Franklin, Ohio. The site is approximately two acres in size and is currently inactive. This site was tasked to an Ecology and Environment, Inc. Field Investigation Team (E & E-FIT) for a site inspection after being identified by the Ohio Environmental Protection Agency in the form of a preliminary assessment submitted to the U.S. Environmental Protection Agency (U.S. EPA).

The site had been occupied by a sewage treatment plant owned and operated by the City of Franklin, Ohio, from the 1930s through 1972. A new sewage treatment plant was then opened approximately 1,500 feet north of the site. The site was then deeded to the Miami Conservancy District, who is the current owner. From 1974 to 1978, the Miami Conservancy District leased the property to Systems Technology Corp. In 1979, Systems Technology Corp. changed its name to Systech Liquid Treatment Corp. Also in 1979, Systech Corp. (245 N. Valley Road, Xenia, Ohio, 45385) was organized as the parent company of Systech Liquid Treatment Corp. Tricil, Inc. (131 N. Ludlow Street, Suite 510, Dayton, Ohio 45402) then purchased Systech Liquid Treatment Corp. from Systech Corp. in 1982. Tricil changed the name of Systech Liquid Treatment Corp. to Tricil Environmental Services, Inc. in 1983.

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Systems Technology Corp. (Systech) operated a liquid waste treatment facility at the site from 1974 to 1978 while the property was leased to the company from the Miami Conservancy District. The facility was constructed by modifying the old City of Franklin sewage treatment plant. The type of wastes treated by the facility included plating wastes from metal industries, oily wastes, phenol contaminated water, cyanide contaminated wastes, acids and bases, and some food related wastes. In addition to the liquid waste treatment, Systech operated a solvent recovery process at the site from 1976 to 1978.

A total 31,387,000 gallons of liquid wastes were treated at the Systech facility. Spent solvents comprise 694,200 gallons of this total volume. A breakdown of specific solvents is as follows:

Waste	Gallons
acetone	9,800
xylene	5,900
1,1,1-trichloroethane	10,500
trichloroethylene	23,200
chlorinated solvents	1,200
methylene chloride	3,100
1,1,2,2-tetrachloroethylene	2,100
toluene	23,800
2-butanone	21,000
ethanol	13,700
heptane	7,900
kerosene	21,000
napthalene	8,400
mixed/unspecified solvents	353,000
lacquer thinner	6,300
paint thinners	166,100
methyl isobutyl ketone	2,000
stoddard solvent (kerosenes)	12,500
freon	1,500
butyl cellosolve	1,200

Other liquid waste quantities include:

Waste	Gallons
waste acids	7,063,000
waste caustics	544,000
oil/water mixtures	324,000
cyanide contaminated waste	30,000
phenol contaminated water	955,000
metal working coolants & soluble oils	7,512,000
chrome waste (acids, rinses, etc.)	282,000
styrene rinse water	2,127,000
diatomaceous earth slurries (used in filtering vegetable oil)	3,927,000
slurries	47,000
aqueous waste	7,882,000

The primary method of waste treatment at the Systech facility was a waste to waste treatment system; compatible wastes were combined to achieve neutralization. The only feedstocks or additives used were pebble lime and sodium hydroxide. There was no disposal of wastes on-site; the facility only treated and stored wastes.

Operation of the facility was on a batch treatment basis; when a large enough volume was accumulated (approximately 25,000 gallons), it was then treated. The waste effluent was then pumped to the new sewage treatment plant north of the site. The new sewage treatment plant, also owned by the Miami Conservancy District, completed final treatment of wastes and discharged them. For a period of three to five months, some solvents were incinerated at the new sewage treatment plant. All other wastes were sent through the sewage treatment plant. Systech was contractually bound to treat all wastes discharged to the new sewage treatment plant to a quality consistent with the Federal Water Act of 1972 and applicable State guidelines. No permits were held.

During operation of the Systech facility, two workers died on August 23, 1975 while cleaning a tank containing sludges laden with cyanide. In 1978, an odor problem developed at the site which ultimately led to the facility closure. The odor was associated with the solvent recovery process.

Following the facility closure, all Systech equipment and buildings were removed. The only structures that remained were part of the original sewage treatment plant and included the pump house, trickling filters, clarifier, dosing chamber, and treatment tanks. The cement foundations from the Systech above ground tanks and solvent recovery building are still present. No underground tanks ever existed at the site.

In 1977, four monitoring wells (MW) were installed to monitor the aquifer at the Systech site. Routine sampling of the monitoring wells indicated degraded groundwater conditions at the site. Wells MW3 (also labelled W140 in figure 2) and MW4 (W139) (figure 2) were used as purge wells in an effort to pump water from the aquifer to contain the extent of contamination and purge the aquifer of contaminants. The result of purging these wells was an improvement in groundwater quality. Hydrogeologic investigations of the area indicate groundwater flow is from the southeast to northwest.

Recent sampling (March 1986) of the monitoring wells at the Systech site by Soil & Material Engineers, Inc., has shown the aquifer is contaminated with xylene, ethylbenzene, chloroethane, toluene, vinyl chloride, 1,2-dichloropropane, 1,1,1-trichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, and Aroclor-1248 (PCB). Soil and Material Engineers, Inc. also sampled soils in June 1986 from three borings that they had drilled at the Systech site. Several contaminants including xylene, toluene, methylene chloride, acetone, 1,1,2,2-tetrachloroethylene, ethyl acetate, methanol, trichloroethylene, hexane, and chlorobenzene were detected in the soil samples.

During the site inspection on May 12-13, 1987, E & E-FIT did not observe any waste, drums, or evidence of recent waste handling activity at the site. Site representatives described various features of the site and indicated what each area was used for during Systech operations. Area 3 (figure 2) was a drum storage area for the solvent recovery process (prior sampling at a soil boring in this area indicated contamination). Area 4 was the solvent recovery facility and solvent storage area. E & E-FIT collected soil samples S3 and S4 in these areas. Soil sample S2 was collected by E & E-FIT in the vicinity of the trickling filter tanks which were used for holding and storing liquid wastes. Site representatives indicated some waste oil may have been spilled in the vicinity of trickling filters T1 and T2. Aroclor-1248 (PCB) was detected in prior sampling of MW2 (W132), which is near the tanks. Soil sample S5 was collected by E & E-FIT near a prior soil boring which had revealed contamination.

E & E-FIT collected a total of four soil samples from the Systech site and one background soil sample (S1) for target compound analysis. On-site soil sample S2 was contaminated with fluoranthene (3,100 ppb), pyrene (2,400 ppb), chrysene (1,900 ppb), benzo(b) fluoranthene (2,700 ppb), benzo(a)pyrene (2,000 ppb), and nickel (20 ppm).

Soil sample S3 was contaminated with butylbenzylphthalate (1,800 ppb), di-n-octylphthalate (7,400 ppb), trichloroethene (120 ppb), tetrachloroethene (150 ppb), and chromium (144 ppm). Soil sample S5 was contaminated with 1,1,1-trichloroethane (17 ppb), butylbenzylphthalate (1,700 ppb), di-n-octylphthalate (1,700 ppb), isophorone (6,900 ppb), chromium (151 ppm), copper (230 ppm), and mercury 2.8 ppm).

E & E-FIT also collected groundwater samples for target compound analysis. The four on-site monitoring wells were sampled and one

residential well sample was taken to serve as a background because all on-site wells have shown contamination in prior sampling. Sample MW1 (W133) was contaminated with 1,2-dichloropropane (15 ppb). Sample MW3 (W140) was contaminated with vinyl chloride (29 ppb), chloroethane (39 ppb), 1,1-dichloroethane (45 ppb), 1,1,1-trichloroethane (15 ppb), 1,2-dichloropropane (190 ppb), and arsenic (27 ppb). Sample MW4 (W139) was contaminated with ethylbenzene (2,700 ppb), total xylenes (9,400 ppb), 4-methylphenol (12 ppb), napthalene (18 ppb), and arsenic (66 ppb).

The sample analysis performed on soil and groundwater samples collected by E & E-FIT at the Systech site represents a documented release to groundwater of 1,1,1-trichloroethane. This compound was detected in both soil and groundwater samples. In addition, extremely high concentrations of other solvents (xylenes, ethylbenzene, trichloroethene, tetrachloroethene) in groundwater samples indicate there was a release of solvents from the solvent recovery facility which operated at the site.

The site inspection work plan for Systech Liquid Treatment Corp. was followed throughout the site inspection.

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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
OH	D030935852

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Systech Liquid Treatment Corp.	Baxter Rd. & State Hwy 73

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST.
Franklin	OH	45005	Warren	165	06

09 COORDINATES: LATITUDE 39°32'58"N; LONGITUDE 084°18'58"W

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 5/12/87 (MONTH DAY YEAR)

02 SITE STATUS: ☐ ACTIVE ■ INACTIVE

03 YEARS OF OPERATION: 1974 (BEGINNING YEAR) 1978 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ■ B. EPA CONTRACTOR Ecology & Environment (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
Thomas Sullivan	Geologist	Ecology & Environment	(312)663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO
Joe Corns	Engineer	"	( ) "
Kristian Webb	Geologist	"	( ) "
Craig Almanza	Environmental Technician	"	( ) "
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Steven Zimmer (Systech Corp.)	Vice-President	245 N. Valley Rd, Xenia, OH 45385	(513)372-8077
Thomas Wittman (Systech Corp.)	President	" "	( ) "
James Rozelle (Miami Conserv. Dist.)	General Manager	38 E. Monument, Dayton, OH 45402	(513)223-1271
Paul Plummer (Miami Conserv. Dist.)	Engineer	" "	( ) "
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	10:30 AM 5/12 8:30 AM 5/13	70°s, partly cloudy to cloudy, slight wind. 70°s, sunny, slight wind.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Dr. Don Josif	U.S. EPA	(312)886-0393

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Thomas Sullivan	U.S. EPA	Ecology & Environment	(312) 663-9415	9/8/87 (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
OH	D030935852

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~~ gallons 31,387,000

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	324,000	gallons	*These are quantities of
SOL	SOLVENTS	694,000	gallons	wastes treated, not waste
PSD	PESTICIDES			at site. During site
OCC	OTHER ORGANIC CHEMICALS	22,480,000	gallons	inspection there were
IOC	INORGANIC CHEMICALS			no visibly observable
ACD	ACIDS	7,063,000	gallons	wastes present. Contam-
BAS	BASES	544,000	gallons	ination of samples indicates
MES	HEAVY METALS	282,000	gallons	some waste may be present
				in soils and groundwater.

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
SOL	1,1,1-trichloroethane	25323-891	Found in sample S5	17	ppb
SOL	1,1,1-trichloroethane	25323-891	Found in sample MW3	15	ppb
SOL	trichloroethane	79-016	Found in sample S3	120	ppb
SOL	tetrachloroethene	127-184	Found in sample S3	150	ppb
SOL	xylenes	1330-207	Found in sample MW4	9,400	ppb
SOL	ethylbenzene	100-414	Found in sample MW4	2,700	ppb
SOL	chloroethane	75-003	Found in sample MW3	39	ppb
SOL	1,1-dichloroethane	75-343	Found in sample MW3	45	ppb
SOL	1,2-dichloropropane	26638-197	Found in sample MW3	190	ppb
OCC	isophorone	78-591	Found in sample S5	6,900	ppb
OCC	vinyl chloride	9003-229	Found in sample MW3	29	ppb
MES	mercury	7439-976	Found in sample S5	2.8	ppm
OLW	fluoranthene	206-440	Found in sample S2	3,100	ppb
OLW	pyrene	129-000	Found in sample S2	2,400	ppb
OLW	chrysene	218-019	Found in sample S2	1,900	ppb
OLW	benzo(b)fluoranthene	205-992	Found in sample S2	2,700	ppb

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Sodium Hydroxide	1310-732	FDS		
FDS	Pebble lime	–	FDS		
FDS			FDS		
FDS			FDS		

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

Site Inspection by Ecology & Environment, Inc., 5/12-13/87.
Sample analysis.
Letter from Tricil Environmental Services, 8/25/87.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ■ OBSERVED (DATE: 5/13/87) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Est. 15,500 — 04 NARRATIVE DESCRIPTION
Groundwater samples from on-site monitoring wells show contamination of the aquifer. (See Part 2, sec. IV; and sample analysis). The population potentially affected includes an estimated 5,000 not served by the City of Franklin System and the 10,500 served by the Franklin system. However, it should be (continued under sec. G below)

01 ■ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
There is potential for surface water contamination in Clear Creek and the Great Miami River from groundwater discharge or surface runoff. Surface water is not used for drinking water in the area.

01 ■ C. CONTAMINATION OF AIR — 02 ■ OBSERVED (DATE: 8/78) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
Currently the site is inactive and therefore no population is potentially affected by air contamination. In 1978 there were complaints regarding foul odors coming from the site. OEPA Air Pollution Control investigated. See Part II-Enforcement Information for details.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
No fire/explosive conditions were observed at the site. The City of Franklin Fire Dept. does not consider the site to be a fire/explosive threat.

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
The site is fenced and locked, there is no potential for population to come into contact with hazardous materials.

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: 5/12/87) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 2 (Acres) — 04 NARRATIVE DESCRIPTION
Soil samples show contamination on the site. Contaminants detected include solvents, heavy metals, and other organic compounds. (See Part 2, sec. IV and sample analysis).

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Est. 15,500 — 04 NARRATIVE DESCRIPTION (continued from sec. A above)
noted that groundwater flow is away from the City of Franklin wells and contamination of these wells is unlikely. The potential for drinking water contamination is primarily for private residential wells downgradient of the site.

01 ■ H. WORKER EXPOSURE/INJURY — 02 ■ OBSERVED (DATE: 8/23/75) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
Currently there are no workers at the site so the potential for worker exposure does not exist. During site operations two workers died while cleaning a tank containing cyanide sludges (8/23/75).

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Est. 15,500 — 04 NARRATIVE DESCRIPTION
There is potential for population exposure to contaminants via groundwater used for drinking. This potential is primarily for the estimated 5,000 people not served by the City of Franklin system. (See sections A and G above).

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
There was no damage to flora observed during site inspection but the potential exists from contaminated surface runoff.

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
There was no damage to fauna observed during site inspection but the potential exists in Clear Creek from groundwater discharge and surface runoff.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
There is no known contamination of the food chain and the potential for contamination is unlikely.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ■ OBSERVED (DATE: 5/12-13/87) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,500 — 04 NARRATIVE DESCRIPTION
Groundwater and soils at the site are contaminated with wastes handled by Systech indicating that there has been unstable containment.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
There is no damage to offsite property and the potential for damage does not exist.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
There is no known contamination of the sewage treatment plant operated by the Miami Conservancy District. The potential for contamination of the plant, or of sewers and storm drains, does not exist.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
There is no evidence of illegal/unauthorized dumping at the site. The site is fenced and locked, the potential for dumping does not exist.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
No other known, potential, or alleged hazards exist.

III. TOTAL POPULATION POTENTIALLY AFFECTED: Est. 15,500

IV. COMMENTS
The potential for population exposure is primarily for the estimated 5,000 people served by private residential wells.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
Site Inspection by Ecology & Environment, Inc. on 5/12-13/87.
Sample Analysis. House count on U.S.G.S. Franklin, OH quadrangle.
Telephone conversation with the Franklin Fire Dept.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D030935852

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
■ J. NONE	No permits currently held. No permits were required during operation.			

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
■ A. SURFACE IMPOUNDMENT	Unknown	
☐ B. PILES		
■ C. DRUMS, ABOVE GROUND	Unknown	
■ D. TANK, ABOVE GROUND	Unknown	
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ 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

1 building remains on-site.

06 AREA OF SITE

Approx. 2.0 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

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

No drums, dikes, liners, or barriers are present. Containment of wastes was inadequate and poor as can be seen by high levels of contaminants in soil and groundwater samples.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☐ YES ■ NO

02 COMMENTS

Site is fenced and locked, contaminants are not easily accessible.

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

Site Inspection by Ecology & Environment, Inc., 5/12-13/87.
Sample Analysis.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D030935852

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
COMMUNITY	A. ☐	B. ☐	C. ■
NON-COMMUNITY	D. ■	E. ☐	F. ☐

03 DISTANCE TO SITE

A. ≈ 1/2 (mi)
B. ≈ 1 (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 15,500

03 DISTANCE TO NEAREST DRINKING WATER WELL ≈ 1/2 (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
≈ 15 (ft)	North-Northwest	≈ 15 (ft)	1600-1800 gpm (gpd) *	☐ YES ■ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

The City of Franklin has wells as close as approx. 1/2 mi. to site, however, based on the hydrogeology of the area it does not appear possible for contaminants to reach these wells from the site. These wells are between 75'-110' deep. There are also residential wells to the west and southwest. * From City of Franklin wells.

10 RECHARGE AREA: ■ YES ☐ NO
COMMENTS: The groundwater may be recharged by precipitation at the site.

11 DISCHARGE AREA: ☐ YES ■ NO
COMMENTS: There is no groundwater discharge within the site boundaries.

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
Clear Creek	☐	< 150 ft. ~~(mi)~~
Great Miami River	☐	0.56 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN (Estimated)

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 2,600 NO OF PERSONS	B. 14,500 NO OF PERSONS	C. 28,000 NO OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0.25 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: ≈ 3,400

04 DISTANCE TO NEAREST OFF-SITE BUILDING: ≈ 450 ft. ~~(mi)~~

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is in a moderately populated rural to semi-urban area. There are moderately to heavily populated areas within 1/2 mile of site.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

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

Poorly sorted alluvial deposits (sand, silt, clay, gravels). Variable permeability.

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)

Ordovician limestones and shales.

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
≈32 (ft)	Unknown (ft)	6.6-7.3

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
+6 (in)	2.5 (in)	≤3 %	Site is level, has little slope.	≤3 %

09 FLOOD POTENTIAL: SITE IS IN Unknown YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum): No 5 acre wetlands near site.
ESTUARINE A. — (mi) OTHER B. — (mi)

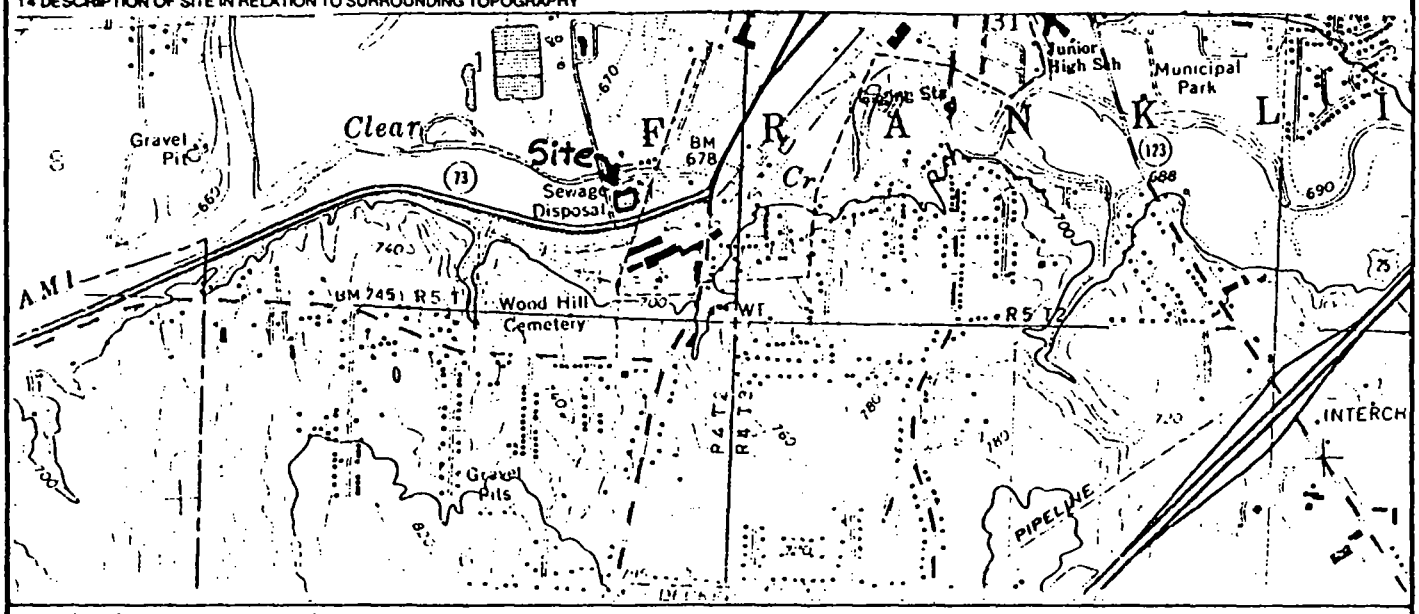
12 DISTANCE TO CRITICAL HABITAT (of endangered species): — (mi)
No critical habitats near site.
ENDANGERED SPECIES

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 0.25 (mi)	B. 0.25 (mi)	C. >1 (mi)	D. >1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



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

Telephone conversation with City of Franklin Water Dept, 2/18/87. On-site well logs provided by Miami Conservancy District. 1980 OHIO Census of Population, U.S. Dept. of Commerce. Glacial Map of OHIO, U.S.G.S. & ODNR, Map I-316, 1961. Geologic Map of OHIO, ODNR, 1981. Franklin Quadrangle, U.S.G.S. 7.5min series, 1974. Site Inspection by Ecology & Environment, Inc., 5/12-13/87. Soil Survey of Warren Co.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	5	Residential well: U.S. EPA Central Regional Lab. Monitoring wells: Org.: Clayton Environmental, Inorg.: Acculabs.	Now available.
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	Org.: Clayton Environmental. Inorg.: Acculabs	Now available.
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	0ppm Background and On-site.
Rad.-Mini	7 tones/min background, 9 tones/min. on-site.
Explosimeter	0% background and on-site.
O_2 meter	21.8% background and on-site.
Drager Tubes	(HCN) No colorimetric changes

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ☐ AERIAL

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

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS Ecology & Environment, Inc.

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

MONITORING WELL DATA

	Elevations: Top casing	water level	bottom well	Water in casing (ft)	well Diam.	water in casing (g)	water purged (g)
MW1	676.32	658.55	649.10	9.45	4"	6.13	≈90
MW2	676.20	661.25	652.60	8.65	4"	5.6	≈30
MW3	678.55	658.62	643.60	15.02	8"	39.0	≈180
MW4	672.65	658.82	644.70	14.12	4"	9.2	≈60

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

Site Inspection by Ecology & Environment, Inc., 5/12-13/87.
Miami Conservancy District files.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II. CURRENT OWNER(S) *

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
MIAMI CONSERVANCY DISTRICT		N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
38 E. MONUMENT			
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
DAYTON / OH	45402		
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE

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

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

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
City of Franklin		N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
35 E. Fourth St.			
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE
Franklin / OH	45005		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Unknown.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE

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

State files.
Site Inspection by Ecology & Environment, Inc., 5/12-13/87.

* See accompanying memo for further owner/operator information.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D030935852

II. CURRENT OPERATOR (Provide if different from owner) *

01 NAME	02 D+B NUMBER
No current operator.	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
N/A	

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) * (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
Systems Technology Corp.	

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

05 CITY	06 STATE	07 ZIP CODE
Xenia	OH	45385

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1974-1978	Systems Technology Corp., Thomas Wittman - President.

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER
No parent company	

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
during site operations	

14 CITY	15 STATE	16 ZIP CODE
(1974-78)		

01 NAME	02 D+B NUMBER
City of Franklin	

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

05 CITY	06 STATE	07 ZIP CODE
Franklin	OH	45005

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1930's-1972	City of Franklin, OH

10 NAME	11 D+B NUMBER
N/A	

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER
Unknown	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

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

Site Inspection by Ecology & Environment, Inc., 5/12-13/87.
State files.

* See accompanying site inspection memo for further owner/operator information.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
No on-site generator.	
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
No off-site generator.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
No transporter.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

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

Site Inspection by Ecology & Environment, Inc., 5/12-13/87.
State files.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II. PAST RESPONSE ACTIVITIES There have been no past response activities at this site.

	02 DATE	03 AGENCY
01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION N/A		
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION N/A		
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION N/A		
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION N/A		
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION N/A		
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION N/A		
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION N/A		
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION N/A		
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION N/A		
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION N/A		
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION N/A		
01 ☐ L. ENCAPSULATION 04 DESCRIPTION N/A		
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION N/A		
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION N/A		
01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION N/A		
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION N/A		
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION N/A		

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D030935852

II PAST RESPONSE ACTIVITIES (Continued) There have been no past response activities at this site.

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

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

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

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

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

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

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

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

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

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

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

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

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

State files.
Site Inspection by Ecology & Environment, Inc., 5/12-13/87.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D030935852

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ■ YES ☐ NO

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

The Warren Co. Health District made a complaint (8/9/78) regarding odors which were causing headaches, burning eyes, and upset stomachs in the southern part of the City of Franklin. The odors were alleged to be coming from the Systems Technology Corp. site (name was later changed to Systech Liquid Treatment Corp.).

The Ohio Environmental Protection Agency, Air Pollution Control Division, investigated the odor problem in August, 1978. The odor problem was found to be coming from the Systems Technology site. The problem was discussed with site operators and the source was allegedly removed. This odor problem resulted in the facility being shut down.

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

State files.
Site Inspection by Ecology & Environment, Inc., 5/12-13/87

EPA FORM 2070-13 (7-81)

Systech Liquid Treatment Corp. OHD030935852

Immediate Removal Action Check Sheet

	High	Moderate	Low
Fire and Explosion Hazard			
Flammable Materials None visibly present.			✓
Explosives None present.			—
Incompatable Chemicals None present			—
Direct Contact with Acutely Toxic Chemicals			
Site Security Fenced, locked.			✓
Leaking Drums or Tanks None present.			—
Open Lagoons or pits Open trickling filters, treatment tanks, and clarifier. Only contain some rainwater.			✓
Materials on Surface No waste present at surface			—
Proximity of Population ~~1/4 mile.~~			✓
Evidence of Casual Site Use None.			—
Contaminated Water Supply			
Exceeds 10 Day Snarl Unknown.			✓
Gross Taste or Odors None known of.			—
Alternate Water Available Unknown.			—
Potential Contamination Potential for residential wells only.			✓

Is the site abandoned or active?
Inactive site.

(— = No hazard.)

Comments

No visible waste is present at the site. There is known soil and groundwater contamination at the site.

3

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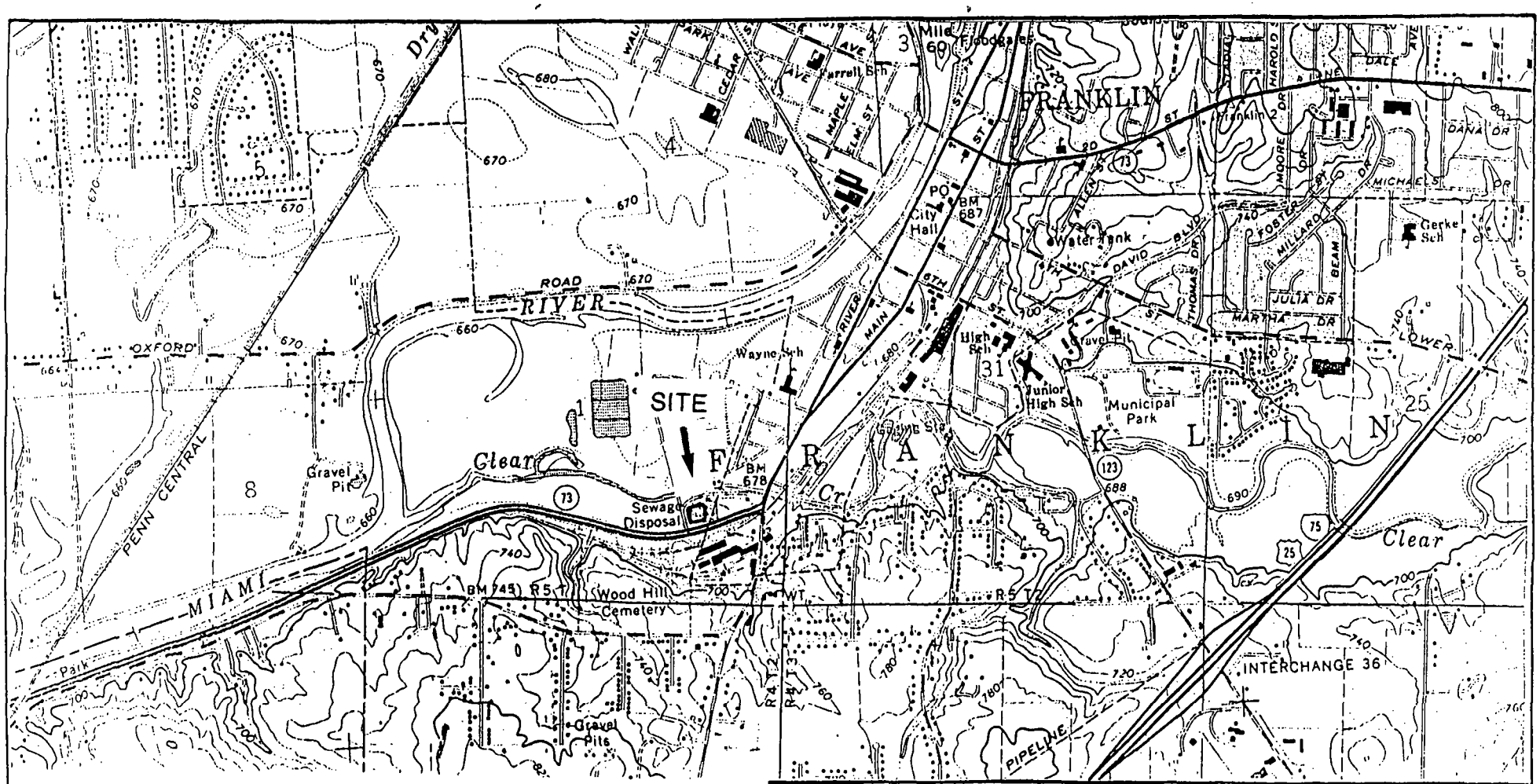
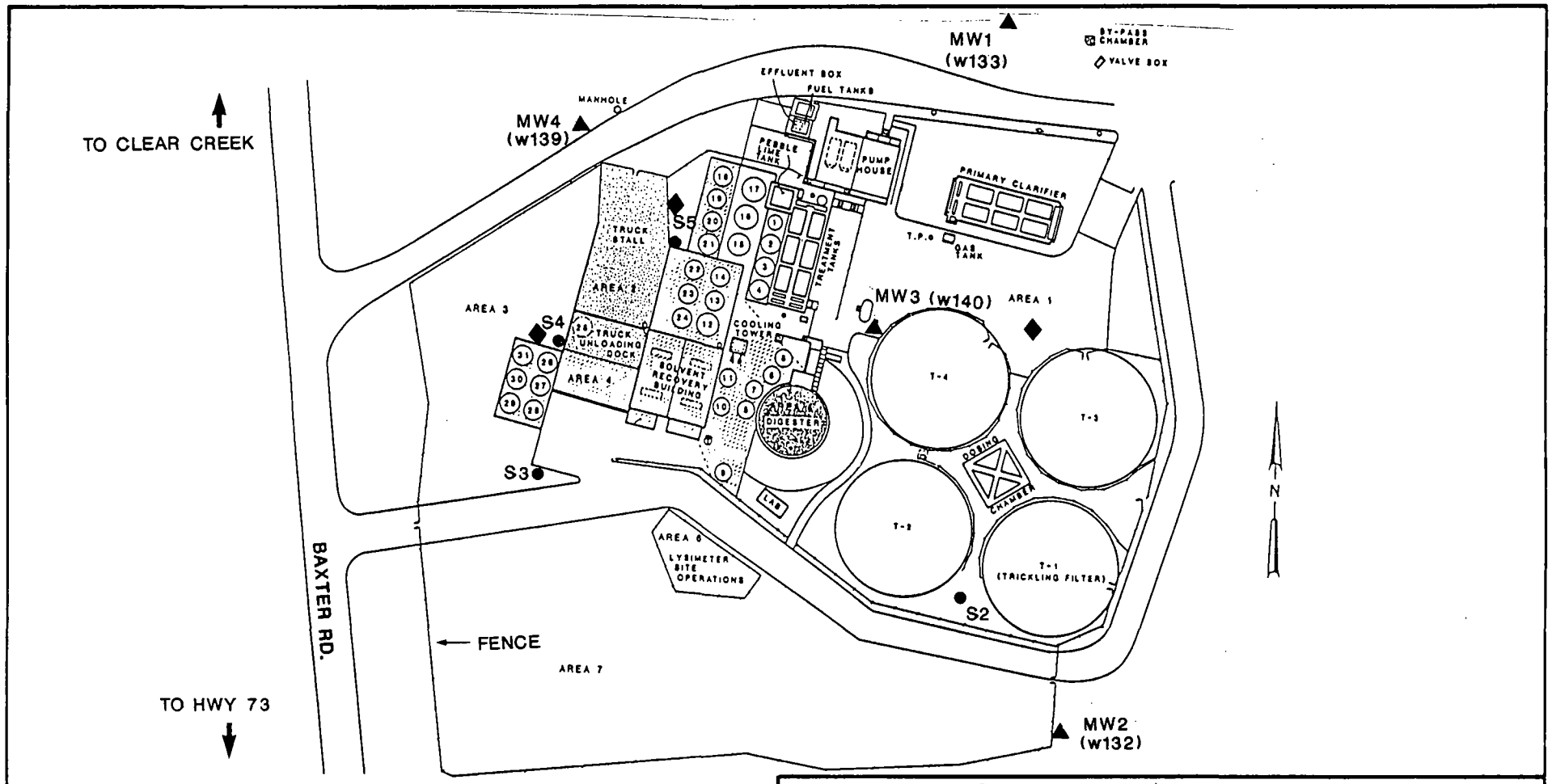


N

ecology and environment, inc.

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

TITLE: SITE LOCATION	FIGURE #: 1
SITE: SYSTECH LIQUID TREATMENT CORP.	SCALE: 1:24,000
CITY: FRANKLIN STATE: OH	P.A.N.: OH0574SI
SOURCE: U.S.G.S. FRANKLIN, OH QUADRANGLE	DATE: 1965 REVISED: 1974



● = SOIL SAMPLE LOCATION

▲ = MONITORING WELL LOCATION

◆ = LOCATION OF PRIOR SOIL BORING

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

TITLE: SITE MAP/SAMPLE LOCATION MAP	FIGURE #: 2
SITE: SYSTECH LIQUID TREATMENT CORP.	SCALE: 0 10 20 30 40 50 60
CITY: FRANKLIN STATE: OH	P.A.N.: OH0574SI
SOURCE: SITE INSPECTION, SOIL & MATERIALS ENGINEERS, INC. MAP	DATE: 5/87 REVISED: N/A

4

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FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 11:10 (A.M.) P.M.

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

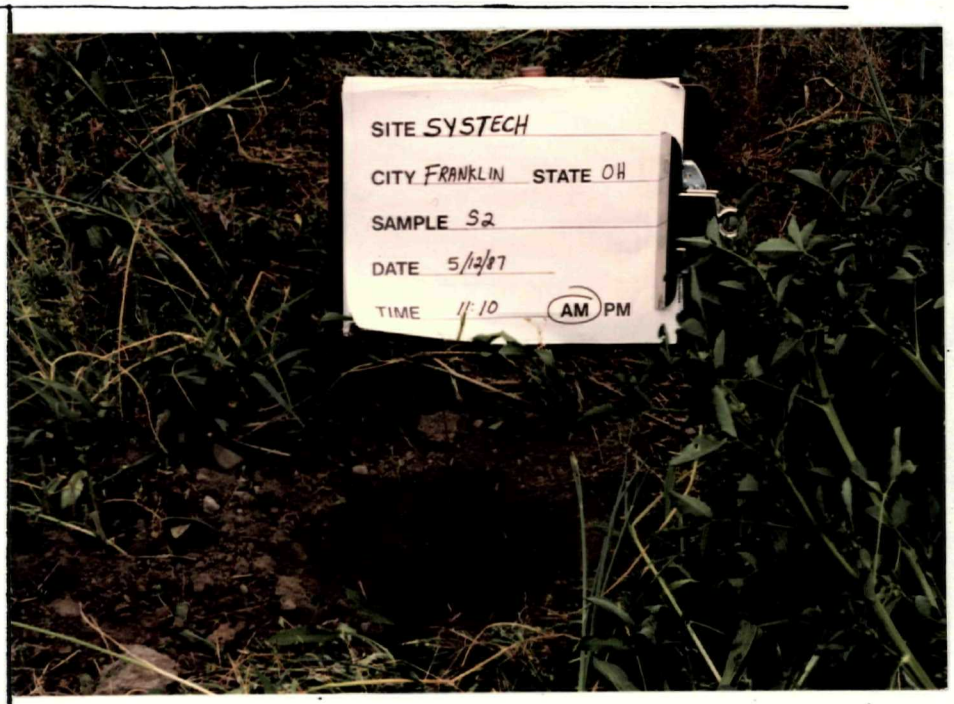
WEATHER 70°'s, partly cloudy, slight wind

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S2



DESCRIPTION: Close-up of S2 Sample location.

DATE 5/12/87

TIME 11:10 (A.M.) P.M.

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

WEATHER 70°'s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S2

DESCRIPTION: S2 Sample location in front of trickling filters.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 11:38 (A.M.) P.M.

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

WEATHER 70°'s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Southern side of site, labeled "Area 7" on map.

DATE 5/12/87

TIME 11:39 (A.M.) P.M.

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

WEATHER 70°'s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Southwestern side of site, labeled "Area 7" on map.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 11:47 (A.M.) P.M.

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

WEATHER 70°'s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Dosing chamber in center of trickling filters.

DATE 5/12/87

TIME 11:48 (A.M.) P.M.

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

WEATHER 70°'s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Only building on-site, old pump house.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 11:49 (A.M.) P.M.

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S3

DESCRIPTION: Close-up of S3 sample location.

DATE 5/12/87

TIME 11:50 (A.M.) P.M.

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S3

DESCRIPTION: S3 sample location next to concrete. Near former drum storage area.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 12:07 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) –

DESCRIPTION: Area where 6 tanks were (labeled 12, 13, 14, 22, 23, 24 on map). Alleged spill, from file information, occurred here.

DATE 5/12/87

TIME 12:20 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S4

DESCRIPTION: Close-up of S4 sample location.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 12:20 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S4

DESCRIPTION: S4 sample location. Near former drum storage area and sludge drying area.

DATE 5/12/87

TIME 12:31 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Six treatment tanks in front of pump house. (Filled with rainwater?).

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 12:33 A.M. (P.M.)

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

WEATHER 70°'s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Trickling filter T4, dosing chamber in background.

DATE 5/12/87

TIME 12:40 A.M. (P.M.)

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

WEATHER 70°'s, slight wind, partly cloudy.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Clarifier (just east of pumphouse).

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 12:45 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S5

DESCRIPTION: Close-up of S5 sample location.

DATE 5/12/87

TIME 12:48 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S5

DESCRIPTION: S5 sample location, pumphouse in background.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 1:30 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S1-Background

DESCRIPTION: Close-up of S1 Background sample location.

DATE 5/12/87

TIME 1:30 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S1-Background

DESCRIPTION: S1-Background sample location.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/12/87

TIME 1:40 A.M. (P.M.)

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

WEATHER 70°s, partly cloudy, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) S1-Background

DESCRIPTION: S1-Background sample location is behind treeline. This field is old ballfield off of Hwy 73.

DATE 5/13/87

TIME 9:15 (A.M.) P.M.

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

WEATHER 70°s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: MW1 (well W133) being purged.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/13/87

TIME 9:35 (A.M.) P.M.

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW1

DESCRIPTION: MW1 (well W133) sample location.

DATE 5/13/87

TIME 9:35 (A.M.) P.M.

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW1

DESCRIPTION: MW1 (well W133) location and surroundings.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/13/87

TIME 10:25 (A.M.) P.M.

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

WEATHER 70°s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW2

DESCRIPTION: MW2 (well W132) sample came from this well.

DATE 5/13/87

TIME 10:25 (A.M.) P.M.

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

WEATHER 70°s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW2

DESCRIPTION: MW2 (well W132) location and surroundings. Dedicated steel hand pump used to purge well also shown.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/13/87

TIME 11:26 (A.M.) P.M.

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW3

DESCRIPTION: MW3 (W140) sample came from this well.

DATE 5/13/87

TIME 11:26 (A.M.) P.M.

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW3

DESCRIPTION: MW3 (W140) location and surroundings.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/13/87

TIME 12:05 A.M. (P.M.)

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

WEATHER 70°s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) —

DESCRIPTION: Locked gate to site, chain link fence with barbed wire.

DATE 5/13/87

TIME 12:27 A.M. (P.M.)

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

WEATHER 70°s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW4

DESCRIPTION: MW4 (well W139) sample came from this well.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/13/87

TIME 12:27 A.M. P.M.

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) MW4

DESCRIPTION: MW4 (well w139) location and surroundings.

DATE 5/13/87

TIME 1:32 A.M. P.M.

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) RW1

DESCRIPTION: RW1 sample was taken from this faucet in backyard.

FIELD PHOTOGRAPHY LOG SHEET

DATE 5/13/87

TIME 1:38 A.M. (P.M.)

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

WEATHER 70°'s, sunny, slight wind.

SITE Systech

TDD# F05-8704-033

PHOTOGRAPHED BY: Tom Sullivan

SAMPLE ID# (if applicable) RW1

DESCRIPTION: RW1 sample was taken from this residence. This photograph shows front of house which is located just off of Hwy 73.

DATE

TIME A.M. P.M.

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

WEATHER

SITE

TDD#

PHOTOGRAPHED BY:

SAMPLE ID# (if applicable)

PHOTO

DESCRIPTION:

A SUMMARY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLLOWING 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

SOIL SAMPLES

ITC	MEM274	MEM 275	MEM 276	MEM 277	MEM 278						
OTC	EL684	EL685	EL686	EL687	EL688						
SAMPLE	S1 Backgrd	S2	S3	S4	S5						
COMPOUND											
chloromethane											
bromomethane											
vinyl chloride											
chloroethane											
methylene chloride											
acetone											
carbon disulfide											
1,1-dichloroethene											
1,1-dichloroethane											
trans-1,2,-dichloroethene											
chloroform											
1,2-dichloroethane											
2-butanone											
1,1,1-trichloroethane					17ppb						
carbon tetrachloride											
vinyl acetate											
bromodichloromethane											
1,1,2,2-tetrachloroethane											
1,2-dichloropropane											
trans-1,3-dichloropropene											
trichloroethene			120ppb								
dibromochloromethane											
1,1,2-trichloroethane											
benzene											
cis-1,3-dichloropropene											
2-chloroethylvinylether											
bromoform											
2-hexanone											
4-methyl-2-pentanone											
tetrachloroethene			150ppb								
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					6,900ppb						
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											
fluorene											
4-nitroaniline											
4,6-dinitro-2-methylphenol											
N-nitrosodiphenylamine											
4-bromophenyl-phenylether											
hexachlorobenzene											

STATE OHIO SITE Systech Liquid Treatment Corp. TDD F05-8704-033 PAGE 1 OF 2, SET # 1

SOIL SAMPLES

ITC	MEM 274	MEM 275	MEM 276	MEM 277	MEM 278						
OTC	EL684	EL685	EL686	EL687	EL688						
SAMPLE	S1 Backgrd.	S2	S3	S4	S5						
COMPOUND											
pentachlorophenol											
phenanthrene											
anthracene											
di-n-butylphthalate											
fluoranthene		3100ppb									
benzidine											
pyrene		2,400ppb									
butylbenzylphthalate			1,800ppb		1,700ppb						
3,3'-dichlorobenzidine											
benzo(a)anthracene											
bis(2-ethylhexyl)phthalate											
chrysene		1,900 ppb									
di-n-octylphthalate			7,400 ppb		1,700ppb						
benzo(b&k)fluoranthene		2,700ppb									
benzo(a)pyrene		2,000ppb									
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											
chlordane											
toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
ELEMENT											
aluminum											
antimony											
arsenic											
barium											
beryllium											
cadmium											
calcium											
chromium	12 ppm	28ppm	144 ppm	39ppm	151ppm						
cobalt											
copper	16ppm	50ppm	96ppm	32ppm	230ppm						
iron											
lead											
magnesium											
manganese											
mercury	0.2ppm	0.2ppm	0.3ppm		2.8ppm						
nickel		20ppm	97ppm								
potassium											
selenium											
silver											
sodium											
thallium											
tin											
vanadium											
zinc											
cyanide CHECK IF ANALYZED (✓)											
TENTATIVELY IDENTIFIED ORGANICS											

STATE OHIO SITE Systech Liquid Treatment Corp. TDD F05-8704-033 PAGE 2 OF 2, SET # 1

GROUNDWATER SAMPLES

	ITC	MEM 279	MEM 280	MEM 281	MEM 282	MEM 283	MEM 284	87FS06S12	87FS06R02			
	OTC	EL 689	EL690	EL691	EL692	EL693	EL694					
	SAMPLE	MW1	MW2	MW3	MW4	Blank	Duplicate	RW1 Backgrd.	Blank			
COMPOUND												
chloromethane												1
bromomethane												
vinyl chloride				29 ppb								
chloroethane				39 ppb								
methylene chloride												
acetone												
carbon disulfide												
1,1-dichloroethene												
1,1-dichloroethane				45 ppb								
trans-1,2,-dichloroethene												
chloroform												
1,2-dichloroethane												
2-butanone												
1,1,1-trichloroethane				15 ppb								
carbon tetrachloride												
vinyl acetate												
bromodichloromethane												
1,1,2,2-tetrachloroethane												
1,2-dichloropropane	15 ppb			190 ppb								
trans-1,3-dichloropropene												
trichloroethene												
dibromochloromethane												
1,1,2-trichloroethane												
benzene												
cis-1,3-dichloropropene												
2-chloroethylvinylether												
bromoform												
2-hexanone												
4-methyl-2-pentanone												
tetrachloroethene												
toluene												
chlorobenzene												
ethylbenzene					2,700 ppb							
styrene												
total xylenes					9,400 ppb							
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					12 ppb							
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					18 ppb							
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												
fluorene												
4-nitroaniline												
4,6-dinitro-2-methylphenol												
N-nitrosodiphenylamine												
4-bromophenyl-phenylether												
hexachlorobenzene												

STATE OHIO SITE Systech Liquid Treatment Corp. TDD FOS-8704-033 PAGE 1 OF 2, SET # 2

GROUNDWATER SAMPLES

	ITC	MEM 279	MEM 280	MEM 281	MEM 282	MEM 283	MEM 284	87FS06SI2	87FS06SI02		
	OTC	EL689	EL690	EL691	EL692	EL693	EL694				
	SAMPLE	MW1	MW2	MW3	MW 4	Blank	Dup-licate	RW1 Backgrd.	Blank		
COMPOUND											
pentachlorophenol											
phenanthrene											
anthracene											
di-n-butylphthalate											
fluoranthene											
benzidine											
pyrene											
butylbenzylphthalate											
3,3'-dichlorobenzidine											
benzo(a)anthracene											
bis(2-ethylhexyl)phthalate											
chrysene											
di-n-octylphthalate											
benzo(bák)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											
chlordane											
toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
ELEMENT											
aluminum											
antimony											
arsenic				27ppb	66ppb						
barium								97.6ppb			
beryllium											
cadmium											
calcium											
chromium											
cobalt											
copper								17.8ppb			
iron								132ppb			
lead											
magnesium											
manganese											
mercury											
nickel											
potassium											
selenium											
silver											
sodium											
thallium											
tin											
vanadium											
zinc								1480ppb			
cyanide CHECK IF ANALYZED (√)											
TENTATIVELY IDENTIFIED ORGANICS											

STATE OHIO SITE Systech Liquid Treatment Corp. TDD F05-8704-033 PAGE 2 OF 2, SET # 2

RECEIVED JUL 07 1987

ecology and environment, inc.

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

International Specialists in the Environment

Date Received for Review 7/7 Date Review Completed 7/8

To: Tom Sullivan

From: Zena Gold-Kaufman ZGK

Subject: Systech Liquid Treatment

PAN: OH 0574 Case # 72265

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	# 5	Low Soil
	Low Water	6	Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status ✓✓ Completed!!

Incomplete, awaiting: ~~2 inorg drinking waters~~

FIT Data Review Findings:

Estimated data - soil - Sb, Pb plasma, Tin. ~~Tin~~ Antimony is usable for HRS purposes

Estimated data - water - Tl, Sn, Cu, Fe

Unusable data - water - Cr, Co, ~~Cu~~, ~~Fe~~, ~~Tl~~, ~~S~~

✓ Compounds were detected in sample(s); see enclosed Chemical Evaluation Form.

Book No. 6 Page No. 104

sampled 5/13

ecology and environment, inc.
CHICAGO, ILLINOIS

CHEMICAL EVALUATION FORM

SITE NAME: Systech Liquid PAN# OH0574 DATE: 7/8

CASE # 7265 UNITS- mg/Kg REVIEWER: ZGK

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	MEM 274	MEM 275	MEM 276	MEM 277	MEM 278	~~MEM 281~~	~~MEM 282~~
	Chromium	3	9-15	12	28	144	39	151		
	Copper	3	9-15	16	50	96	32	230		
	Lead	5	15-25	35						
	Mercury	.2	.6-1.0	0.2	0.2	0.3		2.8		
	Arsenic	10	30-50		8.3	6.1		7.7	~~27~~ 30	~~66~~
	Cyanide	.26	.78-1.05		0.42	10	0.70			
	Nickel	11	33-55		20	97				
	Cadmium	4	12-20			4.6		10		
	Tin	40	120-200				~~24~~	24		
		ug/l		MEM 281	MEM 282					
	Arsenic	10	30-50	27	66					

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

MEMORANDUM

DATE: July 8, 1987
TO: File
FROM: Zena Gold-Kaufman
SUBJECT: Systech Liquid Treatment
PAN# OH0574

The reviewer for the 5 low soil inorganic data results correctly notes that the spike recovery for antimony is biased low, and qualifies the data with a J (estimated). For the 6 low water samples the spike recoveries for thallium and tin are all biased low and that data is also qualified with a J (estimated). he data is usable for HRS purposes in that the consequences are that the values may underestimate the actual concentration.

92F:6X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7-2-87

SUBJECT: Review of Region V CLP Data
Received for Review on 6/17/87

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thacker

TO: Data User: Fit

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

SITE NAME: Septick Liquid Treatment SMO case No. 7265

EPA Data Set No. 5F4023 No. of Samples: 11 D.U./Activity Numbers 4405/172100

CRL No. 87F50750Z - 87F50700Z

SMO Traffic No. MEM274 - MEM284

CLP Laboratory: Accutabs Hrs. Required for Review: 3

Following are our findings: This review covers 5 low soil samples and 6 low water samples analyzed for metals and cyanide.
For soil samples. Spike recoveries for Sb(52%) Pb$_p$(393%), Sn(142%) are shown above. Detection limit for Sb could be elevated. All Sb data are estimate All Sn, Pb$_p$ data are estimated.
For water samples Field blank showed contamination for Fe. All data lower than 5x140ug/l are estimated. Spike recoveries for Cr(112%), Co(14%), Cu(1 Fe(10%), Tl(62%), Sn(64%) are shown above. All Cr, Co data are unuseable. Detection limits for Tl, Sn could be elevated. All Tl, Sn data ar estimated(UJ) all Cu, Fe data are estimate All other QC audits are acceptable.

Ida Lisi
7.2.87

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

cc: Duane Geuder, Quality Assurance Officer, EPA Support Services
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

EPA FORM 1320-6 (Rev. 5/87)

Case Narrative
Case 7265
QC 141+142

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The analysis of Na, Mg, Ca, K, Al and Ba by flame AA require additions of LaCs or KCl for suppression of ionization. For this reason, the resulting sample has a 1.1 dilution factor following the addition. The reportable detection limit is the IDL multiplied by 1.1. These levels are still below the CRDL.

141+142-7265-5-0003

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COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name Accu-Labs Research Case No. 7265

SOW No. 784 Q.C. Report No. 141 + 142

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MEM-274	141-7265-5-1	MEM 283	142-7265-6-5
MEM 275	141-7265-5-2	MEM 284	142-7265-6-6
MEM 276	141-7265-5-3		
MEM 277	141-7265-5-4		
MEM 278	141-7265-5-5		
MEM 279	142-7265-6-1		
MEM 280	142-7265-6-2		
MEM 281	142-7265-6-3		
MEM 282	142-7265-6-4		

Comments: Background corrections used during analysis of all elements at wavelengths less than 350nm.

ICP Interelement and background corrections applied? Yes ____ No ____.

If yes, corrections applied before _____ or after _____ generation of raw data.

Footnotes:

NR - not required by contract at this time

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP/Flame AA) or F (for furnace).

U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

s - Indicates value determined by Method of Standard Addition.

R - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

Form I

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EPA Sample No. MEM 274

Date 6/12/87

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INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 141-7265-5-1 QC REPORT NO. 141

Elements Identified and Measured

Concentration: Low X Medium 0

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	8140 P	13.	Magnesium	19300 P
2.	Antimony	36 UF 'R' UJ	14.	Manganese	589 P
3.	Arsenic	6.0 UF	15.	Mercury	~~0.15~~ 0.2
4.	Barium	65 UP	16.	Nickel	[16] P
5.	Beryllium	1.2 UP	17.	Potassium	[1240] P
6.	Cadmium	2.4 UP	18.	Selenium	3.0 UF
7.	Calcium	64900 P	19.	Silver	2.4 UP
8.	Chromium	12 P	20.	Sodium	[118] P
9.	Cobalt	18 UP	21.	Thallium	6.0 UF
10.	Copper	16 P	22.	Tin	24 UF 'R' UJ
11.	Iron	14200 P	23.	Vanadium	30 UF
12.	Lead	35 F	24.	Zinc	71 P
Cyanide		0.30 U	Percent Solids (%)		84

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:

Lab Manager Cathy Shugarts

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EPA Sample No. MEM 275

Date 6/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 141-7265-5-2 QC REPORT NO. 141 + 142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	8660 P	13.	Magnesium	12800 P
2.	Antimony	32 UF 'R' UJ	14.	Manganese	601 P
3.	Arsenic	8.3 F	15.	Mercury	~~0.17~~ 0.2
4.	Barium	113 P	16.	Nickel	20 P
5.	Beryllium	1.1 UP	17.	Potassium	[1240] P
6.	Cadmium	2.1 UP	18.	Selenium	2.7 UF
7.	Calcium	34900 P	19.	Silver	2.1 UP
8.	Chromium	28 P	20.	Sodium	[113] P
9.	Cobalt	16 UP	21.	Thallium	5.3 UF
10.	Copper	50 P	22.	Tin	21 UF 'R' UJ
11.	Iron	17500 P	23.	Vanadium	27 UF
12.	Lead	183 P 'R' UJ	24.	Zinc	151 P
Cyanide		0.42	Percent Solids (%)		94

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:

Lab Manager Cathy Pugarto

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EPA Sample No. MEM 276

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 141-7265-5-3 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	6790 P	13.	Magnesium	32000 P
2.	Antimony	31 UF 'R' UJ	14.	Manganese	436 P
3.	Arsenic	6.0 F	15.	Mercury	0.3
4.	Barium	[57] P	16.	Nickel	97 P
5.	Beryllium	1.0 UP	17.	Potassium	[840] P
6.	Cadmium	4.6 P	18.	Selenium	2.6 UF
7.	Calcium	112000 P	19.	Silver	2.1 UP
8.	Chromium	144 P	20.	Sodium	[168] P
9.	Cobalt	15 UP	21.	Thallium	5.2 UF
10.	Copper	96 P	22.	Tin	21 UF 'R' J
11.	Iron	14200 P	23.	Vanadium	26 UF
12.	Lead	558 P 'R' J	24.	Zinc	6940 P
Cyanide		10	Percent Solids (%)		97

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: ____

Lab Manager Cathy Shugart

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EPA Sample No. MEM 277

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 141-7265-5-4 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	2480 P	13.	Magnesium	42400 P
2.	Antimony	31 UF 'R' UJ	14.	Manganese	558 P
3.	Arsenic	5.1 UF	15.	Mercury	0.1
4.	Barium	56 UP	16.	Nickel	10 UP
5.	Beryllium	1.0 UP	17.	Potassium	[594] P
6.	Cadmium	2.0 UP	18.	Selenium	2.6 UF
7.	Calcium	243000 P	19.	Silver	2.0 UP
8.	Chromium	39 P	20.	Sodium	[216] P
9.	Cobalt	15 UP	21.	Thallium	5.1 UF
10.	Copper	32 P	22.	Tin	20 UF 'R' J
11.	Iron	9220 P	23.	Vanadium	26 UF
12.	Lead	194 P 'R' J	24.	Zinc	218 P
Cyanide		0.70	Percent Solids (%)		98

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: ____

Lab Manager Cathy Hugatz

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EPA Sample No. MEM 278

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 141-7265-5-5 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	5790 P	13.	Magnesium	21800 P
2.	Antimony	32 UF 'R' UJ	14.	Manganese	362 P
3.	Arsenic	7.7 F	15.	Mercury	2.8
4.	Barium	229 P	16.	Nickel	11 UP
5.	Beryllium	1.0 UP	17.	Potassium	[630] P
6.	Cadmium	10 P	18.	Selenium	2.6 UF
7.	Calcium	74500 P	19.	Silver	2.1 UP
8.	Chromium	151 P	20.	Sodium	[115] P
9.	Cobalt	16 UP	21.	Thallium	5.3 UF
10.	Copper	230 P	22.	Tin	24 F 'R' 'S' J
11.	Iron	18800 P	23.	Vanadium	26 UF
12.	Lead	808 P 'R' J	24.	Zinc	1230 P
Cyanide		0.26 U	Percent Solids (%)		95

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:

Lab Manager Cathy Thugarts

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EPA Sample No. MEM 279

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 142-7265-6-1 QC REPORT NO. 141-142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	176 UP	13.	Magnesium	33700 P
2.	Antimony	60 UF	14.	Manganese	1280 P
3.	Arsenic	10 UF	15.	Mercury	0.2 U
4.	Barium	220 P	16.	Nickel	[20] P
5.	Beryllium	2 UP	17.	Potassium	5390 P
6.	Cadmium	4 UP	18.	Selenium	5 UF
7.	Calcium 132000	~~50600~~ P	19.	Silver	4 UP
8.	Chromium	3 UP 'R' R	20.	Sodium	77000 P
9.	Cobalt	30 UP 'R' R	21.	Thallium	10 UF 'R' UJ
10.	Copper	3 UP 'R' J	22.	Tin	40 UF 'R' UJ
11.	Iron	720 P 'R' J	23.	Vanadium	50 UF
12.	Lead	5 UF	24.	Zinc	23 P
	Cyanide	5 U		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:

Lab Manager Cathy Shugarts

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EPA Sample No. MEM 280

Date 6/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 142-7265-6-2 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	176 UP	13.	Magnesium	27300 P
2.	Antimony	60 UF	14.	Manganese	370 P
3.	Arsenic	10 UF	15.	Mercury	0.2 U
4.	Barium	[110] P	16.	Nickel	20 UP
5.	Beryllium	[2] P	17.	Potassium	[4180] P
6.	Cadmium	4 UP	18.	Selenium	5 UF
7.	Calcium	89100 P	19.	Silver	4 UP
8.	Chromium	3 UP 'R' R	20.	Sodium	51700 P
9.	Cobalt	30 UP 'R' R	21.	Thallium	10 UF 'R' UJ
10.	Copper	[8] P 'R' J	22.	Tin	40 UF 'R' UJ
11.	Iron	1610 P 'R' J	23.	Vanadium	50 UF
12.	Lead	5 UF	24.	Zinc	21 P
	Cyanide	5 U		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:

Lab Manager Cathy Shugarts

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EPA Sample No. MEM 281

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 142-7265-6-3 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	176 UP	13.	Magnesium	27500 P
2.	Antimony	60 UF	14.	Manganese	991 P
3.	Arsenic	27 F	15.	Mercury	0.2 U
4.	Barium	330 P	16.	Nickel	20 UP
5.	Beryllium	2 UP	17.	Potassium	[4180] P
6.	Cadmium	[4] P	18.	Selenium	5 UF
7.	Calcium	96800 P	19.	Silver	4 UP
8.	Chromium	3 UP 'R' R	20.	Sodium	72600 P
9.	Cobalt	30 UP 'R' R	21.	Thallium	10 UF 'R' UJ
10.	Copper	[5] P 'R' J	22.	Tin	40 UF 'R' UJ
11.	Iron	5600 P 'R' J	23.	Vanadium	50 UF
12.	Lead	5 UF	24.	Zinc	25 P
	Cyanide	5 U		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:

Lab Manager Cathy Shugarts

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EPA Sample No. MEM 282

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 142-7265-6-4 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	176 UP	13.	Magnesium	26500 P
2.	Antimony	60 UF	14.	Manganese	596 P
3.	Arsenic	(66) ~~69~~ F 'S'	15.	Mercury	0.2 U
4.	Barium	440 P	16.	Nickel	20 UP
5.	Beryllium	2 UP	17.	Potassium	5060 P
6.	Cadmium	4 UP	18.	Selenium	5 UF
7.	Calcium	121000 P	19.	Silver	4 UP
8.	Chromium	3 UP 'R' R	20.	Sodium	55000 P
9.	Cobalt	30 UP 'R' R	21.	Thallium	10 UF 'R' UJ
10.	Copper	[6] P 'R' J	22.	Tin	40 UF 'R' UJ
11.	Iron	14800 P 'R' J	23.	Vanadium	50 UF
12.	Lead	5 UF	24.	Zinc	50 P
	Cyanide	5 U		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:

Lab Manager Cathy Fougerte

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EPA Sample No. MEM 283

Date 6-12-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 142-7265-6-5 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	176 UP	13.	Magnesium	[187] P
2.	Antimony	60 UF	14.	Manganese	4 UP
3.	Arsenic	10 UF	15.	Mercury	0.2 U
4.	Barium	110 UP	16.	Nickel	20 UP
5.	Beryllium	2 UP	17.	Potassium	[110] P
6.	Cadmium	4 UP	18.	Selenium	5 UF
7.	Calcium	[880] P	19.	Silver	4 UP
8.	Chromium	[3] P 'R' R	20.	Sodium	[1100] P
9.	Cobalt	30 UP 'R' R	21.	Thallium	10 UF 'R' UJ
10.	Copper	[10] P 'R' J	22.	Tin	40 UF 'R' UJ
11.	Iron	140 P 'R' J	23.	Vanadium	50 UF
12.	Lead	5 UF	24.	Zinc	[11] P
	Cyanide	5 U		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: ____

Lab Manager Cathy Shugarts

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EPA Sample No. MEM 284

Date 6-12-87

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INORGANIC ANALYSIS DATA SHEET

LAB NAME Accu-Labs Research CASE NO. 7265

SOW NO. 784

LAB SAMPLE ID. NO. 142-7265-6-6 QC REPORT NO. 141+142

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	176 UP	13.	Magnesium	34200 P
2.	Antimony	60 UF	14.	Manganese	1320 P
3.	Arsenic	10 UF	15.	Mercury	0.2 U
4.	Barium	330 P	16.	Nickel	20 UP
5.	Beryllium	2 UP	17.	Potassium	5500 P
6.	Cadmium	4 UP	18.	Selenium	5 UF
7.	Calcium	121000 P	19.	Silver	4 UP
8.	Chromium	3 UP 'R' R	20.	Sodium	75900 P
9.	Cobalt	30 UP 'R' R	21.	Thallium	10 UF 'R' UJ
10.	Copper	[7] P 'R' J	22.	Tin	40 UF 'R' UJ
11.	Iron	540 P 'R' J	23.	Vanadium	50 UF
12.	Lead	5 UF	24.	Zinc	25 P
Cyanide		5 U	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: ____

Lab Manager Cathy Drugatz

QC EXCEPTION SUMMARY REPORT

CASE # 7265
DATA SET # 4023
LAB Q.C. # 141-142
DATE: 7.2.87

SITE Septech Liquid Treat
LAB Accutabs
REVIEWED BY Ida Levin

MATRIX: GW + SS
CONC. : 1L

WATER SAMPLE SPK. MEM 284
WATER SAMPLE DUP. MEM 279
SOIL SAMPLE SPK. MEM 278
SOIL SAMPLE DUP. MEM 274

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Init Calver	Contin. Calver	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 Dilu AQ	Ser Dilu SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blind Blank	Blind Spike %R	Split Sample RPD	
Aluminum																								
Antimony											52													
Arsenic																								
Barium																								
Beryllium																								
Cadmium																								
Calcium																								
Chromium										1			12											
Cobalt													14											
Copper													11											
Iron													10					140						
Lead											39% (p)													
Magnesium																								
Manganese																								
Mercury																								
Nickel																								
Potassium																								
Selenium																								
Silver																								
Sodium																								
Thallium													62											
Tin											142		64											
Vanadium																								
Zinc																								
Cyanide																								

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Form III A

Q. C. Report No. 141+142

BLANKS

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

DATE 6-12-87

UNITS mg/L (for soil+water)

Matrix soil and water.

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank Soil 1	Preparation Blank water 2
Metals:							
1. Aluminum	0.16 u	0.16u	0.16u			0.176u	0.176u
2. Antimony	0.005u	0.005u	0.005u	0.005u	0.005u	0.005u	0.005u
3. Arsenic	0.005u	0.005u	0.005u	0.005u	0.005u	0.005u	0.005u
4. Barium	0.1u	0.1u	0.1u			0.11u	0.11u
5. Beryllium	0.002u	0.002u	0.002u			0.002u	0.002u
6. Cadmium	0.004u	0.004u	0.004u			0.004u	0.004u
7. Calcium	0.1u	0.1u	0.1u			[0.11]	[0.22]
8. Chromium	0.003u	0.003u	0.003u			0.003u	0.003u
9. Cobalt	0.03u	0.03u	0.03u			0.03u	0.03u
10. Copper	0.003u	0.003u	0.003u			0.003u	0.003u
11. Iron	0.02u	0.02u	0.02u			0.02u	0.02u
12. Lead	0.002u	0.002u	0.002u	0.002u	0.002u	0.002u	0.002u
13. Magnesium	0.05u	0.05u	0.05u			0.055u	0.055u
14. Manganese	0.004u	0.004u	0.004u			0.004u	0.004u
15. Mercury	0.0001u	[0.0001]	0.0001u	0.0001u	[0.0001]	0.0001u	[0.0001]
16. Nickel	0.02u	0.02u	0.02u			0.02u	0.02u
17. Potassium	0.1u	0.1u	0.1u			0.11u	0.11u
18. Selenium	0.002u	0.002u	0.002u	0.002u	0.002u	0.002u	0.002u
19. Silver	0.004u	0.004u	0.004u			0.004u	0.004u
20. Sodium	0.1u	0.1u	0.1u			0.11u	0.11u
21. Thallium	0.002u	0.002u	0.002u	0.002u	0.002u	0.002u	0.002u
22. Tin	0.007u	0.007u	0.007u	0.007u	0.007u	0.007u	[0.014]
23. Vanadium	0.007u	0.007u	0.007u	0.007u	0.007u	0.007u	0.007u
24. Zinc	0.004u	0.004u	0.004u			0.004u	0.004u
Other: Lead (Flame)	0.03u	0.03u				0.03u	
Cyanide	0.005u	0.005u	0.005u			0.005u	0.005u

Form III B

Q. C. Report No. 141+142

BLANKS

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

DATE 6-12-87

UNITS mg/L

Matrix soil+water

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Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. Aluminum							
2. Antimony							
3. Arsenic							
4. Barium							
5. Beryllium							
6. Cadmium							
7. Calcium							
8. Chromium							
9. Cobalt							
10. Copper							
11. Iron							
12. Lead							
13. Magnesium							
14. Manganese							
15. Mercury		[0.0001]				0.0001 U	
16. Nickel							
17. Potassium							
18. Selenium		0.002U	0.002U				
19. Silver							
20. Sodium							
21. Thallium							
22. Tin		0.007U	0.007U				
23. Vanadium							
24. Zinc							
Other:							
Cyanide							

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Form III C

Q. C. Report No. 141+142

BLANKS Analytical Spikes

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

DATE 6-12-87

UNITS mg/L

Matrix soil and water

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. Aluminum							
2. Antimony	0.005U	0.005U	0.005U	0.005U	0.005U		
3. Arsenic	0.005U	0.005U	0.005U	0.005U			
4. Barium							
5. Beryllium							
6. Cadmium							
7. Calcium							
8. Chromium							
9. Cobalt							
10. Copper							
11. Iron							
12. Lead	0.002U	0.002U	0.002U	0.002U			
13. Magnesium							
14. Manganese							
15. Mercury							
16. Nickel							
17. Potassium							
18. Selenium	0.002U	0.002U	0.002U	0.002U			
19. Silver							
20. Sodium							
21. Thallium	0.002U	0.002U	0.002U	0.002U			
22. Tin	0.007U	0.007U	0.007U	0.007U			
23. Vanadium	0.007U	0.007U	0.007U	0.007U			
24. Zinc							
Other:							
Cyanide							

Form III D

Q. C. Report No. 141 + 142

BLANKS MSA

RECEIVED JUL 0 1987

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

DATE 6-12-87

UNITS mg/kg (for soil & water)

Matrix soil and water

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. Aluminum							
2. Antimony							
3. Arsenic	0.005U	0.005U					
4. Barium		-					
5. Beryllium							
6. Cadmium							
7. Calcium							
8. Chromium							
9. Cobalt							
10. Copper							
11. Iron							
12. Lead	0.002U	0.002U					
13. Magnesium							
14. Manganese							
15. Mercury							
16. Nickel							
17. Potassium							
18. Selenium							
19. Silver							
20. Sodium							
21. Thallium	0.002U	0.002U					
22. Tin	0.007U	0.007U	0.007U				
23. Vanadium	0.007U	0.007U					
24. Zinc							
Other:							
Cyanide							

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Form V

Q. C. Report No. 141+142

SPIKE SAMPLE RECOVERY

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

EPA Sample No. MEM 384

DATE 6-12-87

Lab Sample ID No. 142-7265-6-6

Units ug/L

Matrix water

Compound	Control Limit % R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	% R[1]	
Metals:						
1. Aluminum	75-125	2110	176 U	2000	106	
2. Antimony	-	47	5 U	50	94	
3. Arsenic	-	23	5 U	20	106	
4. Barium	-	2200	330	2000	94	
5. Beryllium	-	50	2 U	50	100	
6. Cadmium	-	53	4 U	50	106	
7. Calcium	-	220000	121000	100000	99	
8. Chromium	-	25	3 U	200	12	'R'
9. Cobalt	-	70	30 U	500	14	'R'
10. Copper	-	34	[7]	250	11	'R'
11. Iron	-	640	540	1000	10	'R'
12. Lead	-	19	2 U	20	95	
13. Magnesium	-	75900	34200	50000	83	
14. Manganese	-	1530	1320	200	105	
15. Mercury	-	1.0	0.2 U	1.0	100	
16. Nickel	-	410	20 U	400	102	
17. Potassium	-	57200	5500	50000	103	
18. Selenium	-	11	2 U	10	110	
19. Silver	-	54	4 U	50	108	
20. Sodium	-	176000	75900	100000	100	
21. Thallium	-	31	2 U	50	62	'R'
22. Tin	-	129	7 U	200	64	'R'
23. Vanadium	-	55	7 U	50	110	
24. Zinc	-	232	25	200	104	
Other:						
Cyanide	-					

[1] % R = [(SSR - SR)/SA] x 100

"R" - out of control

Comments:

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Form V E

Q. C. Report No. 141 + 142

SPIKE SAMPLE RECOVERY

LAB NAME ACCU-LABS RESEARCH

DATE 6-12-87

CASE NO. 7265

EPA Sample No. MEM281

Lab Sample ID No. 142-7265-6-3

Units ug/L

Matrix water

Compound	Control Limit % R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	% R[1]
Metals:					
1. Aluminum	75-125				
2. Antimony	-				
3. Arsenic	-				
4. Barium	-				
5. Beryllium	-				
6. Cadmium	-				
7. Calcium	-				
8. Chromium	-				
9. Cobalt	-				
10. Copper	-				
11. Iron	-				
12. Lead	-				
13. Magnesium	-				
14. Manganese	-				
15. Mercury	-				
16. Nickel	-				
17. Potassium	-				
18. Selenium	-				
19. Silver	-				
20. Sodium	-				
21. Thallium	-				
22. Tin	-				
23. Vanadium	-				
24. Zinc	-				
Other:					
Cyanide	-	98	5U	100	98

[1] %R = [(SSR - SR)/SA] x 100

"R" - out of control

Comments:

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Form V A

Q. C. Report No. 141+142

SPIKE SAMPLE RECOVERY

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

EPA Sample No. MEM 278

DATE 6-12-87

Lab Sample ID No. 141-7265-5-5

Units mg/kg wet wt.

Matrix soil

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]	
Metals:						
1. Aluminum	75-125	—	—	—	NR	
2. Antimony	-	13	2.5u	25	52	'R'
3. Arsenic	-	29	7.3	20	109	
4. Barium	-	1280	218	1000	106	
5. Beryllium	-	25	1.0u	25	100	
6. Cadmium	-	35	10	25	100	
7. Calcium	-	—	—	—	NR	
8. Chromium	-	243	143	100	100	
9. Cobalt	-	252	15u	250	101	
10. Copper	-	370	219	125	121	
11. Iron	-	—	—	—	NR	
12. Lead	-					
13. Magnesium	-	—	—	—	NR	
14. Manganese	-	609	344	250	106	
15. Mercury	-	7.6	2.6	5.0	100	
16. Nickel	-	257	5u	250	103	
17. Potassium	-	—	—	—	NR	
18. Selenium	-	6.0	1.0u	5.0	120	
19. Silver	-	25	2.0	25	92	
20. Sodium	-	—	—	—	NR	
21. Thallium	-	21	1.0u	25	84	
22. Tin	-	164	22	100	142	'R'
23. Vanadium	-	40	13	25	108	
24. Zinc	-	1500	1170	250	132	'R' sample less than 4
Other: Lead (Flame)		1750	767	250	393	'R'
Cyanide	-					

[1] %R = [(SSR - SR)/SA] x 100

"R" - out of control

Comments:

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Form V B

Q. C. Report No. 141+142

SPIKE SAMPLE RECOVERY

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

EPA Sample No. MEM 275

DATE 6-12-87

Lab Sample ID No. 141-7265-5-2

Units mg/kg wet wt

Matrix soil

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]
Metals:					
1. Aluminum	75-125				
2. Antimony	-				
3. Arsenic	-				
4. Barium	-				
5. Beryllium	-				
6. Cadmium	-				
7. Calcium	-				
8. Chromium	-				
9. Cobalt	-				
10. Copper	-				
11. Iron	-				
12. Lead	-				
13. Magnesium	-				
14. Manganese	-				
15. Mercury	-	0.63	0.16	0.50	94
16. Nickel	-				
17. Potassium	-				
18. Selenium	-				
19. Silver	-				
20. Sodium	-				
21. Thallium	-				
22. Tin	-				
23. Vanadium	-				
24. Zinc	-				
Other:					
Cyanide	-				

[1] %R = [(SSR - SR)/SA] x 100

"R" - out of control

Comments:

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Form V C

Q. C. Report No. 141+142

SPIKE SAMPLE RECOVERY

LAB NAME ACCU-LABS RESEARCH

CASE NO. 7265

EPA Sample No. MEM 277

DATE 6-12-87

Lab Sample ID No. 141-7265-6-4

Units mg/kg dwt wt

Matrix soil

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]
Metals:					
1. Aluminum	75-125				
2. Antimony	-				
3. Arsenic	-				
4. Barium	-				
5. Beryllium	-				
6. Cadmium	-				
7. Calcium	-				
8. Chromium	-				
9. Cobalt	-				
10. Copper	-				
11. Iron	-				
12. Lead	-				
13. Magnesium	-				
14. Manganese	-				
15. Mercury	-				
16. Nickel	-				
17. Potassium	-				
18. Selenium	-				
19. Silver	-				
20. Sodium	-				
21. Thallium	-				
22. Tin	-				
23. Vanadium	-				
24. Zinc	-				
Other:					
Cyanide	-	5.3	0.7	5.0	92

[1] %R = [(SSR - SR)/SA] x 100

"A" - out of control

Comments:

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Form VI A

Q. C. Report No. 141+142

DUPLICATES

LAB NAME Accu-Labs Research

CASE NO. 7265

EPA Sample No. MEM 274

Lab Sample ID No. 141-7265-5-1

DATE 6-12-87

Units mg/kg dry wt

Matrix soil

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum		8140	9090	11
2. Antimony		36 U	36 U	NC
3. Arsenic		6.0 U	6.0 U	NC
4. Barium		65 U	65 U	NC
5. Beryllium		1.2 U	1.2 U	NC
6. Cadmium		2.4 U	2.4 U	NC
7. Calcium		64900	69900	7.4
8. Chromium		12	11	8.7
9. Cobalt		18 U	18 U	NC
10. Copper		16	18	12
11. Iron		14200	14500	2.1
12. Lead		35	36	2.8
13. Magnesium		19300	20000	3.6
14. Manganese		589	604	2.5
15. Mercury		0.2	0.2	0
16. Nickel		[16]	[12]	NC
17. Potassium		[1240]	[1240]	NC
18. Selenium		3.0 U	3.0 U	NC
19. Silver		2.4 U	2.4 U	NC
20. Sodium		[118]	[127]	NC
21. Thallium		6.0 U	6.0 U	NC
22. Tin		24 U	24 U	NC
23. Vanadium		30 U	30 U	NC
24. Zinc		71	79	11
Other:				
Cyanide		0.3 U	0.3 U	NC

* 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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Form VI B

Q. C. Report No. 141+142

DUPLICATES

LAB NAME Accu-Labs Research

DATE 6-12-87

CASE NO. 7265

EPA Sample No. MEM 278

Lab Sample ID No. 141-7265-5

Units mg/kg dry wt

Matrix soil

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum				
2. Antimony				
3. Arsenic				
4. Barium				
5. Beryllium				
6. Cadmium				
7. Calcium				
8. Chromium				
9. Cobalt				
10. Copper				
11. Iron				
12. Lead				
13. Magnesium				
14. Manganese				
15. Mercury		2.8	2.7	3.6
16. Nickel				
17. Potassium				
18. Selenium				
19. Silver				
20. Sodium				
21. Thallium				
22. Tin				
23. Vanadium				
24. Zinc				
Other:				
Cyanide				

* 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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Form VI C

Q. C. Report No. 141+142

DUPLICATES

LAB NAME Accu-Labs Research

CASE NO. 7265

EPA Sample No. MEM 289

DATE 6-12-87

Lab Sample ID No. 142-7265-6-1

Units ug/l

Matrix water

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum		176 U	176 U	NC
2. Antimony		60 U	60 U	NC
3. Arsenic		10 U	10 U	NC
4. Barium		220	220	0
5. Beryllium		2 U	2 U	NC
6. Cadmium		4 U	4 U	NC
7. Calcium		132000	132000	0
8. Chromium		3 U	3 U	NC
9. Cobalt		30 U	30 U	NC
10. Copper		3 U	3 U	NC
11. Iron		720	710	1.4
12. Lead		5 U	5 U	NC
13. Magnesium		33700	34100	1.2
14. Manganese		1290	1290	0
15. Mercury				
16. Nickel		[20]	[20]	NC
17. Potassium		5390	5830	7.8
18. Selenium		5 U	5 U	NC
19. Silver		4 U	4 U	NC
20. Sodium		77000	74800	2.9
21. Thallium		10 U	10 U	NC
22. Tin		40 U	40 U	NC
23. Vanadium		50 U	50 U	NC
24. Zinc		23	26	12
Other:				
Cyanide		5 U	5 U	NC

* Out of Control

1 To be added at a later date.

2 RPD = [|S - D|/((S + D)/2)] x 100

NC - Not calculable RPD due to value(s) less than CRDL

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Form VI D

Q. C. Report No. 141+142

DUPLICATES

LAB NAME Accu Labs Research

DATE 6-12-87

CASE NO. 7265

EPA Sample No. MEM 280

Lab Sample ID No. 142-7265-6-2

Units ug/L

Matrix water

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum				
2. Antimony				
3. Arsenic				
4. Barium				
5. Beryllium				
6. Cadmium				
7. Calcium				
8. Chromium				
9. Cobalt				
10. Copper				
11. Iron				
12. Lead				
13. Magnesium				
14. Manganese				
15. Mercury		0.2U	0.2U	NC
16. Nickel				
17. Potassium				
18. Selenium				
19. Silver				
20. Sodium				
21. Thallium				
22. Tin				
23. Vanadium				
24. Zinc				
Other:				
Cyanide				

* Out of Control

[1] To be added at a later date.

[2] RPD = [|S - D|/((S + D)/2)] x 100

NC - Not calculable RPD due to value(s) less than CRDL

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Form VII A

Q.C. Report No. 141+142

INSTRUMENT DETECTION LIMITS AND

LABORATORY CONTROL SAMPLE

LAB NAME ACCU-LABS RESEARCH CASE NO. 7265

DATE 6-12-87 LCS UNITS ug/L mg/kg

(Circle One)

Compound	Required Detection Limits (CRDL)-ug/l	Instrument Detection Limits (IDL)-ug/l ICP/CA	Instrument Detection Limits (IDL)-ug/l Furnace	Lab Control Sample True	Lab Control Sample Found	Lab Control Sample % R
Metals:						
1. Aluminum	200	160		1.97	2.06	105
2. Antimony	60		5	0.109	0.098	90
3. Arsenic	10		5	0.049	0.052	106
4. Barium	200	100		2.12	2.09	99
5. Beryllium	5	2		0.527	0.522	99
6. Cadmium	5	4		0.488	0.522	107
7. Calcium	5000	100		51.8	50	96
8. Chromium	10	3		0.529	0.475	90
9. Cobalt	50	30		0.496	0.470	95
10. Copper	25	3		0.524	0.533	102
11. Iron	100	20		2.06	1.87	91
12. Lead	5		2	0.098	0.098	100
13. Magnesium	5000	50		25.5	22.1	87
14. Manganese	15	4		0.520	0.543	104
15. Mercury	0.2	0.1		0.050	0.053	106
16. Nickel	40	20		0.495	0.500	101
17. Potassium	5000	100		51.3	49.5	96
18. Selenium	5		2	0.098	0.100	102
19. Silver	10	4		0.495	0.506	102
20. Sodium	5000	100		50.3	49.5	98
21. Thallium	10		2	0.097	0.100	103
22. Tin	40		7	0.050	0.046	92
23. Vanadium	50		7	0.52	0.45	86
24. Zinc	20	4		3.07	3.01	98
Other: Lead (Flame)		30		5.16	5.5	107
Cyanide	10	5		0.224	0.226	101

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

Date Received for Review 7/6/87 Date Review Completed 7/7/87

To: Tom Sullivan

From: Zena Gold-Kaufman ZGK

Subject: Systech Liquid Treatment

PAN: OH0574 Case # 7265

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
# 5	Low Soil	#	Low Soil
6	Low Water		Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓ Incomplete, awaiting: 5 6 inorganic soil, 2 inorg. drinking waters 5 inorganic groundwater

FIT Data Review Findings:

Many compounds detected.

✓ Compounds were detected in sample(s); see enclosed Chemical Evaluation Form.

Book No. 6 Page No. 104

Sampled 5/13

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CHEMICAL EVALUATION FORM

SITE NAME: Systech PAN# OH0574 DATE: 7/7/87

CASE # 7265 UNITS: µg/l REVIEWER: ZCC

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	EL 689	EL 691	EL 692	EL 694			
	1,2-Dichloropropane	5	15-25	15			16			
	Vinyl Chloride	10	30-50		29					
	Chloroethane	10	30-50		39					
	1,1 Dichloroethane	5	15-25		45					
	1,1,1-Trichloroethane	5	15-25		15					
	1,2 Dichloropropane	5	15-25		190					
	Ethylbenzene	200	600-1000		7	2700				
	Total xylene	200	600-1000			9400				
	4-Methylphenol	10	30-50			12				
	Naphthalene	10	30-50			18				

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CHICAGO, ILLINOIS

CHEMICAL EVALUATION FORM

SITE NAME: Systech Liquid PAN# OH0574 DATE: 7/7/87

CASE # 7265 UNITS- µg/Kg REVIEWER: ZGK

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	EL 685	EL 686	EL 687	EL 688			
	Toluene	5	15-25	6			6			
	phenanthrene	330	990-1650	920						
	Fluoranthene	330		3100						
	Pyrene	330		2400						
	Benzo(a) Anthracene	330		1500						
	chrysene	330		1900						
	Benzo(b) Fluoranthene	330		2700						
	Benzo(a) Pyrene	330		2000						
	Benzo(g,h,i)Perylene	330	↓	1200						
	Trichloroethene	5	15-25		120	6	9			
	Tetrachloroethene	5	15-25		150	10				
	Butylbenzylphthalate	330	990-1650		1800		1700			
	Di-n-Octyl Phthalate	330	990-1650		7400		1700			
	1,1,1-Trichloro-ethane	5	15-25				17			
	Carbon Tetrachloride	5	15-25				16			
	Isophorone	330	990-1650				6900			

Form VII B

Q.C. Report No. 141+142

INSTRUMENT DETECTION LIMITS AND

LABORATORY CONTROL SAMPLE

RECEIVED JUL 10 1987

LAB NAME ACCU-LABS RESEARCH CASE NO. 7265

DATE 6-12-87 LCS UNITS ug/L mg/kg

(Circle One)

Compound	Required Detection Limits (CRDL)-ug/l	Instrument Detection Limits (IDL)-ug/l ICP/AA	Instrument Detection Limits (IDL)-ug/l Furnace	Lab Control Sample True	Lab Control Sample Found	Lab Control Sample %R
Metals:						
1. Aluminum	200	160		1970	2210	112
2. Antimony	60		5	109	102	94
3. Arsenic	10		5	49	45	92
4. Barium	200	100		2120	1980	93
5. Beryllium	5	2		527	541	103
6. Cadmium	5	4		488	541	111
7. Calcium	5000	100		51800	50600	98
8. Chromium	10	3		529	483	91
9. Cobalt	50	30		496	510	103
10. Copper	25	3		524	562	107
11. Iron	100	20		2060	1910	93
12. Lead	5		2	98	96	98
13. Magnesium	5000	50		25500	23200	91
14. Manganese	15	4		520	541	104
15. Mercury	0.2	0.1		50	52	104
16. Nickel	40	20		495	520	105
17. Potassium	5000	100		51300	49500	96
18. Selenium	5		2	98	106	98
19. Silver	10	4		495	519	105
20. Sodium	5000	100		50300	50600	101
21. Thallium	10		2	97	100	103
22. Tin	40		7	50	55	110
23. Vanadium	50		7	520	475	91
24. Zinc	20	4		3070	3030	99
Other:						
Cyanide	10	5		224	226	101

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7/1/87

RECEIVED JUL 0 6 1987

SUBJECT: Review of Region V CLP Data
Received for Review on 6/18/87

FROM: Curtis Ross, Director (5SCRL) Patrick J. Chunilla
Central Regional Laboratory

TO: Data User: Fit

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

SITE NAME: Septech Liquid Treatment SMO case No. 7265

EPA Data Set No. SF4023 No. of Samples: 11 D.U./Activity Numbers 1985/C72100

CRL No. 87F507502 - 87F507510

SMO Traffic No. EL684 - EL694

CLP Laboratory: Clayton Hrs. Required for Review: 16

Following are our findings:

This data set consists of eleven samples, five soils and six waters, that were analyzed for full organics.

All sample holding times were met and GC/MS tuning requirements observed, column degradation and linearity requirements observed. Initial calibrations and continuing calibrations were performed and met criteria.

Six compounds found in the blanks were below the contract required detection limit except acetone (which was less than five times the CRDL) and 2 Butanone which was above its CRDL.

All soil surrogate recoveries were within QC limits but samples EL 686, 687 + 688 contained interferences that ~~[illegible]~~ prevented the calculation of dibutyl chlorendate recoveries for the pesticide fraction.

Water surrogate recoveries for volatiles were within QC limits. Semivolatile surrogate recoveries had 2 out of 6 compounds outside of QC limits and the pesticide (water) surrogate recoveries were all within limits.

Soil matrix spike/matrix spike duplicate recoveries were within QC limits for volatiles and semivolatiles. Soil MS/MSD relative percent difference for volatiles and base/neutral fractions were within QC limits but one out of four of the ~~acid~~ compounds were outside of the QC limits. Unspiked sample interferences prevented the calculation of MS/MSD recovery and RPD values for semis.

Water MS/MSD recoveries were within QC limits for all parameters, water MS/MSD relative percent difference values were within QC limits for VOAs, Base/neutrals and Pesticide fractions, the acid fraction had two out of five compounds outside of QC limits.

The overall quality of this review good.

R Gurley

(✓) 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: Duane Geuder, Quality Assurance Officer, EPA Support Services
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

EPA FORM 1320-6 (Rev. 5/87)

INST. #2B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE# 7265 CONTRACTOR Clayton

RECEIVED JUL 06 1987

	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	870511 16:13			870514 10:51											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane					25.98	J									
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone		35.03	J		49.69	J									
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	.0217		J	.0217	53.73	J									
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate					26.86	J									
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone					31.84	J									
2-Hexanone					37.18	J									
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

EL-689
EL-690
EL-693

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE# 7265 CONTRACTOR Clayton

RECEIVED EL 06 1987

	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	870518 13:32			870518 15:27			870519 10:07			870520 00:52					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane								70.97	J		93.07	J			
Bromomethane								24.25	J						
Vinyl Chloride															
Chloroethane															
Methylene Chloride								39.37	J		93.19	J			
Acetone					139.33	J					26.87	J			
Carbon Disulfide											25.22	J			
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	.049		J	.049		J	.049	33.97	J	.049		J			
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate								82.93	J		30.80	J			
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether								26.99	J						
Bromoform															
4-Methyl-2-Pentanone								26.93	J						
2-Hexanone								31.40	J						
Tetrachloroethene															
1,1,2,2-Tetrachloroethane				.009		J									
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

EL-694	EL-684	EL-685
EL-691	EL-697	EL-686
EL-692	EL-688	

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE# 7265 CONTRACTOR Clayton

RECEIVED JUL 06 1987

	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	870518 15:27			870527 17:43			870525 17:04			870529 15:04			870601 18:55		
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether															
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol		131.8	J												
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid															
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene								31.59	J		35.00	J		25.77	J
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene														25.03	J
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol															
4-Nitrophenol														28.17	J
Dibenzofuran															

AFFECTED SAMPLES:

EL-684	EL-690	EL-692
EL-687		EL-693
EL-686		
EL-685		
EL-688		

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE# 7265 CONTRACTOR Clayton

RECEIVED 6 1987

	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	870518 02:12			870527 16:37			870529 15:44			870529 13:57			870604 14:55		
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline		35.87	J												
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene														22.76	J
Pentachlorophenol															
Phenanthrene														32.23	J
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene		41.14	J		33.11	J		27.42	J		34.55	J		34.05	J
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene														26.46	J
Benzo(k)Fluoranthene					30.14	J									
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene															
Dibenz(a,h)Anthracene															
Benzo(g,h,i) Perylene														42.01	J

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE# 7265 CONTRACTOR Clayton

RECEIVED JUL 0 6 1987

	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	870607 16:12			870608 19:52			870610 12:16								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether															
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol					160.2	J									
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether					129.23	J		35.76	J						
4-Methylphenol															
N-Nitroso-Di-n-Propylamine		31.05	J												
Hexachloroethane															
Nitrobenzene								25.71	J						
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid															
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline								168.12	J						
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline					29.22	J		39.14	J						
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline								29.83	J						
Acenaphthene															
2,4-Dinitrophenol															
4-Nitrophenol															
Dibenzofuran															

AFFECTED SAMPLES:

EL-691	EL-689 RE	
	EL-699 RE	

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE# 7265 CONTRACTOR Clayton

RECEIVED JUL 0 8 1987

	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	870607 12:34			870608 18:41			870610 10:52								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline															
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol															
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene															
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene		30.6	J												
Dibenz(a,h)Anthracene															
Benzo(g,h,i) Perylene															

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

7265 · 5-021-01

Clayton Environmental Consultants, Inc.

22345 Roethel Drive • Novi, Michigan 48050 • (313) 344-1770

RECEIVED JUL 0 6 1987

CASE NARRATIVE

Case No.: 7265, Region V
SMO Nos.: EL 684-694
Contract No.: 68-01-7100

Case Summary

Case 7265 was delivered on two days; five low-level soil samples were received on May 13 and six low-level water samples were received on May 14, 1987 for full organic analyses.

Gel permeation chromatography cleanup (GPC) was performed on the BNA/pesticide fraction of the soil samples. This procedure resulted in a dilution factor of two, since only one-half of the extract was prepared.

A laboratory contaminant was detected in the pesticide fraction of EL 691 Matrix Spike (MS), which affected the recovery for endrin. This contaminant did not appear in the unspiked sample or the matrix spike duplicate (MSD), and endrin was not detected in the samples. Ms. Jan Pels, from Region V, was contacted on May 22, and she advised us to report the results since the contaminant did not appear to affect the quality of the data.

Surrogate recoveries in the BNA fraction of water samples EL 689 and EL 694 were below 10%, therefore as outlined in sections 4.4.2.1.1, 4.4.2.1.2, and 4.4.2.1.3 in the Statement of Work (SOW), the following steps were taken by the laboratory to correct the problem:

- All calculations were checked to verify the low recoveries.
- The samples were rerun to verify the surrogate results.
- The samples were re-extracted on June 10, 1987, and re-analyzed.

The re-analysis (following re-extraction) provided recovery results within the contract-required limits, therefore, as specified in SOW Section 4.4.2.1.3.1, only the data from the reanalysis has been reported..

Dibutyl chlorendate could not be calculated in the pesticide fraction of soil samples EL 686-688, MBlank I (L/S), EL 688MS and MSD, and water sample EL 691MS because of a co-eluting peak.

Branch Offices: Los Angeles, CA • Atlanta, GA • Edison, NJ • Toronto, Ontario • Windsor, Ontario • London, U.K.

7265 • 5-021-02

RECEIVED JUL 0 6 1987

We were unable to calculate pesticide MS and MSD recoveries in soil sample EL 688 because of a matrix interference in the unspiked sample.

The number labeled "dilution factor" on the quantitation reports for the VOA and BNA analyses is a calculation factor which takes into account, based on the sample matrix: percent moisture, sample size, unit conversions, and dilutions, to derive the final concentration.

The Hewlett Packard GC/MS data system used by Clayton has a combined NBS/WILEY library. The data system prints the mass spectra for all tentatively identified compounds (TIC's) and the top three library matches. When no library matches are found, the data system prints "NO DATA BASE ENTRIES RETRIEVED".

Standards

The instrument was tuned to meet the abundance criteria for BFB and DFTPP before any standards, blanks, or samples were analyzed. Initial and continuing calibration data of the SPCC and CCC for VOA's and BNA's are within the contract-required QC limits.

Percent-difference and retention time shifts for all pesticide compounds were within contract-required criteria for the primary run which was used for quantitation.

Pesticide Linearity and Degradation

Linearity and degradation criteria are within the contract-required QC limits for the packed column which was used for quantitation.

Surrogate Recoveries

Surrogate recoveries are within QC limits for all blanks and samples except:

	Compound	% Rec	QC Range
BNA			
EL 691	2-fluorophenol	17	21-100
EL 691MSD	2-fluorophenol	19	21-100

RECEIVED JUL 0 6 1987

Matrix Spike/Matrix Spike Duplicate

Matrix spike and matrix spike duplicate recovery data are within QC limits for all compounds except:

		RPD	QC Limit
EL 688 MS/MSD	4-nitrophenol	78	50
El 691 MS/MSD	pentachlorophenol	57	50
	4-nitrophenol	69	50

Blanks

Blank results are recorded on the Method Blank Summary form for all compounds; the following HSL compounds were detected above the contract-required detection limit (CRDL).

	Compound	Concentration (ug/kg)	CRDL (ug/kg)
VOA			
MBlank I	acetone	15	10
	2-butanone	12	10

Additional Flags

The following are laboratory flags which are used in addition to those identified by the EPA:

N= Instrument detection limit exceeded the CRDL, therefore instrument detection limit was used
M= Matrix spike compound.
A= Indicates a pesticide value less than the dilution-corrected limit of detection but greater than the CRDL.

Daryl Strandbergh
Project Manager, CLP

Date: 6/12/87

7265 · 5-003-02

In Reference to Case No(s): 7265

RECEIVED OCT 06 1987

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Telephone Record Log

Date of Call: May 13, 1987

Laboratory Name: Clayton Environmental

Lab Contact: Audrey McNary

Region: SMO

Regional Contact: Leslie Braun

Call Initiated By: ✓ Laboratory ___ ~~Region~~ SMO

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

Summary of Questions/Issues Discussed:

(1) Rec'd Case 7265 with only 5 soil samples. We were expecting 5 waters.
(2) Case number not on sample tags.

Summary of Resolution:

(1) Case is not complete. Six water samples to be shipped 5/13/87
(2) Add Case No. to sample tags, date & initial.

Audrey McNary
Signature

05/13/87
Date

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

7265 · 5-003-03

In Reference to Case No(s):

7265

RECEIVED JUL 0 6 1987

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Telephone Record Log

Date of Call: May 22, 1987

Laboratory Name: Clayton

Lab Contact: Daryl Strandbergh

Region: V

Regional Contact: Jan Pels

Call Initiated By: X Laboratory ____ Region

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

Summary of Questions/Issues Discussed:

A laboratory contaminant was found in the MSD of the pesticide fraction. The contaminant affects the recovery results for endrin. The contaminant was not found in the unspiked sample or the MS. Endrin was not found in the samples. Will region V accept the data with a note in the narrative.

Summary of Resolution:

The contaminant does not seem to affect the quality of the data. Report the results and note in narrative about the problem. Region V will accept the data.

Daryl Strandbergh
Signature

5/22/87
Date

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

7265 • 5-003-01

In Reference to Case No(s): 7265

RECEIVED JUL 0 6 1987

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Telephone Record Log

Date of Call: May 7, 1987

Laboratory Name: Clayton

Lab Contact: Daryl Strandbergh

Region: SMO

Regional Contact: Leslie Brarn

Call Initiated By: ___ Laboratory X ~~Region~~ SMO

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

Summary of Questions/Issues Discussed:

Case 7265 consisting of 5 4/W & 4 4/S for full organics is scheduled to ship May 12 or 13 from region V under contract 68-01-7100.

Summary of Resolution:

Daryl Strandbergh
Signature

5/7/87
Date

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

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. 7265 Contract Laboratory Clayton Environmental Contract No. 68-01-7100

Low ✓ Medium _____

SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (81-117)	VOLATILE: BFB (74-121)	VOLATILE: 1,2 DICHLORO ETHANE-D4 (70-121)	SEMI-VOLATILE: NITRO-BENZENE-D5 (23-120)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (30-115)	SEMI-VOLATILE: TERPHENYL-D14 (18-137)			SEMI-VOLATILE: PHENOL-D5 (24-113)	SEMI-VOLATILE: 2-FLUORO-PHENOL (25-121)	SEMI-VOLATILE: 2,4,6 TRIBROMO PHENOL (19-122)	PESTICIDE: DIBUTYL-CHLORENDATE (20-150) **
EL-684	112 ✓	95 ✓	89 ✓	56	58	78			49	43	62	103
EL-685	117 ✓	95 ✓	93 ✓	54	57	85			47	40	57	102
EL-686	108 ✓	92 ✓	110 ✓	56	63	104			48	41	58	†
EL-687	110 ✓	94 ✓	90 ✓	50	50	97			40	39	58	†
EL-688	113 ✓	83 ✓	109 ✓	60	61	81			49	38	54	†
MBLKI(LS)	99 ✓	99 ✓	93 ✓	63	59	78			50	51	50	†
MBLKII(LS)	100 ✓	95 ✓	108 ✓	NR	NR	NR			NR	NR	NR	NR
EL688MS	114 ✓	90 ✓	87 ✓	58	63	92			50	51	45	†
EL688MSD	115 ✓	84 ✓	97 ✓	55	55	95			44	44	46	†

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: 0 out of 27 ; outside of QC limits

Semi-Volatiles: 0 out of 48 ; outside of QC limits

Pesticides: 0 out of 2 ; outside of QC limits

7/85

Comments: Evaluation Std. Mix C (Run # 1087) used to calculate DBC recoveries.
† Unable to calculate due to interference peaks in the samples

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7265 • 5-022-01

FORM II

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No. 7265 Contract Laboratory Clayton Environmental Contract No. 68-01-7100

SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (88-110)	VOLATILE: BFB (86-115)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (76-114)	SEMI-VOLATILE: NITRO-BENZENE-D5 (35-114)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (43-116)	SEMI-VOLATILE: TERPHENYL-D14 (33-141)			SEMI-VOLATILE: PHENOL-D5 (10-94)	SEMI-VOLATILE: 2-FLUORO-PHENOL (21-100)	SEMI-VOLATILE: 2,4,6 TRIBROMO-PHENOL (10-123)	PESTICIDE: ** DIBUTYL-CHLORENDATE (24-154)	
EL 689	103	100	90	NR	NR	NR			NR	NR	NR	83	
EL 689RE	NR	NR	NR	83	78	84			23	37	73	NR	
EL 690	102	99	78	58	43	94			20	30	54	77	
EL 691	100	104	110	78	60	93			12	17*	47	83	
EL 692	104	101	111	65	49	91			21	32	63	75	(0.2 d.)
EL 693	101	97	88	70	49	98			18	26	54	80	
EL 694	103	103	98	NR	NR	NR			NR	NR	NR	83	
EL 694RE	NR	NR	NR	75	72	80			22	36	67	NR	
M Blk I	100	98	92	68	57	97			23	38	57	81	
M Blk II	99	97	98	6-11-92 ~~76~~ NR	NR	NR			NR	NR	NR	NR	
M Blk IIRE	NR	NR	NR	76	74	84			36	51	69	NR	
EL 691MS	100	98	88	72	57	94			19	25	54	+	(0.4 d.)
EL 691MSD	99	99	90	76	62	91			16	19*	55	83	(0.4 d.)

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 0 out of 30 ; outside of QC limits

Semi-Volatiles: 2 out of 60 ; outside of QC limits

Pesticides: 0 out of 8 ; outside of QC limits

Comments: Evaluation Std. Mix C (Run #994) used to calculate DBC recoveries.
+ Unable to calculate due to a co-eluting interference peak.

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7285.5.082-02

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 7265 Contractor Clayton Environmental Contract No. 68-01-7100

Low Level ✓ Medium Level _____

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO. EL-688	1,1-Dicholoroethene	53	0	51	96	50	94	2.0	22	59-172
	Trichloroethene	53	9	51	79	50	77	2.0	24	62-137
	Chlorobenzene	53	0	53	100	52	98	1.9	21	60-133
	Toluene	53	6	62	106	68	117	9.2	21	59-139
	Benzene	53	0	55	104	53	100	3.7	21	66-142
B/N SMO SAMPLE NO. EL-688	1,2,4-Trichlorobenzene	3500	0	2100	60	1900	54	10	23	38-107
	Acenaphthene	3500	0	2200	63	2100	60	4.7	19	31-137
	2,4 Dinitrotoluene	3500	0	1700	49	1700	49	0	47	28-89
	Pyrene	3500	600	3500	83	3800	91	8.2	36	35-142
	N-Nitrosodi-n-Propylamine	3500	0	2000	57	1800	51	11	38	41-126
	1,4-Dichlorobenzene	3500	0	2000	57	1800	51	11	27	28-104
ACID SMO SAMPLE NO. EL-688	Pentachlorophenol	7000	0	4600	66	4400	63	4.4	47	17-109
	Phenol	7000	0	4500	64	3900	56	14	35	26-90
	2-Chlorophenol	7000	0	4000	57	3500	50	13	50	25-102
	4-Chloro-3-Methylphenol	7000	0	4400	63	4000	57	9.5	33	26-103
	4-Nitrophenol	7000	0	4100	59	1800	26	78*	50	11-114
PEST SMO SAMPLE NO. EL-688	Lindane	56	0	+	+	+	+	+	50	46-127
	Heptachlor	56	0	+	+	+	+	+	31	35-130
	Aldrin	56	0	+	+	+	+	+	43	34-132
	Dieldrin	140	0	+	+	+	+	+	38	31-134
	Endrin	140	0	+	+	+	+	+	45	42-139
	4,4'-DDT	140	0	+	+	+	+	+	50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5 : outside QC limits
B/N 0 out of 6 : outside QC limits
ACID 1 out of 5 : outside QC limits
PEST 0 out of 0 : outside QC limits

RECOVERY: VOAs 0 out of 10 : outside QC limits
B/N 0 out of 12 : outside QC limits
ACID 0 out of 10 : outside QC limits
PEST 0 out of 0 : outside QC limits

Comments: + Unable to calculate due to matrix interference in the ~~unspi~~ unspiked sample.

7/85

FORM III

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7285 • 5-023-01

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WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 7265 **Contractor** Clayton Environmental **Contract No.** 68-01-7100

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO. EL-691	1,1-Dichloroethene	62	0	59	95	58	94	1.7	14	61-145
	Trichloroethene	62	1	55	87	55	87	0	14	71-120
	Chlorobenzene	62	0	57	92	57	92	0	13	75-130
	Toluene	62	2	59	92	58	90	1.7	13	76-125
	Benzene	62	0	55	89	57	92	3.6	11	76-127
B/N SMO SAMPLE NO. EL-691	1,2,4-Trichlorobenzene	100	0	66 ✓	66	70 ✓	70	5.9	28	39-98
	Acenaphthene	100	0	65 ✓	65	73 ✓	73	12	31	46-118
	2,4 Dinitrotoluene	100	0	77 ✓	77	83 ✓	83	7.5	38	24-96
	Pyrene	100	0	95 ✓	95	95 ✓	95	0	31	26-127
	N-Nitroso-Di-n-Propylamine	100	0	58 ✓	58	72 ✓	72	22	38	41-116
	1,4-Dichlorobenzene	100	0	56 ✓	56	66 ✓	66	16	28	36-97
ACID SMO SAMPLE NO. EL-691	Pentachlorophenol	200	0	72 ✓	36	130 ✓	65	57*	50	9-103
	Phenol	200	0	45 ✓	22	35 ✓	18	25	42	12-89
	2-Chlorophenol	200	0	120 ✓	60	93 ✓	46	25	40	27-123
	4-Chloro-3-Methylphenol	200	0	130 ✓	65	110 ✓	55	17	42	23-97
	4-Nitrophenol	200	0	130 ✓	65	63 ✓	32	69*	50	10-80
PEST SMO SAMPLE NO. EL-691	Lindane	0.20	0	0.18	90	0.19	95	5.4	15	56-123
	Heptachlor	0.20	0	0.20	100	0.21	105	4.9	20	40-131
	Aldrin	0.20	0	0.16+	80	0.17	85	6.1	22	40-120
	Dieldrin	0.50	0	0.47++	94	0.47	94	0	18	52-126
	Endrin	0.50	0	▲	▲	0.52	104	▲	21	56-121
	4,4'-DDT	0.50	0	0.57++	~~0~~ 114	0.53	106	7.3	27	38-127

JG 6-11-87

* ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD:
VOAs 0 out of 5 : outside QC limits
B/N 0 out of 6 : outside QC limits
ACID 2 out of 5 : outside QC limits
PEST 0 out of 5 : outside QC limits

RECOVERY:
VOAs 0 out of 10 : outside QC limits
B/N 0 out of 12 : outside QC limits
ACID 0 out of 12 : outside QC limits
PEST 0 out of 11 : outside QC limits

Comments:
\+ Calculated using Ar/Ht ratio.
++ Calculated using manual peak height.
▲ Unable to calculate due to a co-eluting interference peak.

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7265.5-023-02

FORM III 7/85

METHOD BLANK SUMMARY

Case No. 7265 Region V Contractor Clayton Environmental Contract No. 68-01-7100

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (INCL. TIC OR UNKNOWN)	CONC.	UNITS	CRQL
B7877 MBlk I	5-19-87	VOA	SOIL	LOW	2B	67641	ACETONE	15	ug/kg	10
B7877 MBlk I	5-19-87	VOA	SOIL	LOW	2B	78933	2-BUTANONE	12	ug/kg	10
B7893 MBlk II	5-20-87	VOA	SOIL	LOW	2B	75092	METHYLENE CHLORIDE	0.9 J	ug/kg	5
B7893 MBlk II	5-20-87	VOA	SOIL	LOW	2B	67641	ACETONE	6 J	ug/kg	10
B7893 MBlk II	5-20-87	VOA	SOIL	LOW	2B	108101	4-METHYL-2-PENTANONE	3 J	ug/kg	10
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	—	Unknown compound	900 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	2216300	2,5-dimethyl heptane	1000 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	123422	4-hydroxy-4-methyl-2-pentanone*	20000 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	—	dimethyl heptane	300 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	16784461	3-ethyl-2-methyl hexane	2000 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	110123	5-methyl-2-hexanone	3000 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	2216344	4-methyl octane	3000 J	ug/kg	—
A8628 MBlk I	5-27-87	BNA	SOIL	LOW	1A	2216333	3-methyl octane	4000 J	ug/kg	—
Run# 1096 MBlk I	5-30-87	Pest	SOIL	LOW	HP5733	—	No Pest/PCB's detected at or above CRQL	—	—	—

Comments:

* Possible aldol condensation product.

FORM IV 7/85

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7265 • 5-024-01

METHOD BLANK SUMMARY

Case No. 7265 Region V Contractor Clayton Environmental Contract No. 68-01-7100

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (INCL. TIC OR UNKNOWN)	CONC.	UNITS	CRQL
B7819 MBlkI	5-16-87	VOA	WATER	LOW	2B	75092	METHYLENE CHLORIDE	1 J	ug/L	5
B7819 MBlkI	5-16-87	VOA	WATER	LOW	2B	67641	ACETONE	7 J	ug/L	10
B7819 MBlkI	5-16-87	VOA	WATER	LOW	2B	108101	4-METHYL-2-PENTANONE	4 J	ug/L	10
B7819 MBlkI	5-16-87	VOA	WATER	LOW	2B	79345	1,1,2,2-TETRACHLOROETHANE	0.8 J	ug/L	5
B7861 MBlkII	5-18-87	VOA	WATER	LOW	2B	75092	~~METHYLENE CHLORIDE~~ 6-8-87 Acetone	8 J	ug/L	~~5~~ 10
A8671 MBlkI	5-29-87	BNA	water	LOW	1A	123422	4-hydroxy-4-methyl-2-pentanone*	20 J	ug/L	—
A8830 MBlkIIRE	6-10-87	BNA	water	LOW	1A		No semi-volatile compounds detected	—	—	—
Run# 1014 MBlkI	5-27-87	Pest	water	LOW	HP-5733	—	No Pest/PCB's detected at or above CRDL	—	—	—

Comments:

* possible aldol condensation

AMC 6/10/87

FORM IV 7/85

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7265.5-024-02

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Sample Number
PFEL-684

7265 RECEIVED 5-028-01
JUL 06 1987

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7878 (545-550)
QC Report No: NA
Sample Matrix: SOIL
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-13-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5-19-87
Date Analyzed: 5-19-87
Conc/Dil Factor 1 pH 7.8
Percent Moisture: (Not Decanted) 15.38%

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	12 U	J
74-83-9	Bromomethane	12 U	J
75-01-4	Vinyl Chloride	12 U	
75-00-3	Chloroethane	12 U	
75-09-2	Methylene Chloride	5 J	
67-64-1	Acetone	78 B	
75-15-0	Carbon Disulfide	6 U	
75-35-4	1, 1-Dichloroethene	6 U	
75-34-3	1, 1-Dichloroethane	6 U	
156-60-5	Trans-1, 2-Dichloroethene	6 U	
67-66-3	Chloroform	6 U	
107-06-2	1, 2-Dichloroethane	6 U	
78-93-3	2-Butanone	12 U	J
71-55-6	1, 1, 1-Trichloroethane	6 U	
56-23-5	Carbon Tetrachloride	6 U	
108-05-4	Vinyl Acetate	12 U	J
75-27-4	Bromodichloromethane	6 U	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	6 U	
10061-02-6	Trans-1, 3-Dichloropropene	6 U	
79-01-6	Trichloroethene	4 J	
124-48-1	Dibromochloromethane	6 U	
79-00-5	1, 1, 2-Trichloroethane	6 U	
71-43-2	Benzene	6 U	
10061-01-5	cis-1, 3-Dichloropropene	6 U	
110-75-8	2-Chloroethylvinylether	12 U	J
75-25-2	Bromoform	6 U	
108-10-1	4-Methyl-2-Pentanone	12 U	J
591-78-6	2-Hexanone	12 U	J
127-18-4	Tetrachloroethene	6 U	
79-34-5	1, 1, 2, 2-Tetrachloroethane	6 U	
108-88-3	Toluene	3 J	
108-90-7	Chlorobenzene	6 U	
100-41-4	Ethylbenzene	6 U	
100-42-5	Styrene	6 U	
	Total Xylenes	6 U	

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

N Matrix spike compound

H Instrument limit of detection was used because it was higher than the CRDL

159 Indicates a value less than the dilution corrected limit of

Laboratory Name: Clayton Environmental

Case No: 7265

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Sample Number: EL-684

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 5/18/87

Date Analyzed: 5/28/87 (A8646)

Conc/Dil Factor: 0.5 (GPC)

Percent Moisture (Decanted): 15.38

GPC Cleanup: ☒ Yes ☐ No

Separatory Funnel Extraction ☐ Yes

Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	790 U
111-44-4	bis(-2-Chloroethyl)Ether	790 U
95-57-8	2-Chlorophenol	790 U
541-73-1	1 3-Dichlorobenzene	790 U
106-46-7	1 4-Dichlorobenzene	790 U
100-51-6	Benzyl Alcohol	790 U
95-50-1	1 2-Dichlorobenzene	790 U
95-48-7	2-Methylphenol	790 U
39638-32-9	bis(2-chloroisopropyl)Ether	790 U
106-44-5	4-Methylpheno	790 U
621-64-7	N-Nitroso-Di-n-Propylamine	790 U
67-72-1	Hexachloroethane	790 U
98-95-3	Nitrobenzene	790 U
78-59-1	Isophorone	790 U
88-75-5	2-Nitrophenol	790 U
105-67-9	2. 4-Dimethylphenol	790 U
65-85-0	Benzoic Acid	3900 U
111-91-1	bis(-2-ChloroethoxylMethane	790 U
120-83-2	2 4-Dichlorophenol	790 U
120-82-1	1 2. 4-Trichlorobenzene	790 U
91-20-3	Naphthalene	790 U
106-47-8	4-Chloroaniline	790 U
87-68-3	Hexachlorobutadiene	790 U
59-50-7	4-Chloro-3-Methylphenol	790 U
91-57-6	2-Methylnaphthalene	790 U
77-47-4	Hexachlorocyclopentadiene	790 U J
88-06-2	2. 4 6-Trichlorophenol	790 U
95-95-4	2. 4. 5-Trichlorophenol	3900 U
91-58-7	2-Chloronaphthalene	790 U
88-74-4	2-Nitroaniline	3900 U
131-11-3	Dimethyl Phthalate	790 U
208-96-8	Acenaphthylene	790 U
99-09-2	3-Nitroaniline	3900 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	790 U
51-28-5	2. 4-Dinitrophenol	3900 U
100-02-7	4-Nitrophenol	3900 U
132-64-9	Dibenzofuran	790 U
121-14-2	2 4-Dinitrotoluene	790 U
606-20-2	2. 6-Dinitrotoluene	790 U
84-66-2	Diethylphthalate	790 U
7005-72-3	4-Chlorophenyl-phenylether	790 U
86-73-7	Fluorene	790 U
100-01-6	4-Nitroaniline	3900 U
534-52-1	4 6-Dinitro-2-Methylphenol	3900 U
86-30-6	N-Nitrosodiphenylamine (1)	790 U
101-55-3	4-Bromophenyl-phenylether	790 U
118-74-1	Hexachlorobenzene	790 U
87-86-5	Pentachlorophenol	3900 U
85-01-8	Phenanthrene	110 J
120-12-7	Anthracene	790 U
84-74-2	Di-n-Butylphthalate	790 U
206-44-0	Fluoranthene	250 J
129-00-0	Pyrene	170 J
85-68-7	Butylbenzylphthalate	790 U
91-94-1	3. 3 -Dichlorobenzidine	2200 U
56-55-3	Benzo(a)Anthracene	110 J
117-81-7	bis(2-Ethylhexyl)Phthalate	150 J
218-01-9	Chrysene	140 J
117-84-0	Di-n-Octyl Phthalate	790 U
205-99-2	Benzo(b)Fluoranthene	130 J
207-08-9	Benzo(k)Fluoranthene	100 J
50-32-8	Benzo(a)Pyrene	140 J
193-39-5	Indeno(1. 2. 3-cd)Pyrene	1000 N
53-70-3	Dibenzo(a. h)Anthracene	1300 N
191-24-2	Benzo(g. h. i)Perylene	110 J

(J) KG

(1)-Cannot be separated from diphenylamine

Form I 7 85

Laboratory Name Clayton

Case No 7265

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Sample Number EL-684

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May 1987

Date Analyzed: 30 May 1987

Conc/(Dil Factor): 1 x 0.5 (GPC effect)

Percent Moisture (decanted) 15.38

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	19u
319-85-7	Beta-BHC	19u
319-86-8	Delta-BHC	19u
58-89-9	Gamma-BHC (Lindane)	19u
76-44-8	Heptachlor	19u
309-00-2	Aldrin	19u
1024-57-3	Heptachlor Epoxide	19u
959-98-8	Endosulfan I	19u
60-57-1	Dieldrin	38u
72-55-9	4,4'-DDE	38u
72-20-8	Endrin	38u
33213-65-9	Endosulfan II	38u
72-54-8	4,4'-DDD	38u
1031-07-8	Endosulfan Sulfate	38u
50-29-3	4,4'-DDT	38u
72-43-5	Methoxychlor	190u
53494-70-5	Endrin Ketone	38u
57-74-9	Chlordane	190u
8001-35-2	Toxaphene	380u
12674-11-2	Aroclor-1016	190u
11104-28-2	Aroclor-1221	190u
11141-16-5	Aroclor-1232	190u
53469-21-9	Aroclor-1242	190u
12672-29-6	Aroclor-1248	190u
11097-69-1	Aroclor-1254	380u
11096-82-5	Aroclor-1260	380u

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 _____ or W_s 30.00 g V_t 20,000 µl 40,000 µl due to GPC effect V_i 1 µl

R. Hallal 6/2/87

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a.K. 6-7-87

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Laboratory Name Clayton Environmental

Case No 7265

Sample Number
ELE184

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	NO VOLATILE COMPOUNDS DETECTED	UOA	—	—
2. —	POSSIBLE ACETIC ACID, -1-METHYLETHYL ESTER	BNA	5.65	900 J B
3. ~~7440-22-4~~	~~2,5-DIMETHYL HEPTANE~~ 2,5-DIMETHYL HEPTANE	BNA	6.06	700 J B
4. 123422	4-HYDROXY-4-METHYL-2-PENTANONE*	BNA	6.24	20000 J B
5. 16789461	3-ETHYL-2-METHYL HEXANE	BNA	6.54	1000 J B
6. 110123	5-METHYL-2-HEXANONE	BNA	6.59	3000 J B
7. 2216344	4-METHYL OCTANE	BNA	6.72	2000 J B
8. 2216333	3-METHYL OCTANE	BNA	6.90	3000 J B
9. —	UNKNOWN COMPOUND	BNA	8.27	500 J
10. 4436753	3-HEXENE-2,5-DIONE	BNA	8.70	400 J
11. —	UNKNOWN COMPOUND	BNA	9.66	800 J
12. —	UNKNOWN COMPOUND	BNA	10.89	1000 J
13. 593453	OCTADECANE	BNA	33.99	300 J
14. 638664	OCTADECANAL	BNA	35.32	400 J
15. —	UNKNOWN HYDROCARBON	BNA	35.85	1000 J
16. —	OCTADECENAL	BNA	37.28	400 J
17. —	UNKNOWN HYDROCARBON	BNA	37.90	600 J
18. —	UNKNOWN, POSSIBLE HYDROCARBON	BNA	39.99 ~~39.97~~	300 J
19. —	UNKNOWN COMPOUND	BNA	42.06	700 J
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

JG 6-9-87

*Possible aldol condensation product.

Sample Number
EL-685

7265 • 5-028-04

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7894 (545552)
QC Report No: NA
Sample Matrix: SOIL
Contract No: 68-01-7100
Data Release Authorized By:
Date Sample Received: 5-13-87

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Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-20-87
Date Analyzed: 5-20-87
Conc/Dil Factor: 1 pH 8.4
Percent Moisture: (Not Decanted) 6.33%

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	11 U	J
74-83-9	Bromomethane	11 U	
75-01-4	Vinyl Chloride	11 U	
75-00-3	Chloroethane	11 U	J+4
75-09-2	Methylene Chloride	1 JB	
67-64-1	Acetone	36 B	J
75-15-0	Carbon Disulfide	5 U	J
75-35-4	1, 1-Dichloroethene	5 U	
75-34-3	1, 1-Dichloroethane	5 U	
156-60-5	Trans-1, 2-Dichloroethene	5 U	
67-66-3	Chloroform	5 U	
107-06-2	1, 2-Dichloroethane	5 U	
78-93-3	2-Butanone	12	J
71-55-6	1, 1, 1-Trichloroethane	5 U	
56-23-5	Carbon Tetrachloride	5 U	
108-05-4	Vinyl Acetate	11 U	J
75-27-4	Bromodichloromethane	5 U	

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 U
10061-02-6	Trans-1, 3-Dichloropropene	5 U
79-01-6	Trichloroethene	1 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1, 1, 2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1, 3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	11 U
75-25-2	Bromoform	5 U
108-10-1	4-Methyl-2-Pentanone	11 U
591-78-6	2-Hexanone	11 U
127-18-4	Tetrachloroethene	5 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 U
108-88-3	Toluene	6
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

(J) KG

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC-MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

N Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the dilution corrected limit of

204

J.6

Laboratory Name Clayton Environmental

Case No 7265

Sample Number
EL6985

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7265 • 50028-05

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 5/18/87

Date Analyzed 5/28/87 (A8649)

Conc/Dil Factor: 0.5 (GPC)

Percent Moisture (Decanted) 6.33

GPC Cleanup ☒ Yes ☐ No

Separatory Funnel Extraction ☐ Yes

Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	710 U
111-44-4	bis(-2-Chloroethyl)Ether	710 U
95-57-8	2-Chlorophenol	710 U
541-73-1	1 3-Dichlorobenzene	710 U
106-46-7	1 4-Dichlorobenzene	710 U
100-51-6	Benzyl Alcohol	710 U
95-50-1	1 2-Dichlorobenzene	710 U
95-48-7	2-Methylphenol	710 U
39638-32-9	bis(2-chloroisopropyl)Ether	710 U
106-44-5	4-Methylpheno	710 U
621-64-7	N-Nitroso-Di-n-Propylamine	710 U
67-72-1	Hexachloroethane	710 U
98-95-3	Nitrobenzene	710 U
78-59-1	Isophorone	710 U
88-75-5	2-Nitrophenol	710 U
105-67-9	2. 4-Dimethylphenol	710 U
65-85-0	Benzoic Acid	3600 U
111-91-1	bis(-2-Chloroethoxy)Methane	710 U
120-83-2	2 4-Dichlorophenol	710 U
120-82-1	1 2. 4-Trichlorobenzene	710 U
91-20-3	Naphthalene	130 J
106-47-8	4-Chloroaniline	710 U
87-68-3	Hexachlorobutadiene	710 U
59-50-7	4-Chloro-3-Methylphenol	710 U
91-57-6	2-Methylnaphthalene	82 J
77-47-4	Hexachlorocyclopentadiene	710 U J
88-06-2	2. 4 6-Trichlorophenol	710 U
95-95-4	2. 4 5-Trichlorophenol	3600 U
91-58-7	2-Chloronaphthalene	710 U
88-74-4	2-Nitroaniline	3600 U
131-11-3	Dimethyl Phthalate	710 U
208-96-8	Acenaphthylene	140 J
99-09-2	3-Nitroaniline	3600 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	710 U
51-28-5	2. 4-Dinitrophenol	3600 U
100-02-7	4-Nitrophenol	3600 U
132-64-9	Dibenzofuran	710 U
121-14-2	2 4-Dinitrotoluene	710 U
606-20-2	2. 6-Dinitrotoluene	710 U
84-66-2	Diethylphthalate	710 U
7005-72-3	4-Chlorophenyl-phenylether	710 U
86-73-7	Fluorene	710 U
100-01-6	4-Nitroaniline	3600 U
534-52-1	4 6-Dinitro-2-Methylphenol	3600 U
86-30-6	N-Nitrosodiphenylamine (1)	710 U
101-55-3	4-Bromophenyl-phenylether	710 U
118-74-1	Hexachlorobenzene	710 U
87-86-5	Pentachlorophenol	3600 U
85-01-8	Phenanthrene	920
120-12-7	Anthracene	200 J
84-74-2	Di-n-Butylphthalate	710 U
206-44-0	Fluoranthene	3100
129-00-0	Pyrene	2400 J
85-68-7	Butylbenzylphthalate	710 U
91-94-1	3. 3 -Dichlorobenzidine	2000 N
56-55-3	Benzo(a)Anthracene	1500
117-81-7	bis(2-Ethylhexyl)Phthalate	470 J
218-01-9	Chrysene	1900
117-84-0	Di-n-Octyl Phthalate	710 U
205-99-2	Benzo(b)Fluoranthene	2700
207-08-9	Benzo(k)Fluoranthene	740 U
50-32-8	Benzo(a)Pyrene	2000
193-39-5	Indeno(1 2. 3-cd)Pyrene	830 J
53-70-3	Dibenz(a h)Anthracene	240 J
191-24-2	Benzo(g. h. i)Perylene	1200

(1)-Cannot be separated from diphenylamine

205 (J) KG

7265 · 5-028-06

Laboratory Name Clayton

Case No 7265

Sample Number El-68S

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May 1987

Date Analyzed: 1 June 1987

Conc/Dil Factor: 1 X 0.5 GPC effect

Percent Moisture (decanted) 6.33

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)	
319-84-6	Alpha-BHC		
319-85-7	Beta-BHC		
319-86-8	Delta-BHC	17u	*
58-89-9	Gamma-BHC (Lindane)	17u	*
76-44-8	Heptachlor	17u	*
309-00-2	Aldrin		
1024-57-3	Heptachlor Epoxide	17u	*
959-98-8	Endosulfan I		
60-57-1	Dieldrin	34u	*
72-55-9	4, 4'-DDE	34u	*
72-20-8	Endrin	34u	*
33213-65-9	Endosulfan II	34u	*
72-54-8	4, 4'-DDD	34u	*
1031-07-8	Endosulfan Sulfate		
50-29-3	4, 4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin Ketone		
57-74-9	Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-21-9	Aroclor-1242		
12672-29-6	Aroclor-1248		
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

* Only These compounds are reported at 1 dil.

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 _____ or W_s 30.00g V_t 20,000 µl / 40,000 due to GPC effect V_i 1 µl

R. Hallal 6/4/87

a.K. 6-7-87

7265 · 5-028-07

Laboratory Name Clayton

Case No 7265

Sample Number EL-685

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May 1987

Date Analyzed: 31 May 1987

Conc/(Dil Factor): 0.5 x0.5 (GPC effect)

Percent Moisture (decanted) 6.33

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)	
319-84-6	Alpha-BHC	34u	*
319-85-7	Beta-BHC		
319-86-8	Delta-BHC		
58-89-9	Gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin	34u	*
1024-57-3	Heptachlor Epoxide		
959-98-8	Endosulfan I	34u	*
60-57-1	Dieldrin		
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	68u	*
50-29-3	4,4'-DDT	68u	*
72-43-5	Methoxychlor		
53494-70-5	Endrin Ketone		
57-74-9	Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-21-9	Aroclor-1242		
12672-29-6	Aroclor-1248		
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

* only these compounds are reported at 0.5 dil.

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 _____ or W_s 30.00g V_t 20,000µl 40,000µl due to GPC effect 80,000µl due to 0.5 dil. V_i 1µl

a.k. 6-7-87

R.H. 6-1-87

7265 · 5-028-00

Laboratory Name Clayton

Case No 7265

Sample Number EL-685

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May 1987

Date Analyzed: 1 June 1987

Cond/Dil Factor: 0.2 x 0.5 (Gpc effect)

Percent Moisture (decanted) 6.33

GPC Cleanup ☑ Yes ☐ No

Separatory Funnel Extraction ☐ Yes

Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or (ug/Kg) (Circle One)	
319-84-6	Alpha-BHC		*
319-85-7	Beta-BHC	85u	
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		*
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	850u	
53494-70-5	Endrin Ketone	170u	
57-74-9	Chlordane	850u	
8001-35-2	Toxaphene	1700u	
12674-11-2	Aroclor-1016	850u	
11104-28-2	Aroclor-1221	850u	
11141-16-5	Aroclor-1232	850u	
53469-21-9	Aroclor-1242	850u	
12672-29-6	Aroclor-1248	850u	
11097-69-1	Aroclor-1254	1700u	
11096-82-5	Aroclor-1260	1700u	*

* Reported at 1 and 0.5 dilutions on next pages

V_t = 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 _____ or W_s 30.00 g V_t 20,000 µl / 40,000 µl due to Gpc effect / 200,000 µl due to 0.2 dil. V_i 1 µl

R. Hallal 6/2/87

A.K. 6-7-87

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7265 • 5-029-02

Laboratory Name Clayton Environmental

Case No 7265

Sample Number
EL-685

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	—	UNKNOWN COMPOUND (possible hydrocarbon)	VOA	24.16	6 J
2.	—	UNKNOWN COMPOUND	BNA	5.69	800 J B
3.	2216306	2,5-DIMETHYL HEPTANE	BNA	6.10	800 J B
4.	123422	4-HYDROXY-4-METHYL-2-PENTANONE *	BNA	6.28	20000 J B
5.	16789461	3-ETHYL-2-METHYL HEXANE	BNA	6.57	1100 J B
6.	110123	5-METHYL-2-HEXANONE	BNA	6.61	2000 J B
7.	2216344	4-METHYL OCTANE	BNA	6.75	2000 J B
8.	2216333	3-METHYL OCTANE	BNA	6.92	3000 J B
9.	—	POSSIBLE SOLVENT	BNA	8.28	800 J
10.	—	UNKNOWN COMPOUND	BNA	8.70	500 J
11.	—	UNKNOWN COMPOUND	BNA	9.69	300 J
12.	—	UNKNOWN COMPOUND	BNA	10.92	500 J
13.	203645	4H-CYCLOPENTA[def]PHENANTHRENE	BNA	25.62	400 J
14.	—	9,10-ANTHRACENEDIONE PLUS AN UNKNOWN	BNA	26.30	300 J
15.	—	UNKNOWN COMPOUND	BNA	35.05	1000 J
16.	—	POSSIBLE BENZO[e] PYRENE	BNA	35.96	1000 J
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

* Possible aldol condensation product.

Sample Number
EL-686

7265 5-028-09

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Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7898 (545554)
QC Report No: NA
Sample Matrix: SOIL
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-13-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5-20-87
Date Analyzed: 5-20-87
Conc/(Dil Factor): 0.4 pH 8.0
Percent Moisture: (Not Decanted) 5.67 %

CAS Number		ug/l or (ug/Kg) (Circle One)	
74-87-3	Chloromethane	27 U	J
74-83-9	Bromomethane	27 U	
75-01-4	Vinyl Chloride	27 U	
75-00-3	Chloroethane	27 U	
75-09-2	Methylene Chloride	2 J B	
67-64-1	Acetone	62 B	J
75-15-0	Carbon Disulfide	13 U	J
75-35-4	1, 1-Dichloroethene	13 U	
75-34-3	1, 1-Dichloroethane	13 U	
156-60-5	Trans-1, 2-Dichloroethene	6 J	
67-66-3	Chloroform	13 U	
107-06-2	1, 2-Dichloroethane	13 U	
78-93-3	2-Butanone	26 J	
71-55-6	1, 1, 1-Trichloroethane	11 J	
56-23-5	Carbon Tetrachloride	13 U	
108-05-4	Vinyl Acetate	27 U	J
75-27-4	Bromodichloromethane	13 U	

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	13 U
10061-02-6	Trans-1, 3-Dichloropropene	13 U
79-01-6	Trichloroethene	120
124-48-1	Dibromochloromethane	13 U
79-00-5	1, 1, 2-Trichloroethane	13 U
71-43-2	Benzene	2 J
10061-01-5	cis-1, 3-Dichloropropene	13 U
110-75-8	2-Chloroethylvinylether	27 U
75-25-2	Bromoform	13 U
108-10-1	4-Methyl-2-Pentanone	27 U
591-78-6	2-Hexanone	27 U
127-18-4	Tetrachloroethene	150
79-34-5	1, 1, 2, 2-Tetrachloroethane	13 U
108-88-3	Toluene	4 J
108-90-7	Chlorobenzene	2 J
100-41-4	Ethylbenzene	13 U
100-42-5	Styrene	13 U
	Total Xylenes	13 U

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

N Matrix spike compound

H Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the dilution corrected limit of

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Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL-686

7265-02810

RECEIVED JUL 06 1987

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 5/18/87

Date Analyzed 5/28/87

Conc/Dil Factor 0.25 (0.5 x 0.5-GPC)

Percent Moisture (Decanted) 5.67 %

GPC Cleanup ☒Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	1400 U
111-44-4	bis(-2-Chloroethyl)Ether	1400 U
95-57-8	2-Chlorophenol	1400 U
541-73-1	1 3-Dichlorobenzene	1400 U
106-46-7	1 4-Dichlorobenzene	1400 U
100-51-6	Benzyl Alcohol	1400 U
95-50-1	1 2-Dichlorobenzene	1400 U
95-48-7	2-Methylphenol	1400 U
39638-32-9	bis(2-chloroisopropyl)Ether	1400 U
106-44-5	4-Methylphenol	1400 U
621-64-7	N-Nitroso-Di-n-Propylamine	1400 U
67-72-1	Hexachloroethane	1400 U
98-95-3	Nitrobenzene	1400 U
78-59-1	Isophorone	650 J
88-75-5	2-Nitrophenol	1400 U
105-67-9	2. 4-Dimethylphenol	1400 U
65-85-0	Benzoic Acid	7100 U
111-91-1	bis(-2-Chloroethoxy)Methane	1400 U
120-83-2	2 4-Dichlorophenol	1400 U
120-82-1	1 2. 4-Trichlorobenzene	1400 U
91-20-3	Naphthalene	1400 U
106-47-8	4-Chloroaniline	1400 U
87-68-3	Hexachlorobutadiene	1400 U
59-50-7	4-Chloro-3-Methylphenol	1400 U
91-57-6	2-Methylnaphthalene	1400 U
77-47-4	Hexachlorocyclopentadiene	1400 U J
88-06-2	2. 4 6-Trichlorophenol	1400 U
95-95-4	2. 4. 5-Trichlorophenol	7100 U
91-58-7	2-Chloronaphthalene	1400 U
88-74-4	2-Nitroaniline	7100 U
131-11-3	Dimethyl Phthalate	1400 U
208-96-8	Acenaphthylene	1400 U
99-09-2	3-Nitroaniline	7100 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	1400 U
51-28-5	2. 4-Dinitrophenol	7100 U
100-02-7	4-Nitrophenol	7100 U
132-64-9	Dibenzofuran	1400 U
121-14-2	2 4-Dinitrotoluene	1400 U
606-20-2	2. 6-Dinitrotoluene	1400 U
84-66-2	Diethylphthalate	1400 U
7005-72-3	4-Chlorophenyl-phenylether	1400 U
86-73-7	Fluorene	1400 U
100-01-6	4-Nitroaniline	7100 U
534-52-1	4 6-Dinitro-2-Methylphenol	7100 U
86-30-6	N-Nitrosodiphenylamine (1)	1400 U
101-55-3	4-Bromophenyl-phenylether	1400 U
118-74-1	Hexachlorobenzene	1400 U
87-86-5	Pentachlorophenol	7100 U
85-01-8	Phenanthrene	1400 U
120-12-7	Anthracene	1400 U
84-74-2	Di-n-Butylphthalate	440 J
206-44-0	Fluoranthene	160 J
129-00-0	Pyrene	320 J
85-68-7	Butylbenzylphthalate	1500
91-94-1	3. 3 -Dichlorobenzidine	4000 N
56-55-3	Benzo(a)Anthracene	1400 U
117-81-7	bis(2-Ethylhexyl)Phthalate	15000
218-01-9	Chrysene	220 J
117-84-0	Di-n-Octyl Phthalate	7400
205-99-2	Benzo(b)Fluoranthene	400 J
207-08-9	Benzo(k)Fluoranthene	1400 U
50-32-8	Benzo(a)Pyrene	1400 U
193-39-5	Indeno(1 2. 3-cd)Pyrene	170 J
53-70-3	Dibenz(a h)Anthracene	2300 N
191-24-2	Benzo(g. h. i)Perylene	2400 N

(J) KG

(1)-Cannot be separated from diphenylamine

7265 • 5-028-11

Laboratory Name Clayton

Case No 7265

Sample Number 21-686

RECEIVED JUL 0 6 1987

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared 18 May 1987

Date Analyzed 31 May 1987

Conc/(Dil Factor) 1 X 0.5 (GPC effect)

Percent Moisture (decanted) 5.67

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)	
319-84-6	Alpha-BHC		*
319-85-7	Beta-BHC	17u	
319-86-8	Delta-BHC	17u	
58-89-9	Gamma-BHC (Lindane)	17u	
76-44-8	Heptachlor	17u	
309-00-2	Aldrin		*
1024-57-3	Heptachlor Epoxide	17u	
959-98-8	Endosulfan I	17u	
60-57-1	Dieldrin	34u	
72-55-9	4,4'-DDE	34u	
72-20-8	Endrin	34u	
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		
53494-70-5	Endrin Ketone		
57-74-9	Chlordane		*
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016		
11104-28-2	Aroclor-1221		
11141-16-5	Aroclor-1232		
53469-21-9	Aroclor-1242		
12672-29-6	Aroclor-1248		
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

* Reported at 0.2 dil on next page

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 _____ or W_s 30.00g V_t 20,000ul 40,000ul due to GPC effect V_i 1ul

R. Hallal 6/3/87

264

a.r. 6-7-87

7-85

7265 - 5-028-12

Laboratory Name Clayton

Case No 7265

Sample Number EL-686

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May 1987

Date Analyzed: 31 May 1987

Conc/(Dil Factor): 0.2 x 0.5 (GPC effect)

Percent Moisture (decanted) 5.67

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	85u *
319-85-7	Beta-BHC	
319-86-8	Delta-BHC	
58-89-9	Gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	85u *
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	
72-55-9	4,4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	170u
72-54-8	4,4'-DDD	170u
1031-07-8	Endosulfan Sulfate	170u
50-29-3	4,4'-DDT	170u
72-43-5	Methoxychlor	850u
53494-70-5	Endrin Ketone	170u
57-74-9	Chlordane	850u
8001-35-2	Toxaphene	1700u
12674-11-2	Aroclor-1016	850u
11104-28-2	Aroclor-1221	850u *
11141-16-5	Aroclor-1232	850u
53469-21-9	Aroclor-1242	850u
12672-29-6	Aroclor-1248	850u
11097-69-1	Aroclor-1254	1700u
11096-82-5	Aroclor-1260	1700u

* Reported at 0.2 dil.

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 _____ or W_s 30,00g V_t 20,000 µl 40,000 µl due to GPC effect 265 200,000 µl due to 0.2 dil. V_i 1 µl

a.k. 6-7-87
R. Hallal 6/3/87

7265 • 5-029-03

Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL-686

Organics Analysis Data Sheet
(Page 4)

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Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	—	NO VOLATILE COMPOUNDS DETECTED	VOA	—	—
2.	—	UNKNOWN COMPOUND	BNA	5.23	900 J B
3.	2216300	2,5-DIMETHYL HEPTANE	BNA	6.13	710 J B
4.	123422	4-HYDROXY-4-METHYL-2-PENTANONE*	BNA	6.29	20000 J B
5.	—	UNKNOWN POSSIBLE HYDROCARBON MW 128	BNA	6.59	2000 J
6.	110123	5-METHYL-2-HEXANONE	BNA	6.63	2000 J B
7.	2216344	4-METHYL OCTANE	BNA	6.77	2000 J B
8.	2216333	3-METHYL OCTANE	BNA	6.95	3000 J B
9.	97858	PROPANOIC ACID, 2-METHYL, 2-METHYL PROPYL ESTER	BNA	7.93	3000 J
10.	—	UNKNOWN COMPOUND	BNA	8.70	600 J
11.	—	UNKNOWN COMPOUND	BNA	9.68	700 J
12.	96437	[1,1'-BIPHENYL]-2-OL	BNA	19.65	700 J
13.	1241947	PHOSPHORIC ACID, 2-ETHYLHEXYL DIPHENYL ESTER	BNA	31.48	3000 J
14.	—	UNKNOWN, POSSIBLE PHTHALATE	BNA	32.55	4000 J
15.	3648213	POSSIBLE 1,2-BENZENEDICARBOXYLIC ACID, DIHEPTYL ESTER	BNA	33.73	2000 J
16.	85698	1,2-BENZENEDICARBOXYLIC ACID, BUTYL 2-ETHYLHEXYL ESTER	BNA	33.83	1000 J
17.	3648213	POSSIBLE 1,2-BENZENEDICARBOXYLIC ACID, DIHEPTYL ESTER	BNA	35.57	2000 J
18.	—	UNKNOWN, POSSIBLE PHTHALATE	BNA	38.45	3000 J
19.	—	POSSIBLE 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER	BNA	40.03	800 J
20.	—	POSSIBLE 1,2-BENZENEDICARBOXYLIC ACID, BIS (2-METHYL PROPYL) ESTER	BNA	41.40	1000 J
21.					
22.					
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30.					

* Possible aldol condensation product.

Sample Number
EL-687

Organics Analysis Data Sheet
(Page 1)

7265 • 5-028-13

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7881 (545556)
QC Report No: NA
Sample Matrix: SOIL
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-15-87

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Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5-19-87
Date Analyzed: 5-19-87
Conc/Dil Factor: 1 pH 7.8
Percent Moisture: (Not Decanted) 1.72 %

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10 U	J
74-83-9	Bromomethane	10 U	J
75-01-4	Vinyl Chloride	10 U	
75-00-3	Chloroethane	10 U	
75-09-2	Methylene Chloride	1 J	
67-64-1	Acetone	27 B	
75-15-0	Carbon Disulfide	5 U	
75-35-4	1, 1-Dichloroethene	5 U	
75-34-3	1, 1-Dichloroethane	5 U	
156-60-5	Trans-1, 2-Dichloroethene	1 J	
67-66-3	Chloroform	5 U	
107-06-2	1, 2-Dichloroethane	5 U	
78-93-3	2-Butanone	10 U	J
71-55-6	1, 1, 1-Trichloroethane	5 U	
56-23-5	Carbon Tetrachloride	5 U	
108-05-4	Vinyl Acetate	10 U	J
75-27-4	Bromodichloromethane	5 U	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5 U	
10061-02-6	Trans-1, 3-Dichloropropene	5 U	
79-01-6	Trichloroethene	6	
124-48-1	Dibromochloromethane	5 U	
79-00-5	1, 1, 2-Trichloroethane	5 U	
71-43-2	Benzene	5 U	
10061-01-5	cis-1, 3-Dichloropropene	5 U	
110-75-8	2-Chloroethylvinylether	10 U	J
75-25-2	Bromoform	5 U	
108-10-1	4-Methyl-2-Pentanone	10 U	J
591-78-6	2-Hexanone	10 U	J
127-18-4	Tetrachloroethene	10	
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 U	
108-88-3	Toluene	5	
108-90-7	Chlorobenzene	5 U	
100-41-4	Ethylbenzene	5 U	
100-42-5	Styrene	5 U	
	Total Xylenes	5 U	

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

H Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the dilution corrected limit of

Laboratory Name Clayton Environmental

Case No: 7265

Sample Number
EL-687

7265 • 5-008-14

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 5/18/87

Date Analyzed: 5/28/87 (A8647)

Conc/Dil Factor: 0.5 (GPC)

Percent Moisture (Decanted) 1.72

GPC Cleanup ☒Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	680 u
111-44-4	bis(-2-Chloroethyl)Ether	680 u
95-57-8	2-Chlorophenol	680 u
541-73-1	1 3-Dichlorobenzene	680 u
106-46-7	1 4-Dichlorobenzene	680 u
100-51-6	Benzyl Alcohol	680 u
95-50-1	1 2-Dichlorobenzene	680 u
95-48-7	2-Methylphenol	680 u
39638-32-9	bis(2-chloroisopropyl)Ether	680 u
106-44-5	4-Methylpheno	680 u
621-64-7	N-Nitroso-Di-n-Propylamine	680 u
67-72-1	Hexachloroethane	680 u
98-95-3	Nitrobenzene	680 u
78-59-1	Isophorone	680 u
88-75-5	2-Nitrophenol	680 u
105-67-9	2. 4-Dimethylphenol	680 u
65-85-0	Benzoic Acid	3400 u
111-91-1	bis(-2-Chloroethoxy)Methane	680 u
120-83-2	2 4-Dichlorophenol	680 u
120-82-1	1. 2. 4-Trichlorobenzene	680 u
91-20-3	Naphthalene	680 u
106-47-8	4-Chloroaniline	680 u
87-68-3	Hexachlorobutadiene	680 u
59-50-7	4-Chloro-3-Methylphenol	680 u
91-57-6	2-Methylnaphthalene	680 u
77-47-4	Hexachlorocyclopentadiene	680 u J
88-06-2	2. 4 6-Trichlorophenol	680 u
95-95-4	2. 4. 5-Trichlorophenol	3400 u
91-58-7	2-Chloronaphthalene	680 u
88-74-4	2-Nitroaniline	3400 u
131-11-3	Dimethyl Phthalate	680 u
208-96-8	Acenaphthylene	680 u
99-09-2	3-Nitroaniline	3400 u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	680 u
51-28-5	2. 4-Dinitrophenol	3400 u
100-02-7	4-Nitrophenol	3400 u
132-64-9	Dibenzofuran	680 u
121-14-2	2 4-Dinitrotoluene	680 u
606-20-2	2. 6-Dinitrotoluene	680 u
84-66-2	Diethylphthalate	680 u
7005-72-3	4-Chlorophenyl-phenylether	680 u
86-73-7	Fluorene	680 u
100-01-6	4-Nitroaniline	3400 u
534-52-1	4 6-Dinitro-2-Methylphenol	3400 u
86-30-6	N-Nitrosodiphenylamine (1)	680 u
101-55-3	4-Bromophenyl-phenylether	680 u
118-74-1	Hexachlorobenzene	680 u
87-86-5	Pentachlorophenol	3400 u
85-01-8	Phenanthrene	680 u
120-12-7	Anthracene	680 u
84-74-2	Di-n-Butylphthalate	250 J
206-44-0	Fluoranthene	680 u
129-00-0	Pyrene	680 u J
85-68-7	Butylbenzylphthalate	320 J
91-94-1	3. 3 -Dichlorobenzidine	1900 N
56-55-3	Benzo(a)Anthracene	680 u
117-81-7	bis(2-Ethylhexyl)Phthalate	2500
218-01-9	Chrysene	680 u
117-84-0	Di-n-Octyl Phthalate	680 u
205-99-2	Benzo(b)Fluoranthene	96 J
207-08-9	Benzo(k)Fluoranthene	680 u
50-32-8	Benzo(a)Pyrene	680 u
193-39-5	Indeno(1. 2. 3-cd)Pyrene	880 N
53-70-3	Dibenzo(a h)Anthracene	1100 N
191-24-2	Benzo(g. h. i)Perylene	1200 N

(J) KG

(1)-Cannot be separated from diphenylamine

Form I

7 85 1/1

7265-5-028-15

Laboratory Name Clayton

Case No 7265

Sample Number EL-687

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May, 1987

Date Analyzed: 31 ~~May~~ 1987 R.H 6/5/87

Conc./Dil Factor: 0.5X0.5 (GPC effect)

Percent Moisture (decanted) 1.72

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	33u
319-85-7	Beta-BHC	33u
319-86-8	Delta-BHC	33u
58-89-9	Gamma-BHC (Lindane)	33u
76-44-8	Heptachlor	33u
309-00-2	Aldrin	33u
1024-57-3	Heptachlor Epoxide	33u
959-98-8	Endosulfan I	33u
60-57-1	Dieldrin	65u
72-55-9	4,4'-DDE	65u
72-20-8	Endrin	65u
33213-65-9	Endosulfan II	65u
72-54-8	4,4'-DDD	65u
1031-07-8	Endosulfan Sulfate	65u
50-29-3	4,4'-DDT	65u
72-43-5	Methoxychlor	330u
53494-70-5	Endrin Ketone	65u
57-74-9	Chlordane	330u
8001-35-2	Toxaphene	650u
12674-11-2	Aroclor-1016	330u
11104-28-2	Aroclor-1221	330u
11141-16-5	Aroclor-1232	330u
53469-21-9	Aroclor-1242	330u
12672-29-6	Aroclor-1248	330u
11097-69-1	Aroclor-1254	650u
11096-82-5	Aroclor-1260	650u

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 _____ or W_s 30.00g V_t 20,000ul 40,000ul due to GPC effect 80,000ul due to 0.5 dil. V_i 1ul

R. Hallal 6/3/8.

a.K 6-5-87

7265 • 5-029-04

Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL-887

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	NO VOLATILE COMPOUNDS DETECTED	VOA	—	—
2. 926829	possible 1-methylethyl ester acetic acid plus unknown ~~3,5-DIMETHYL HEPTANE~~	BNA	5.70	800 J
3. 2216306	2,5-DIMETHYL HEPTANE	BNA	6.09	800 J B
4. 123422	4-HYDROXY-4-METHYL-2-PENTANONE *	BNA	6.27	20000 J B
5. 16784461	3-ETHYL-2-METHYL HEXANE	BNA	6.57	1000 J B
6. 110123	5-METHYL-2-HEXANONE	BNA	6.62	2000 J B
7. 2216344	4-METHYL OCTANE	BNA	6.75	2000 J B
8. 2216333	3-METHYL OCTANE	BNA	6.91	3000 J B
9. —	UNKNOWN, POSSIBLE HYDROCARBON MW 128	BNA	8.27	300 J
10. —	UNKNOWN COMPOUND	BNA	8.68	500 J
11. 1241947	~~2-ETHYLHEXYL~~ 2-ETHYLHEXYL PHOSPHORIC ACID, DIPHENYL ESTER	BNA	31.46	300 J
12. —	UNKNOWN COMPOUND	BNA	33.11	300 J
13. —	POSSIBLE TRI-P-CRESYL PHOSPHATE	BNA	34.34	400 J
14. —	UNKNOWN COMPOUND	BNA	34.48	400 J
15. —	UNKNOWN HYDROCARBON	BNA	37.91	500 J
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* Possible aldol condensation product.

7 85

Sample Number
EQL-688

7265 5-028-16

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Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7882 (545558)
QC Report No: NA
Sample Matrix: SOIL
Contract No: 68-01-7100
Data Release Authorized By:
Date Sample Received: 5-13-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-19-87
Date Analyzed: 5-19-87
Conc/Dil Factor: 1 pH 8.5
Percent Moisture: (Not Decanted) 4.91 %

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	11 U	J
74-83-9	Bromomethane	11 U	J
75-01-4	Vinyl Chloride	11 U	
75-00-3	Chloroethane	11 U	
75-09-2	Methylene Chloride	3 J	
67-64-1	Acetone	36 B	
75-15-0	Carbon Disulfide	5 U	
75-35-4	1, 1-Dichloroethene	5 U	
75-34-3	1, 1-Dichloroethane	5 U	
156-60-5	Trans-1, 2-Dichloroethene	2 J	
67-66-3	Chloroform	5 U	
107-06-2	1, 2-Dichloroethane	5 U	
78-93-3	2-Butanone	11 U	J
71-55-6	1, 1, 1-Trichloroethane	17	
56-23-5	Carbon Tetrachloride	10	
108-05-4	Vinyl Acetate	11 U	J
75-27-4	Bromodichloromethane	5 U	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5 U	
10061-02-6	Trans-1, 3-Dichloropropene	5 U	
79-01-6	Trichloroethene	9	
124-48-1	Dibromochloromethane	5 U	
79-00-5	1, 1, 2-Trichloroethane	5 U	
71-43-2	Benzene	5 U	
10061-01-5	cis-1, 3-Dichloropropene	5 U	
110-75-8	2-Chloroethylvinylether	11 U	J
75-25-2	Bromoform	5 U	
108-10-1	4-Methyl-2-Pentanone	11 U	J
591-78-6	2-Hexanone	11 U	J
127-18-4	Tetrachloroethene	9	
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 U	
108-88-3	Toluene	6	
108-90-7	Chlorobenzene	5 U	
100-41-4	Ethylbenzene	5 U	
100-42-5	Styrene	5 U	
	Total Xylenes	5 U	

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

N Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the dilution corrected limit of

1/4

Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL-688

Organics Analysis Data Sheet
(Page 2)

7265 • 5028-17

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Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/18/87

Date Analyzed: 5/28/87

Conc/(Dil Factor): 0.25 (0.5 x 0.5 - GPC)

Percent Moisture (Decanted) 4.91%

GPC Cleanup ☒Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	1400 U
111-44-4	bis(-2-Chloroethyl)Ether	1400 U
95-57-8	2-Chlorophenol	1400 U
541-73-1	1 3-Dichlorobenzene	1400 U
106-46-7	1 4-Dichlorobenzene	1400 U
100-51-6	Benzyl Alcohol	1400 U
95-50-1	1 2-Dichlorobenzene	1400 U
95-48-7	2-Methylphenol	1400 U
39638-32-9	bis(2-chloroisopropyl)Ether	1400 U
106-44-5	4-Methylpheno	1400 U
621-64-7	N-Nitroso-Di-n-Propylamine	1400 U
67-72-1	Hexachloroethane	1400 U
98-95-3	Nitrobenzene	1400 U
78-59-1	Isophorone	6900
88-75-5	2-Nitrophenol	1400 U
105-67-9	2. 4-Dimethylphenol	1400 U
65-85-0	Benzoic Acid	7000 U
111-91-1	bis(-2-Chloroethoxyl)Methane	1400 U
120-83-2	2 4-Dichlorophenol	1400 U
120-82-1	1 2. 4-Trichlorobenzene	1400 U
91-20-3	Naphthalene	190 J
106-47-8	4-Chloroaniline	1400 U
87-68-3	Hexachlorobutadiene	1400 U
59-50-7	4-Chloro-3-Methylphenol	1400 U
91-57-6	2-Methylnaphthalene	1400 U
77-47-4	Hexachlorocyclopentadiene	1400 U J
88-06-2	2. 4. 6-Trichlorophenol	1400 U
95-95-4	2. 4. 5-Trichlorophenol	7000 U
91-58-7	2-Chloronaphthalene	1400 U
88-74-4	2-Nitroaniline	7000 U
131-11-3	Dimethyl Phthalate	1400 U
208-96-8	Acenaphthylene	1400 U
99-09-2	3-Nitroaniline	7000 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	1400 U
51-28-5	2. 4-Dinitrophenol	7000 U
100-02-7	4-Nitrophenol	7000 U
132-64-9	Dibenzofuran	1400 U
121-14-2	2 4-Dinitrotoluene	1400 U
606-20-2	2. 6-Dinitrotoluene	1400 U
84-66-2	Diethylphthalate	550 J
7005-72-3	4-Chlorophenyl-phenylether	1400 U
86-73-7	Fluorene	1400 U
100-01-6	4-Nitroaniline	7000 U
534-52-1	4 6-Dinitro-2-Methylphenol	7000 U
86-30-6	N-Nitrosodiphenylamine (1)	290 J
101-55-3	4-Bromophenyl-phenylether	1400 U
118-74-1	Hexachlorobenzene	1400 U
87-86-5	Pentachlorophenol	7000 U
85-01-8	Phenanthrene	680 J
120-12-7	Anthracene	1400 U
84-74-2	Di-n-Butylphthalate	720 J
206-44-0	Fluoranthene	490 J
129-00-0	Pyrene	600 J
85-68-7	Butylbenzylphthalate	1700
91-94-1	3. 3 -Dichlorobenzidine	3900 N
56-55-3	Benzo(a)Anthracene	1400 U
117-81-7	bis(2-Ethylhexyl)Phthalate	7100
218-01-9	Chrysene	470 J
117-84-0	Di-n-Octyl Phthalate	1700
205-99-2	Benzo(b)Fluoranthene	370 J
207-08-9	Benzo(k)Fluoranthene	1400 U
50-32-8	Benzo(a)Pyrene	530 J
193-39-5	Indeno(1. 2. 3-cd)Pyrene	1800 N
53-70-3	Dibenz(a h)Anthracene	2200 N
191-24-2	Benzo(g. h. i)Perylene	370 J

(J) KG

(1)-Cannot be separated from diphenylamine

7265 - 5-028-18

Laboratory Name Clayton

Case No 7265

Sample Number EL-688

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 18 May 1987

Date Analyzed: 1 June 1987

Conc/(Dil Factor): 0.01 x 0.5 (GPC effect)

Percent Moisture (decanted) 4.91

GPC Cleanup ☑Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	1700u
319-85-7	Beta-BHC	1700u
319-86-8	Delta-BHC	1700u
58-89-9	Gamma-BHC (Lindane)	1700u
76-44-8	Heptachlor	1700u
309-00-2	Aldrin	1700u
1024-57-3	Heptachlor Epoxide	1700u
959-98-8	Endosulfan I	1700u
60-57-1	Dieldrin	3400u
72-55-9	4,4'-DDE	3400u
72-20-8	Endrin	3400u
33213-65-9	Endosulfan II	3400u
72-54-8	4,4'-DDD	3400u
1031-07-8	Endosulfan Sulfate	3400u
50-29-3	4,4'-DDT	3400u
72-43-5	Methoxychlor	17000u
53494-70-5	Endrin Ketone	3400u
57-74-9	Chlordane	17000u
8001-35-2	Toxaphene	34000u
12674-11-2	Aroclor-1016	17000u
11104-28-2	Aroclor-1221	17000u
11141-16-5	Aroclor-1232	17000u
53469-21-9	Aroclor-1242	17000u
12672-29-6	Aroclor-1248	17000u
11097-69-1	Aroclor-1254	34000u
11096-82-5	Aroclor-1260	34000u

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 _____ or W_s 30.00g V_t 20,000 µl 40,000 µl due to GPC effect 40,00000 due to 0.01 dilt. V_i 1 µl

R. Hallal 6/3/87

A. Kashed 6-7-87

Laboratory Name: Clayton Environmental

Case No: 7265

Sample Number: EP-689 RE

7265 · 028-20

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 6/10/87

Date Analyzed: 6/10/87

Conc/Dil Factor: 1

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)	
108-95-2	Phenol	10 u	
111-44-4	bis(-2-Chloroethyl)Ether	10 u	
95-57-8	2-Chlorophenol	10 u	
541-73-1	1 3-Dichlorobenzene	10 u	
106-46-7	1, 4-Dichlorobenzene	10 u	
100-51-6	Benzyl Alcohol	10 u	
95-50-1	1, 2-Dichlorobenzene	10 u	
95-48-7	2-Methylphenol	10 u	
39638-32-9	bis(2-chloroisopropyl)Ether	10 u	J
106-44-5	4-Methylphenol	10 u	
621-64-7	N-Nitroso-Di-n-Propylamine	10 u	
67-72-1	Hexachloroethane	10 u	
98-95-3	Nitrobenzene	10 u	J
78-59-1	Isophorone	10 u	
88-75-5	2-Nitrophenol	10 u	
105-67-9	2, 4-Dimethylphenol	10 u	
65-85-0	Benzoic Acid	50 u	
111-91-1	bis(-2-Chloroethoxy)Methane	10 u	
120-83-2	2, 4-Dichlorophenol	10 u	
120-82-1	1, 2, 4-Trichlorobenzene	10 u	
91-20-3	Naphthalene	10 u	
106-47-8	4-Chloroaniline	10 u	J
87-68-3	Hexachlorobutadiene	10 u	
59-50-7	4-Chloro-3-Methylphenol	10 u	
91-57-6	2-Methylnaphthalene	10 u	
77-47-4	Hexachlorocyclopentadiene	10 u	
88-06-2	2, 4, 6-Trichlorophenol	10 u	
95-95-4	2, 4, 5-Trichlorophenol	50 u	
91-58-7	2-Chloronaphthalene	10 u	
88-74-4	2-Nitroaniline	50 u	J
131-11-3	Dimethyl Phthalate	10 u	
208-96-8	Acenaphthylene	10 u	
99-09-2	3-Nitroaniline	50 u	J

CAS Number		(ug/l or ug/Kg) (Circle One)
83-32-9	Acenaphthene	10 u
51-28-5	2, 4-Dinitrophenol	50 u
100-02-7	4-Nitrophenol	50 u
132-64-9	Dibenzofuran	10 u
121-14-2	2, 4-Dinitrotoluene	10 u
606-20-2	2, 6-Dinitrotoluene	10 u
84-66-2	Diethylphthalate	10 u
7005-72-3	4-Chlorophenyl-phenylether	10 u
86-73-7	Fluorene	10 u
100-01-6	4-Nitroaniline	50 u
534-52-1	4, 6-Dinitro-2-Methylphenol	50 u
86-30-6	N-Nitrosodiphenylamine (1)	10 u
101-55-3	4-Bromophenyl-phenylether	10 u
118-74-1	Hexachlorobenzene	10 u
87-86-5	Pentachlorophenol	50 u
85-01-8	Phenanthrene	10 u
120-12-7	Anthracene	10 u
84-74-2	Di-n-Butylphthalate	10 u
206-44-0	Fluoranthene	10 u
129-00-0	Pyrene	10 u
85-68-7	Butylbenzylphthalate	10 u
91-94-1	3, 3'-Dichlorobenzidine	28 N
56-55-3	Benzo(a)Anthracene	10 u
117-81-7	bis(2-Ethylhexyl)Phthalate	1 J
218-01-9	Chrysene	10 u
117-84-0	Di-n-Octyl Phthalate	10 u
205-99-2	Benzo(b)Fluoranthene	11 N
207-08-9	Benzo(k)Fluoranthene	10 u
50-32-8	Benzo(a)Pyrene	10 u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	13 N
53-70-3	Dibenzo(a, h)Anthracene	16 N
191-24-2	Benzo(g, h, i)Perylene	17 N

(J) KG

(1)-Cannot be separated from diphenylamine

Sample Number
OEL-689

7265 5-028-19

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7820 (545560)
QC Report No: NA
Sample Matrix: WATER
Contract No: 68-01-7100
Data Release Authorized By:
Date Sample Received: 5-15-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-16-87
Date Analyzed: 5-16-87
Conc/Dil Factor: 1 pH 6-9
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10 u	J
74-83-9	Bromomethane	10 u	
75-01-4	Vinyl Chloride	10 u	
75-00-3	Chloroethane	5 J	
75-09-2	Methylene Chloride	5 u	
67-64-1	Acetone	6 J B	
75-15-0	Carbon Disulfide	5 u	
75-35-4	1, 1-Dichloroethene	5 u	
75-34-3	1, 1-Dichloroethane	3 J	
156-60-5	Trans-1, 2-Dichloroethene	5 u	
67-66-3	Chloroform	5 u	
107-06-2	1, 2-Dichloroethane	5 u	
78-93-3	2-Butanone	10 u	J
71-55-6	1, 1, 1-Trichloroethane	5 u	
56-23-5	Carbon Tetrachloride	5 u	
108-05-4	Vinyl Acetate	10 u	J
75-27-4	Bromodichloromethane	5 u	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	15	
10061-02-6	Trans-1, 3-Dichloropropene	5 u	
79-01-6	Trichloroethene	4 J	
124-48-1	Dibromochloromethane	5 u	
79-00-5	1, 1, 2-Trichloroethane	5 u	
71-43-2	Benzene	5 u	
10061-01-5	cis-1, 3-Dichloropropene	5 u	
110-75-8	2-Chloroethylvinylether	10 u	
75-25-2	Bromoform	5 u	
108-10-1	4-Methyl-2-Pentanone	10 u	J
591-78-6	2-Hexanone	10 u	J
127-18-4	Tetrachloroethene	5 u	
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u	
108-88-3	Toluene	5 u	
108-90-7	Chlorobenzene	5 u	
100-41-4	Ethylbenzene	5 u	
100-42-5	Styrene	5 u	
	Total Xylenes	5 u	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC-MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

H Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the

A 1 2

Laboratory Name Clayton Environmental

Case No 7265

7265 • 5-029-05

Sample Number EL688

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	NO VOLATILE COMPOUNDS DETECTED	VOA	—	—
2. 589344	3-methyl hexane	VOA	24.44	8 J
3. 123422	4-HYDROXY-4-METHYL-2-PENTANONE *	BNA	6.24	20000 J B
4. 110123	5-METHYL-2-HEXANONE	BNA	6.60	3000 J B
5. 2216333	3-METHYL OCTANE	BNA	6.91	3000 J B
6. —	POSSIBLE OCTANOIC ACID	BNA	13.55	6000 J
7. 112345	2-(2-BUTOXYETHOXY)-ETHANOL	BNA	13.82	3000 J
8. —	UNKNOWN COMPOUND	BNA	14.55	6000 J
9. 334485	DECANOIC ACID	BNA	17.03	3000 J
10. —	POSSIBLE HEXADECANE PLUS UNKNOWN	BNA	20.80	6000 J
11. —	UNKNOWN COMPOUND	BNA	21.21	5000 J
12. —	UNKNOWN COMPOUND	BNA	21.84	2000 J
13. 629787	HEPTADECANE	BNA	22.30	3000 J
14. —	UNKNOWN COMPOUND	BNA	25.05	4000 J
15. 57103	HEXADECANOIC ACID	BNA	25.88	4000 J
16. —	UNKNOWN COMPOUND	BNA	26.06	2000 J
17. —	UNKNOWN COMPOUND	BNA	28.29	5000 J
18. —	UNKNOWN COMPOUND	BNA	31.87	4000 J
19. —	UNKNOWN COMPOUND	BNA	33.83	40000 J
20. —	UNKNOWN COMPOUND	BNA	35.65	30000 J
21. —	UNKNOWN COMPOUND (possible brominated)	BNA	36.93	9000 J
22. —	UNKNOWN COMPOUND	BNA	37.60	4000 J
23. —	UNKNOWN HYDROCARBON PLUS unknown	BNA	37.93	3000 J
24. —	UNKNOWN COMPOUND (possibly brominated cmpd)	BNA	39.26	20000 J
25. —	UNKNOWN COMPOUND (possibly brominated cmpd)	BNA	39.76	40000 J
26.				
27.				
28.				
29.				
30.				

AS 5/21/87

* Possible aldol condensation product.

Laboratory Name Clayton

Case No 7265

Sample Number
E6689

7265-5
[redacted]-028-21

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

JG 6-12-87

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 15 May 1987

Date Analyzed: 27 May 1987

Conc/Dil Factor: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

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 1000 ml or W_s _____ V_t 10000 ul V_i 1.0 ul

A. Kochat 5-29-87
R. Hallal 6-8-87

7265 • 5-029-06

Laboratory Name Clayton Environmental

Case No 7265

Sample Number RE 689

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	NO VOLATILE COMPOUNDS DETECTED	VOA	—	—
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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25.				
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29.				
30.				

7265 · 5-029-07

Laboratory Name Clayton Environmental

Case No 7265

Sample Number
EEL-689 RE

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN COMPOUND	BNA	17.65	10J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Sample Number
EL-690

Organics Analysis Data Sheet
(Page 1)

7265 5-028-22

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Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7821 (545562)
QC Report No: NA
Sample Matrix: WATER
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-14-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5-16-87
Date Analyzed: 5-16-87
Conc/Dil Factor: 1 pH 7.1
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10 u	J
74-83-9	Bromomethane	10 u	
75-01-4	Vinyl Chloride	10 u	
75-00-3	Chloroethane	10 u	
75-09-2	Methylene Chloride	1 J B	
67-64-1	Acetone	43 B	J
75-15-0	Carbon Disulfide	5 u	
75-35-4	1, 1-Dichloroethene	5 u	
75-34-3	1, 1-Dichloroethane	5 u	
156-60-5	Trans-1, 2-Dichloroethene	5 u	
67-66-3	Chloroform	5 u	
107-06-2	1, 2-Dichloroethane	5 u	
78-93-3	2-Butanone	10 u	J
71-55-6	1, 1, 1-Trichloroethane	5 u	
56-23-5	Carbon Tetrachloride	5 u	
108-05-4	Vinyl Acetate	10 u	J
75-27-4	Bromodichloromethane	5 u	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5 u	
10061-02-6	Trans-1, 3-Dichloropropene	5 u	
79-01-6	Trichloroethene	5 u	
124-48-1	Dibromochloromethane	5 u	
79-00-5	1, 1, 2-Trichloroethane	5 u	
71-43-2	Benzene	5 u	
10061-01-5	cis-1, 3-Dichloropropene	5 u	
110-75-8	2-Chloroethylvinylether	10 u	
75-25-2	Bromoform	5 u	
108-10-1	4-Methyl-2-Pentanone	10 u	J
591-78-6	2-Hexanone	10 u	J
127-18-4	Tetrachloroethene	5 u	
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u	
108-88-3	Toluene	5 u	
108-90-7	Chlorobenzene	5 u	
100-41-4	Ethylbenzene	5 u	
100-42-5	Styrene	5 u	
	Total Xylenes	5 u	

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC-MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

N Matrix spike compound

N Instrument limit of detection was used because it was higher than the CRDL

A 2 2 A Indicates a value less than the

Laboratory Name: Clayton Enviromental

Case No: 7265

Sample Number: EL-690

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7265 5-028-23

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/15/87

Date Analyzed: 5/29/87

Conc/Dil Factor: 1

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol	10 u
111-44-4	bis(-2-Chloroethyl)Ether	10 u
95-57-8	2-Chlorophenol	10 u
541-73-1	1 3-Dichlorobenzene	10 u
106-46-7	1, 4-Dichlorobenzene	10 u
100-51-6	Benzyl Alcohol	10 u
95-50-1	1, 2-Dichlorobenzene	10 u
95-48-7	2-Methylphenol	10 u
39638-32-9	bis(2-chloroisopropyl)Ether	10 u
106-44-5	4-Methylphenol	10 u
621-64-7	N-Nitroso-Di-n-Propylamine	10 u
67-72-1	Hexachloroethane	10 u
98-95-3	Nitrobenzene	10 u
78-59-1	Isophorone	10 u
88-75-5	2-Nitrophenol	10 u
105-67-9	2, 4-Dimethylphenol	10 u
65-85-0	Benzoic Acid	50 u
111-91-1	bis(-2-Chloroethoxy)Methane	10 u
120-83-2	2, 4-Dichlorophenol	10 u
120-82-1	1, 2, 4-Trichlorobenzene	10 u
91-20-3	Naphthalene	10 u
106-47-8	4-Chloroaniline	10 u
87-68-3	Hexachlorobutadiene	10 u
59-50-7	4-Chloro-3-Methylphenol	10 u
91-57-6	2-Methylnaphthalene	10 u
77-47-4	Hexachlorocyclopentadiene	10 u J
88-06-2	2, 4, 6-Trichlorophenol	10 u
95-95-4	2, 4, 5-Trichlorophenol	50 u
91-58-7	2-Chloronaphthalene	10 u
88-74-4	2-Nitroaniline	50 u
131-11-3	Dimethyl Phthalate	10 u
208-96-8	Acenaphthylene	10 u
99-09-2	3-Nitroaniline	50 u

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10 u
51-28-5	2, 4-Dinitrophenol	50 u
100-02-7	4-Nitrophenol	50 u
132-64-9	Dibenzofuran	10 u
121-14-2	2, 4-Dinitrotoluene	10 u
606-20-2	2, 6-Dinitrotoluene	10 u
84-66-2	Diethylphthalate	10 u
7005-72-3	4-Chlorophenyl-phenylether	10 u
86-73-7	Fluorene	10 u
100-01-6	4-Nitroaniline	50 u
534-52-1	4, 6-Dinitro-2-Methylphenol	50 u
86-30-6	N-Nitrosodiphenylamine (1)	10 u
101-55-3	4-Bromophenyl-phenylether	10 u
118-74-1	Hexachlorobenzene	10 u
87-86-5	Pentachlorophenol	50 u
85-01-8	Phenanthrene	10 u
120-12-7	Anthracene	10 u
84-74-2	Di-n-Butylphthalate	10 u
206-44-0	Fluoranthene	10 u
129-00-0	Pyrene	10 u J
85-68-7	Butylbenzylphthalate	10 u
91-94-1	3, 3'-Dichlorobenzidine	28 N
56-55-3	Benzo(a)Anthracene	10 u
117-81-7	bis(2-Ethylhexyl)Phthalate	10 u
218-01-9	Chrysene	10 u
117-84-0	Di-n-Octyl Phthalate	10 u
205-99-2	Benzo(b)Fluoranthene	11 N
207-08-9	Benzo(k)Fluoranthene	10 u
50-32-8	Benzo(a)Pyrene	10 u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	13 N
53-70-3	Dibenzo, h)Anthracene	16 N
191-24-2	Benzo(g, h, i)Perylene	17 N

(1)-Cannot be separated from diphenylamine

(J) KG

Laboratory Name Clayton

Case No 7265

Sample Number
EL-69D

Organics Analysis Data Sheet
(Page 3)

7265 • 5-028-24

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Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 15 May 1987

Date Analyzed: 27 May 1987

Conc/~~Dil Factor~~: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

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 1000ml or W_s ____ V_t 10000ul V_i 1.0ul

A. Kashat 5-29-87
R. Hallal 6-8-87

7/85

7265 · 5-029-08

Laboratory Name Clayton Environmental

Case No 7265

Sample Number SEDL-690

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	No volatile compounds detected	VOA	—	—
2.	No semivolatile compounds detected	BNA	—	—
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Sample Number
EL-281

7265 • 5-28-25

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Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7863 (545565)
QC Report No: NA
Sample Matrix: WATER
Contract No: 68-01-7100
Data Release Authorized By:
Date Sample Received: 5-14-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-18-87
Date Analyzed: 5-18-87
Conc/Dil Factor: 0.8 pH 7.0
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	12 U	
74-83-9	Bromomethane	12 U	
75-01-4	Vinyl Chloride	29	
75-00-3	Chloroethane	39	
75-09-2	Methylene Chloride	6 U	
67-64-1	Acetone	16 B	J
75-15-0	Carbon Disulfide	6 U	
75-35-4	1, 1-Dichloroethene	6 U	
75-34-3	1, 1-Dichloroethane	45	
156-60-5	Trans-1, 2-Dichloroethene	69	
67-66-3	Chloroform	6 U	
107-06-2	1, 2-Dichloroethane	6 U	
78-93-3	2-Butanone	12 U	J
71-55-6	1, 1, 1-Trichloroethane	15	
56-23-5	Carbon Tetrachloride	6 U	
108-05-4	Vinyl Acetate	12 U	
75-27-4	Bromodichloromethane	6 U	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	190	
10061-02-6	Trans-1, 3-Dichloropropene	6 U	
79-01-6	Trichloroethene	1 J	
124-48-1	Dibromochloromethane	6 U	
79-00-5	1, 1, 2-Trichloroethane	6 U	J
71-43-2	Benzene	6 U	
10061-01-5	cis-1, 3-Dichloropropene	6 U	
110-75-8	2-Chloroethylvinylether	12 U	
75-25-2	Bromoform	6 U	
108-10-1	4-Methyl-2-Pentanone	12 U	
591-78-6	2-Hexanone	12 U	
127-18-4	Tetrachloroethene	6 U	
79-34-5	1, 1, 2, 2-Tetrachloroethane	6 U	
108-88-3	Toluene	2 J	
108-90-7	Chlorobenzene	6 U	
100-41-4	Ethylbenzene	7	
100-42-5	Styrene	6 U	
	Total Xylenes	6 U	

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

N Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the dilution corrected limit of

444

Laboratory Name: Clayton Environmental

Case No: 7265

Sample Number: PBC-691

7265 5-028-26

RECEIVED JUL 0 6 1987

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/15/87

Date Analyzed: 6/8/87

Conc/Dil Factor: 1

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)	
108-95-2	Phenol	10 u	
111-44-4	bis(-2-Chloroethyl)Ether	10 u	
95-57-8	2-Chlorophenol	10 u	
541-73-1	1 3-Dichlorobenzene	10 u	
106-46-7	1, 4-Dichlorobenzene	10 u	
100-51-6	Benzyl Alcohol	10 u	J
95-50-1	1, 2-Dichlorobenzene	10 u	
95-48-7	2-Methylphenol	10 u	
39638-32-9	bis(2-chloroisopropyl)Ether	10 u	J
106-44-5	4-Methylphenol	10 u	
621-64-7	N-Nitroso-Di-n-Propylamine	10 u	
67-72-1	Hexachloroethane	10 u	
98-95-3	Nitrobenzene	10 u	
78-59-1	Isophorone	10 u	
88-75-5	2-Nitrophenol	10 u	
105-67-9	2, 4-Dimethylphenol	10 u	
65-85-0	Benzoic Acid	50 u	
111-91-1	bis(-2-Chloroethoxy)Methane	10 u	
120-83-2	2, 4-Dichlorophenol	10 u	
120-82-1	1, 2, 4-Trichlorobenzene	10 u	
91-20-3	Naphthalene	10 u	
106-47-8	4-Chloroaniline	10 u	
87-68-3	Hexachlorobutadiene	10 u	
59-50-7	4-Chloro-3-Methylphenol	10 u	
91-57-6	2-Methylnaphthalene	10 u	
77-47-4	Hexachlorocyclopentadiene	10 u	
88-06-2	2, 4, 6-Trichlorophenol	10 u	
95-95-4	2, 4, 5-Trichlorophenol	50 u	
91-58-7	2-Chloronaphthalene	10 u	
88-74-4	2-Nitroaniline	50 u	J
131-11-3	Dimethyl Phthalate	10 u	
208-96-8	Acenaphthylene	10 u	
99-09-2	3-Nitroaniline	50 u	

CAS Number		(ug/l) or ug/Kg (Circle One)	
83-32-9	Acenaphthene	10 u	
51-28-5	2, 4-Dinitrophenol	50 u	
100-02-7	4-Nitrophenol	50 u	
132-64-9	Dibenzofuran	10 u	
121-14-2	2, 4-Dinitrotoluene	10 u	
606-20-2	2, 6-Dinitrotoluene	10 u	
84-66-2	Diethylphthalate	10 u	
7005-72-3	4-Chlorophenyl-phenylether	10 u	
86-73-7	Fluorene	10 u	
100-01-6	4-Nitroaniline	50 u	
534-52-1	4, 6-Dinitro-2-Methylphenol	50 u	
86-30-6	N-Nitrosodiphenylamine (1)	10 u	
101-55-3	4-Bromophenyl-phenylether	10 u	
118-74-1	Hexachlorobenzene	10 u	
87-86-5	Pentachlorophenol	50 u	
85-01-8	Phenanthrene	10 u	
120-12-7	Anthracene	10 u	
84-74-2	Di-n-Butylphthalate	10 u	
206-44-0	Fluoranthene	10 u	
129-00-0	Pyrene	10 u	
85-68-7	Butylbenzylphthalate	10 u	
91-94-1	3, 3'-Dichlorobenzidine	28 N	
56-55-3	Benzo(a)Anthracene	10 u	
117-81-7	bis(2-Ethylhexyl)Phthalate	4 J	
218-01-9	Chrysene	10 u	
117-84-0	Di-n-Octyl Phthalate	10 u	
205-99-2	Benzo(b)Fluoranthene	11 N	
207-08-9	Benzo(k)Fluoranthene	10 u	
50-32-8	Benzo(a)Pyrene	10 u	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	13 N	
53-70-3	Dibenz(a, h)Anthracene	16 N	
191-24-2	Benzo(g, h, i)Perylene	17 N	

(J) KG

(1)-Cannot be separated from diphenylamine

Laboratory Name Clayton

Case No 7265

Sample Number EL-691

7265 5-028-27

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 15 May 1987

Date Analyzed: 27 May 1987

Conc/Dil Factor: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4,4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4,4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4,4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

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 1000 ml or W_s _____ V_t 10000 ul V_i 1.0 ul

A. Kashat 5-29-87
R. Hallal 6-8-87

7/85

Laboratory Name Clayton Environmental

Case No 7265

7265 • 5-029-09

Sample Number RE-691

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 115071	1-PROPENE	VOA	2.94	10 J
2. —	BACKGROUND ARGON + CO_2 (SYSTEM ARTIFACT)	VOA	8.14	40 J
3. —	UNKNOWN COMPOUND (possibly chlorinated)	VOA	11.86	8 J
4. —	unknown compound	BNA	7.82	10 J
5. —	unknown compound	BNA	17.73	50 J
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Sample Number
EL-692

Organics Analysis Data Sheet
(Page 1)

7265 5-028-28

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Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7867 (545569)
QC Report No: NA
Sample Matrix: WATER
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-14-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-18-87
Date Analyzed: 5-18-87
Conc/Dil Factor: 0.025 pH 6.9
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	400 U
74-83-9	Bromomethane	400 U
75-01-4	Vinyl Chloride	400 U
75-00-3	Chloroethane	400 U
75-09-2	Methylene Chloride	39 J
67-64-1	Acetone	360 JB
75-15-0	Carbon Disulfide	200 U
75-35-4	1, 1-Dichloroethene	200 U
75-34-3	1, 1-Dichloroethane	72 J
156-60-5	Trans-1, 2-Dichloroethene	200 U
67-66-3	Chloroform	200 U
107-06-2	1, 2-Dichloroethane	200 U
78-93-3	2-Butanone	400 U J
71-55-6	1, 1, 1-Trichloroethane	200 U
56-23-5	Carbon Tetrachloride	200 U
108-05-4	Vinyl Acetate	400 U
75-27-4	Bromodichloromethane	200 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	200 U
10061-02-6	Trans-1, 3-Dichloropropene	200 U
79-01-6	Trichloroethene	200 U
124-48-1	Dibromochloromethane	200 U
79-00-5	1, 1, 2-Trichloroethane	200 U
71-43-2	Benzene	200 U
10061-01-5	cis-1, 3-Dichloropropene	200 U
110-75-8	2-Chloroethylvinylether	400 U
75-25-2	Bromoform	200 U
108-10-1	4-Methyl-2-Pentanone	400 U
591-78-6	2-Hexanone	400 U
127-18-4	Tetrachloroethene	200 U J
79-34-5	1, 1, 2, 2-Tetrachloroethane	200 U
108-88-3	Toluene	3500
108-90-7	Chlorobenzene	200 U
100-41-4	Ethylbenzene	2700
100-42-5	Styrene	200 U
	Total Xylenes	9400

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

H Instrument limit of detection was used because it was higher than the CRDL

A Indicates a value less than the dilution corrected limit of [illegible] than the CRDL

Laboratory Name: Clayton Environmental

Case No: 7265

Sample Number: EL-692

7265 · 5 RECEIVED JUL 06 1987

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/15/87

Date Analyzed: 6/1/87

Conc/(Dil Factor): 1

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)	
108-95-2	Phenol	10 u	
111-44-4	bis(-2-Chloroethyl)Ether	10 u	
95-57-8	2-Chlorophenol	10 u	
541-73-1	1 3-Dichlorobenzene	10 u	
106-46-7	1, 4-Dichlorobenzene	10 u	
100-51-6	Benzyl Alcohol	10 u	
95-50-1	1, 2-Dichlorobenzene	10 u	
95-48-7	2-Methylphenol	10 u	
39638-32-9	bis(2-chloroisopropyl)Ether	10 u	
106-44-5	4-Methylphenol	(12)	
621-64-7	N-Nitroso-Di-n-Propylamine	10 u	
67-72-1	Hexachloroethane	10 u	
98-95-3	Nitrobenzene	10 u	
78-59-1	Isophorone	10 u	
88-75-5	2-Nitrophenol	10 u	
105-67-9	2, 4-Dimethylphenol	8 J	
65-85-0	Benzoic Acid	50 u	
111-91-1	bis(-2-Chloroethoxy)Methane	10 u	
120-83-2	2, 4-Dichlorophenol	10 u	
120-82-1	1, 2, 4-Trichlorobenzene	10 u	
91-20-3	Naphthalene	(18)	
106-47-8	4-Chloroaniline	10 u	
87-68-3	Hexachlorobutadiene	10 u	
59-50-7	4-Chloro-3-Methylphenol	10 u	
91-57-6	2-Methylnaphthalene	10 u	
77-47-4	Hexachlorocyclopentadiene	10 u	J
88-06-2	2, 4, 6-Trichlorophenol	10 u	
95-95-4	2, 4, 5-Trichlorophenol	50 u	
91-58-7	2-Chloronaphthalene	10 u	
88-74-4	2-Nitroaniline	50 u	
131-11-3	Dimethyl Phthalate	10 u	
208-96-8	Acenaphthylene	10 u	J
99-09-2	3-Nitroaniline	50 u	

CAS Number		(ug/l) or ug/Kg (Circle One)	
83-32-9	Acenaphthene	10 u	
51-28-5	2, 4-Dinitrophenol	50 u	
100-02-7	4-Nitrophenol	50 u	J
132-64-9	Dibenzofuran	10 u	
121-14-2	2, 4-Dinitrotoluene	10 u	
606-20-2	2, 6-Dinitrotoluene	10 u	
84-66-2	Diethylphthalate	10 u	
7005-72-3	4-Chlorophenyl-phenylether	10 u	
86-73-7	Fluorene	10 u	
100-01-6	4-Nitroaniline	50 u	
534-52-1	4, 6-Dinitro-2-Methylphenol	50 u	
86-30-6	N-Nitrosodiphenylamine (1)	10 u	
101-55-3	4-Bromophenyl-phenylether	10 u	
118-74-1	Hexachlorobenzene	10 u	J
87-86-5	Pentachlorophenol	50 u	
85-01-8	Phenanthrene	10 u	J
120-12-7	Anthracene	10 u	
84-74-2	Di-n-Butylphthalate	10 u	
206-44-0	Fluoranthene	10 u	
129-00-0	Pyrene	10 u	J
85-68-7	Butylbenzylphthalate	10 u	
91-94-1	3, 3'-Dichlorobenzidine	28 N	
56-55-3	Benzo(a)Anthracene	10 u	
117-81-7	bis(2-Ethylhexyl)Phthalate	10 u	
218-01-9	Chrysene	10 u	
117-84-0	Di-n-Octyl Phthalate	10 u	
205-99-2	Benzo(b)Fluoranthene	11 N	J
207-08-9	Benzo(k)Fluoranthene	10 u	
50-32-8	Benzo(a)Pyrene	10 u	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	13 N	
53-70-3	Dibenz(a, h)Anthracene	16 N	
191-24-2	Benzo(g, h, i)Perylene	17 N	J

(1)-Cannot be separated from diphenylamine

(J) KG

Laboratory Name Clayton

Case No 7265

Sample Number EL-692

7265 · 5-028-30

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 15 May 1987

Date Analyzed: 27 May 1987

Conc/(Dil Factor): 0.2

Percent Moisture (decanted) ——

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.25µ
319-85-7	Beta-BHC	0.25µ
319-86-8	Delta-BHC	0.25µ
58-89-9	Gamma-BHC (Lindane)	0.25µ
76-44-8	Heptachlor	0.25µ
309-00-2	Aldrin	0.25µ
1024-57-3	Heptachlor Epoxide	0.25µ
959-98-8	Endosulfan I	0.25µ
60-57-1	Dieldrin	0.50µ
72-55-9	4,4'-DDE	0.50µ
72-20-8	Endrin	0.50µ
33213-65-9	Endosulfan II	0.50µ
72-54-8	4,4'-DDD	0.50µ
1031-07-8	Endosulfan Sulfate	0.50µ
50-29-3	4,4'-DDT	0.50µ
72-43-5	Methoxychlor	2.5µ
53494-70-5	Endrin Ketone	0.50µ
57-74-9	Chlordane	2.5µ
8001-35-2	Toxaphene	5.0µ
12674-11-2	Aroclor-1016	2.5µ
11104-28-2	Aroclor-1221	2.5µ
11141-16-5	Aroclor-1232	2.5µ
53469-21-9	Aroclor-1242	2.5µ
12672-29-6	Aroclor-1248	2.5µ
11097-69-1	Aroclor-1254	5.0µ
11096-82-5	Aroclor-1260	5.0µ

V_t = 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 1000ml or W_s ——— V_t 10000ul / 50000ul - 0.2dil V_i 1.0ul

477

A. Kashot 5-29-87
R. Hallal 6-8-87

7.85

7265 • 5-029-10

Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL 92

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	—	BACKGROUND ARGON + CO_2 (SYSTEM ARTIFACT)	VOA	8.10	2000 J
2.	108883	TOLUENE	BNA	4.70	2000 J
3.	100414	ETHYL BENZENE	BNA	6.75	2000 J
4.	108383	m-XYLENE	BNA	6.98	6000 J
5.	1330207	XYLENE (O+P-XYLENE)	BNA	7.47	1000 J
6.	98828	TMETHYLETHYLBENZENE	BNA	8.16	40 J
7.	103651	PROPYLBENZENE	BNA	8.82	30 J
8.	—	ETHYLMETHYLBENZENE	BNA	9.01	200 J
9.	—	TRIMETHYLBENZENE	BNA	9.16	60 J
10.	—	ETHYLMETHYLBENZENE	BNA	9.41	50 J
11.	—	TRIMETHYLBENZENE	BNA	9.72	200 J
12.	—	TRIMETHYLBENZENE	BNA	10.36	50 J
13.	496117	2,3-DIHYDRO-1H-INDENE	BNA	10.65	20 J
14.	873949	3,3,5-TRIMETHYLCYCLOHEXANONE	BNA	10.73	200 J
15.	116029	3,3,5-TRIMETHYLCYCLOHEXANOL	BNA	11.00	100 J
16.	—	UNKNOWN COMPOUND	BNA	11.08	20 J
17.	—	POSSIBLE DIBUTOXYMETHANOL	BNA	11.13	20 J
18.	—	UNKNOWN COMPOUND (alkyl benzene)	BNA	11.32	10 J
19.	—	UNKNOWN COMPOUND	BNA	12.04	10 J
20.	—	TETRAMETHYL BENZENE	BNA	12.44	10 J
21.	—	UNKNOWN COMPOUND	BNA	12.85	20 J
22.	824226	2,3-DIHYDRO-4-METHYL-1H-INDENE	BNA	13.08	10 J
23.	—	UNKNOWN COMPOUND	BNA	17.91	10 J
24.	10544500	MOL. SULFUR	BNA	27.32	40 J
25.					
26.					
27.					
28.					
29.					
30.					

Sample Number
EL-693

Organics Analysis Data Sheet
(Page 1)

7265 • 28-028-31

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Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7825 (545570)
QC Report No: NA
Sample Matrix: WATER
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-14-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-16-87
Date Analyzed: 5-16-87
Cond/Dil Factor: 1 pH 8.1
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	10 u	J
74-83-9	Bromomethane	10 u	
75-01-4	Vinyl Chloride	10 u	
75-00-3	Chloroethane	10 u	
75-09-2	Methylene Chloride	0.6 JB	
67-64-1	Acetone	4 JB	
75-15-0	Carbon Disulfide	5 u	
75-35-4	1, 1-Dichloroethene	5 u	
75-34-3	1, 1-Dichloroethane	5 u	
156-60-5	Trans-1, 2-Dichloroethene	5 u	
67-66-3	Chloroform	5 u	
107-06-2	1, 2-Dichloroethane	5 u	
78-93-3	2-Butanone	10 u	J
71-55-6	1, 1, 1-Trichloroethane	5 u	
56-23-5	Carbon Tetrachloride	5 u	
108-05-4	Vinyl Acetate	10 u	J
75-27-4	Bromodichloromethane	5 u	

CAS Number		ug/l or ug/Kg (Circle One)	
78-87-5	1, 2-Dichloropropane	5 u	
10061-02-6	Trans-1, 3-Dichloropropene	5 u	
79-01-6	Trichloroethene	5 u	
124-48-1	Dibromochloromethane	5 u	
79-00-5	1, 1, 2-Trichloroethane	5 u	
71-43-2	Benzene	5 u	
10061-01-5	cis-1, 3-Dichloropropene	5 u	
110-75-8	2-Chloroethylvinylether	10 u	
75-25-2	Bromoform	5 u	
108-10-1	4-Methyl-2-Pentanone	10 u	J
591-78-6	2-Hexanone	10 u	J
127-18-4	Tetrachloroethene	5 u	
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u	
108-88-3	Toluene	0.6 J	
108-90-7	Chlorobenzene	5 u	
100-41-4	Ethylbenzene	5 u	
100-42-5	Styrene	5 u	
	Total Xylenes	5 u	

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC-MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

M Matrix spike compound

N Instrument limit of detection was used because it was higher than the CRDL

5 Indicates a value less than the

Laboratory Name: Clayton Environmental

Case No: 7265

Sample Number
BK-693

7265 5-028-32

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/15/87

Date Analyzed: 6/1/87

Conc/Dil Factor: 1

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)	
108-95-2	Phenol	10 u	
111-44-4	bis(-2-Chloroethyl)Ether	10 u	
95-57-8	2-Chlorophenol	10 u	
541-73-1	1 3-Dichlorobenzene	10 u	
106-46-7	1, 4-Dichlorobenzene	10 u	
100-51-6	Benzyl Alcohol	10 u	
95-50-1	1, 2-Dichlorobenzene	10 u	
95-48-7	2-Methylphenol	10 u	
39638-32-9	bis(2-chloroisopropyl)Ether	10 u	
106-44-5	4-Methylphenol	10 u	
621-64-7	N-Nitroso-Di-n-Propylamine	10 u	
67-72-1	Hexachloroethane	10 u	
98-95-3	Nitrobenzene	10 u	
78-59-1	Isophorone	10 u	
88-75-5	2-Nitrophenol	10 u	
105-67-9	2, 4-Dimethylphenol	10 u	
65-85-0	Benzoic Acid	50 u	
111-91-1	bis(-2-Chloroethoxy)Methane	10 u	
120-83-2	2, 4-Dichlorophenol	10 u	
120-82-1	1, 2, 4-Trichlorobenzene	10 u	
91-20-3	Naphthalene	10 u	
106-47-8	4-Chloroaniline	10 u	
87-68-3	Hexachlorobutadiene	10 u	
59-50-7	4-Chloro-3-Methylphenol	10 u	
91-57-6	2-Methylnaphthalene	10 u	
77-47-4	Hexachlorocyclopentadiene	10 u	J
88-06-2	2, 4, 6-Trichlorophenol	10 u	
95-95-4	2, 4, 5-Trichlorophenol	50 u	
91-58-7	2-Chloronaphthalene	10 u	
88-74-4	2-Nitroaniline	50 u	
131-11-3	Dimethyl Phthalate	10 u	
208-96-8	Acenaphthylene	10 u	J
99-09-2	3-Nitroaniline	50 u	

CAS Number		(ug/l or ug/Kg) (Circle One)	
83-32-9	Acenaphthene	10 u	
51-28-5	2, 4-Dinitrophenol	50 u	
100-02-7	4-Nitrophenol	50 u	J
132-64-9	Dibenzofuran	10 u	
121-14-2	2, 4-Dinitrotoluene	10 u	
606-20-2	2, 6-Dinitrotoluene	10 u	
84-66-2	Diethylphthalate	10 u	
7005-72-3	4-Chlorophenyl-phenylether	10 u	
86-73-7	Fluorene	10 u	
100-01-6	4-Nitroaniline	50 u	
534-52-1	4, 6-Dinitro-2-Methylphenol	50 u	
86-30-6	N-Nitrosodiphenylamine (1)	10 u	
101-55-3	4-Bromophenyl-phenylether	10 u	
118-74-1	Hexachlorobenzene	10 u	
87-86-5	Pentachlorophenol	50 u	
85-01-8	Phenanthrene	10 u	
120-12-7	Anthracene	10 u	
84-74-2	Di-n-Butylphthalate	10 u	
206-44-0	Fluoranthene	10 u	
129-00-0	Pyrene	10 u	
85-68-7	Butylbenzylphthalate	10 u	
91-94-1	3, 3'-Dichlorobenzidine	28 N	
56-55-3	Benzo(a)Anthracene	10 u	
117-81-7	bis(2-Ethylhexyl)Phthalate	10 u	
218-01-9	Chrysene	10 u	
117-84-0	Di-n-Octyl Phthalate	10 u	
205-99-2	Benzo(b)Fluoranthene	11 N	
207-08-9	Benzo(k)Fluoranthene	10 u	
50-32-8	Benzo(a)Pyrene	10 u	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	13 N	
53-70-3	Dibenzo(a, h)Anthracene	16 N	
191-24-2	Benzo(g, h, i)Perylene	17 N	

(1)-Cannot be separated from diphenylamine

(J) KG

Laboratory Name: Clayton

Case No: 7265

Sample Number: EL-693

7265 5-028-33

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 15 May 1987

Date Analyzed: 27 May 1987

Conc/(Dil Factor): 1

Percent Moisture (decanted): —

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4,4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4,4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4,4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

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 1000ml or W_s _____ V_t 10000ul V_i 1.0ul

524

A. Kashat 5-29-87
R. Hallal 6-8-87

Laboratory Name Clayton Environmental

Case No 7265

7265 · 5-029-1

Sample Number EL-2C43

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 75285	2-METHYL PROPANE (ISOBUTANE)	VOA	7.06	20 J
2. —	No semi-volatiles compound detected	BNA	—	—
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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29.				
30.				

Sample Number
EL-694

Organics Analysis Data Sheet
(Page 1)

7265 · 5-28-34

RECEIVED JUL 06 1987

Laboratory Name: Clayton Environmental
Case No: 7265
Lab Sample ID No: B7862 (545573)
QC Report No: NA
Sample Matrix: WATER
Contract No: 68-01-7100
Data Release Authorized By: [signature]
Date Sample Received: 5-14-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 5-18-87
Date Analyzed: 5-18-87
Cond/Dil Factor 1 pH 6.9
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	5 J
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	5 JB
75-15-0	Carbon Disulfide	5 U
75-35-4	1, 1-Dichloroethene	5 U
75-34-3	1, 1-Dichloroethane	3 J
156-60-5	Trans-1, 2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1, 2-Dichloroethane	5 U
78-93-3	2-Butanone	10 U J
71-55-6	1, 1, 1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	16
10061-02-6	Trans-1, 3-Dichloropropene	5 U
79-01-6	Trichloroethene	4 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1, 1, 2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1, 3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 U J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

(J) KG

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

N Matrix spike compound

N Instrument limit of detection was used because it was higher than the CRQL

A Indicates a value less than the

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Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL-694

7265 • 5-02835

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 6/10/87

Date Analyzed 6/10/87

Conc/Dil Factor: 0.5

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)		
108-95-2	Phenol	20	u	
111-44-4	bis(-2-Chloroethyl)Ether	20	u	
95-57-8	2-Chlorophenol	20	u	
541-73-1	1 3-Dichlorobenzene	20	u	
106-46-7	1 4-Dichlorobenzene	20	u	
100-51-6	Benzyl Alcohol	20	u	
95-50-1	1 2-Dichlorobenzene	20	u	
95-48-7	2-Methylphenol	20	u	
39638-32-9	bis(2-chloroisopropyl)Ether	20	u	J
106-44-5	4-Methylpheno	20	u	
621-64-7	N-Nitroso-Di-n-Propylamine	20	u	
67-72-1	Hexachloroethane	20	u	
98-95-3	Nitrobenzene	20	u	J
78-59-1	Isophorone	20	u	
88-75-5	2-Nitrophenol	20	u	
105-67-9	2. 4-Dimethylphenol	20	u	
65-85-0	Benzoic Acid	100	u	
111-91-1	bis(2-Chloroethoxyl)Methane	20	u	
120-83-2	2 4-Dichlorophenol	20	u	
120-82-1	1 2. 4-Trichlorobenzene	20	u	
91-20-3	Naphthalene	20	u	
106-47-8	4-Chloroaniline	20	u	J
87-68-3	Hexachlorobutadiene	20	u	
59-50-7	4-Chloro-3-Methylphenol	20	u	
91-57-6	2-Methylnaphthalene	20	u	
77-47-4	Hexachlorocyclopentadiene	20	u	
88-06-2	2. 4 6-Trichlorophenol	20	u	
95-95-4	2. 4. 5-Trichlorophenol	100	u	
91-58-7	2-Chloronaphthalene	20	u	
88-74-4	2-Nitroaniline	100	u	J
131-11-3	Dimethyl Phthalate	20	u	
208-96-8	Acenaphthylene	20	u	
99-09-2	3-Nitroaniline	100	u	J

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	20	u
51-28-5	2. 4-Dinitrophenol	100	u
100-02-7	4-Nitrophenol	100	u
132-64-9	Dibenzofuran	20	u
121-14-2	2 4-Dinitrotoluene	20	u
606-20-2	2. 6-Dinitrotoluene	20	u
84-66-2	Diethylphthalate	20	u
7005-72-3	4-Chlorophenyl-phenylether	20	u
86-73-7	Fluorene	20	u
100-01-6	4-Nitroaniline	100	u
534-52-1	4 6-Dinitro-2-Methylphenol	100	u
86-30-6	N-Nitrosodiphenylamine (1)	20	u
101-55-3	4-Bromophenyl-phenylether	20	u
118-74-1	Hexachlorobenzene	20	u
87-86-5	Pentachlorophenol	100	u
85-01-8	Phenanthrene	20	u
120-12-7	Anthracene	20	u
84-74-2	Di-n-Butylphthalate	20	u
206-44-0	Fluoranthene	20	u
129-00-0	Pyrene	20	u
85-68-7	Butylbenzylphthalate	20	u
91-94-1	3. 3 -Dichlorobenzidine	56	N
56-55-3	Benzo(a)Anthracene	20	u
117-81-7	bis(2-Ethylhexyl)Phthalate	380	
218-01-9	Chrysene	20	u
117-84-0	Di-n-Octyl Phthalate	20	u
205-99-2	Benzo(b)Fluoranthene	22	N
207-08-9	Benzo(k)Fluoranthene	20	u
50-32-8	Benzo(a)Pyrene	20	u
193-39-5	Indeno(1 2. 3-cd)Pyrene	26	N
53-70-3	Dibenz(a h)Anthracene	32	N
191-24-2	Benzo(g h i)Perylene	34	N

(1)-Cannot be separated from diphenylamine

538 (J) KG

Laboratory Name Clayton

Case No 7265

Sample Number EL-694

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7265 • 5-028

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 15 May 1987

Date Analyzed: 27 May 1987

Conc/Dil Factor: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4,4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4,4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4,4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

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 1000 ml or W_s ____ V_t 10000 ul V_i 1.0 ul

a. Kashat 5-29-87
R. Hullal 6-8-87

7265 • 5-029-12

Laboratory Name Clayton Environmental

Case No 7265

Sample Number EL-694

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	NO VOLATILE COMPOUNDS DETECTED	VOA	—	—
2. 123795	Hexanedioic acid, Dioctyl ester	BNA	30.70	40J
3.				
4.				
5.				
6.				
7.				
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29.				
30.				

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International Specialists in the Environment

Date Received for Review 7/6/87 Date Review Completed 7/7/87

To: Tom Sullivan
From: Brenda R. Jones
Subject: Systech Liquid Treatment

PAN: FOH0514SI Case # 7265

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	#	Low Soil
	Low Water		Low Water
2	Drinking Water		Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓✓ Incomplete, awaiting: _____

FIT Data Review Findings:

1) No compounds detected in VOA and Pest/PCB fraction
2) A/B/N fractions lost by the lab during extraction

_____ Compounds were detected in sample(s); see enclosed Chemical Evaluation Form.

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ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH SUPERFUND HIT SAMPLE DATE 5/13/87 LAB ARRIVAL DATE 5/14/87 DUE DATE 6/4/87

DU NUMBER U905 C76100 DATA SET NUMBER 3840 STUDY Systech Liquid PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION Sample # TAG-IT	WATER VOLATILE ORGANICS SCAN UG/L TOX 17564	WATER ABN ORGANICS SCAN UG/L TOX 17574	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
87FS06R02	Blank 5-36612 5-36613	✓ Completed TCS 5-29-87 6/12/87			
87FS06S12	RW1 5-36604 5-36648 5-36649 5-36602	✓			
87FS06R02	Blank 5-36611		✓		
87FS06S12	RW1 5-36650 5-36601		✓		

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

Study Name: SYSTECH LIQUID
Sample # : 87FS06 S12

Data Set #: SF-3960
Matrix : WATER

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	CAS #	Compounds	Concentration (PPB)
1.	74-87-3	Chloromethane	10 U
2.	74-83-9	Bromomethane	10 U
3.	75-01-4	Vinyl Chloride	10 U
4.	75-00-3	Chloroethane	1.5 U
5.	75-09-2	Methylene Chloride	1.0 U
6.	107-02-8	Acrolein	100 U
7.	67-64-1	Acetone	75 U
8.	107-37-1	Acrylonitrile	50 U
9.	75-15-0	Carbon Disulfide	3.0 U
10.	75-35-4	1,1-Dichloroethene	1.5 U
11.	75-35-3	1,1-Dichloroethane	1.5 U
12.	156-60-5	trans-1,2-Dichloroethene	1.5 U
13.	67-66-3	Chloroform	1.5 U
14.	78-93-3	2-Butanone	50 U
15.	107-06-2	1,2-Dichloroethane	1.5 U
16.	71-55-6	1,1,1-Trichloroethane	1.5 U
17.	56-23-5	Carbon Tetrachloride	1.5 U
18.	108-05-4	Vinyl Acetate	15 U
19.	75-27-4	Bromodichloromethane	1.5 U
20.	78-87-5	1,2-Dichloropropane	1.5 U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0 U
22.	79-01-6	Trichloroethene	1.5 U
23.	71-43-2	Benzene	1.5 U
24.	124-48-1	Dibromochloromethane	1.5 U
25.	79-00-5	1,1,2-Trichloroethane	1.5 U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0 U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5 U
28.	75-25-2	Bromoform	1.5 U
29.	108-10-1	4-Methyl-2-pentanone	3.0 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: SYSTECH LIQUID
Sample # : 87FS06 R02

Data Set #: SF-3960
Matrix : WATER

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	CAS #	Compounds	Concentration (PPB)
1.	74-87-3	Chloromethane	10 U
2.	74-83-9	Bromomethane	10 U
3.	75-01-4	Vinyl Chloride	10 U
4.	75-00-3	Chloroethane	1.5 U
5.	75-09-2	Methylene Chloride	1.0 U
6.	107-02-8	Acrolein	100 U
7.	67-64-1	Acetone	75 U
8.	107-37-1	Acrylonitrile	50 U
9.	75-15-0	Carbon Disulfide	3.0 U
10.	75-35-4	1,1-Dichloroethene	1.5 U
11.	75-35-3	1,1-Dichloroethane	1.5 U
12.	156-60-5	trans-1,2-Dichloroethene	1.5 U
13.	67-66-3	Chloroform	1.5 U
14.	78-93-3	2-Butanone	50 U
15.	107-06-2	1,2-Dichloroethane	1.5 U
16.	71-55-6	1,1,1-Trichloroethane	1.5 U
17.	56-23-5	Carbon Tetrachloride	1.5 U
18.	108-05-4	Vinyl Acetate	15 U
19.	75-27-4	Bromodichloromethane	1.5 U
20.	78-87-5	1,2-Dichloropropane	1.5 U
21.	10061-02-6	trans-1,3-Dichloropropene	1.0 U
22.	79-01-6	Trichloroethene	1.5 U
23.	71-43-2	Benzene	1.5 U
24.	124-48-1	Dibromochloromethane	1.5 U
25.	79-00-5	1,1,2-Trichloroethane	1.5 U
26.	10061-01-5	cis-1,3-Dichloropropene	2.0 U
27.	110-75-8	2-Chloroethyl Vinyl Ether	1.5 U
28.	75-25-2	Bromoform	1.5 U
29.	108-10-1	4-Methyl-2-pentanone	3.0 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: SYSTECH LIQUID
Sample # : 87FS06 R02

Data Set #: SF-3960
Matrix : WATER

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TENTATIVELY IDENTIFIED COMPOUNDS	ESTIMATED CONC.(PPB)
2-METHYL PROPANE	95

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

DIVISION/BRANCH: ESD Sampling Date: 5/13/87 (Month Day Year) Arrival Date: 5/14/87 (Month Day Year) Analysis Due Date: 6/4/87 (Month Day Year)

Sample # D.U. Number: Y905 Group # : 3960 Activity # : C7600 Study: Systech liquid

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	T-Chlordane	Toxaphene
1 S7FS06R02	<.005	<.03	<.005	<.01	<.01	<.01	<.01	<.01	<.005	<.005	<.005	<.01	<.02	<.02	<.02	<.1	<.03	<.03	<.02	<1.0
2 S12	<.005	<.03	<.005	<.01	<.01	<.01	<.01	<.01	<.005	<.005	<.005	<.01	<.02	<.02	<.02	<.1	<.03	<.03	<.02	<1.0
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

AIC 6/3/87

4/5/87

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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM: Form #1:

DIVISION/BRANCH: ESD Sampling Date: 5/13/87 (Month Day Year) Arrival Date: 5/14/87 (Month Day Year) Analysis Due Date: 6/4/87 (Month Day Y

D.U. Number: Y905 Group #: 3960 Activity #: C76100 Study: Systech Liquid

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

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor	Aroclor	Aroclor	Dibuthyl phthalate	Diethyl Hexyl phthalate	
1	87FS06R02	<.1	<.1	<.1	<.1						
2	912	<.1	<.1	<.1	<.1						
3											
4											
5			AL	6/3/87							
6			G.F.	6-4-	87						
7				4/5/87							
8											
9											
10											
11											
12											
13											
14											
15											
16											

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

RECEIVED JUL 0 6 1987

CR for CR 7/1/87

DATE: 2 JUL 1987

SUBJECT: Review of Region 5 data for Systech Liquid

FROM: Curtis Ross, Director
Region 5 Central Regional Laboratory

To: Data User: FIT

Attached are the results for:

CRL Data Set Numbers: SF-3960
Sample Numbers: 87FS66R02; S12
Parameter(s): ABN
Laboratory: CRL

Results Status:

(✓) DATA ACCEPTABLE FOR USE*
( ) DATA QUALIFIED AS TO USE
(✓) DATA UNACCEPTABLE FOR USE

7/1/87

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

SAMPLES WERE LOST DURING EXTRACTION

If there are any questions regarding the data, refer them to Steve Parker, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

RECEIVED BY/DATE: Brenda R. Jones 6 June 87
Comments:

Filed by/date:

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

Date Received for Review 29 May 87 Date Review Completed 1 June 87

To: Tom Sullivan

From: Brenda R. Jones

Subject: Systech Liquid

PAN: FOH0574SI Case # 7265

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	#	Low Soil
	Low Water		Low Water
	Drinking Water	2	Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓ Incomplete, awaiting: organic data results

FIT Data Review Findings:

✓ Compounds were detected in sample(s); see enclosed Chemical Evaluation Form.

Book No. 6 Page No. 107

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CHICAGO, ILLINOIS

CHEMICAL EVALUATION FORM

SITE NAME: Systech Liquid PAN# FOH 0574ST DATE: 1 June 87

CASE # 7265 UNITS- µg/l REVIEWER: BLS

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	87F506 S12						
	Lead	70	210-350	6.1						
	Boron	Not listed	—	342						
	Barium	5	15-25	97.6						
	Copper	6	18-30	17.8						
	Iron	80	240-400	132						
	Lithium	10	30-50	26.9						
	Strontium	10	↓	2600						
	Zinc	40	120-200	148						

C76IZZ
7TFA05WUZZ
5/29/87
5/20/87

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND FIT SAMPLE DATE 5/13/87 LAB ARRIVAL DATE 5/14/87 DUE DATE 6/4/87

DU NUMBER 9905 (C76IZZ) DATA SET NUMBER 3960 STUDY Sytech Liquid PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION Sample# TAG#	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 ~~IK~~ CD UG/L MET1221
87FS06B02	Blank 5-36607	L	L <2	L <2	L <2	L <2	L <0.2 RP
87FS06S12	BL01 5-36646	L	L <2	L 6.1	L <2	L <2	L <0.2 RP
			JRC 5/15	RNP ~~5/15/87~~ 5/19/87	DM 5/20/87	JRC 5/15	BR 5/18/87

TRANSMITTED BY TELEMAIL

MAY 29 1987
U.S. EPA CENTRAL REGIONAL LAB

RECEIVED MAY 29 1987

C76/ZZ

RECEIVED MAY 29 1987 7TFA05W4ZZ

5-27-87 Y905

DATA SET : SF3960 Systech Liquid

JVM 28 May 87

5/28/87

5/27/87

ELEMENT		FS06R02		FS06S12
AG ug/l	<	6.	<	6.
AL	<	80.	<	80.
B	<	80.		342.
BA	<	6.		97.6
BE	<	1.	<	1.
CD	<	10.	<	10.
CO	<	6.	<	6.
CR	<	8.	<	8.
CU	<	6.		17.8
FE	<	80.		132.
LI	<	10.		26.9
MN	<	5.	<	5.
MO	<	15.	<	15.
NI	<	15.	<	15.
SN	<	40.	<	40.
SR	<	10.		2600.
TI	<	25.	<	25.
V	<	5.	<	5.
Y	<	5.	<	5.
ZN	<	40.		1480.
CA mg/l	<	0.5		88.
K	<	2.		2.49
MG	<	0.1		~~42.1~~ 40. ppm
NA		1.		21.6

TRANSMITTED BY

MAY 29 1987

U.S. EPA CENTRAL REGIONAL LAB

ecology and environment, inc.

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

International Specialists in the Environment

Date Received for Review: 26 May 87 Date Review Completed: 27 May 87

TO: Tom Sullivan

FROM: Brenda Robbins Jones

SUBJECT: Systech Liquid

Sample Description: Case # 7265

2- water cyanides - drinking water

Project Data Status: INcomplete

FIT Data Review Findings:

NO cyanide present

Addtional Comments:

Book No. 6

Page No. 105

recycled paper

5/20/87

OK-BB 5/19/87

5/22/87

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS - NUTRIENTS

DIVISION/BRANCH SUPERFUND FIT SAMPLE DATE 5/13/87 LAB ARRIVAL DATE 5/14/87 DUE DATE 6/4/87

DU NUMBER 4905 C7600 DATA SET NUMBER 3960 STUDY Systech Liquid PRIORITY ✓ CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION Sample # TAG #	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
87FS06B02	Blank 5-36608		✓ KS *			
87FS06S12	BW1 5-36647		✓ KS *			
			R.A. Bam			
			5-14-87			
			*SAMPLES	WERE RUN	USING AUTO-	UV
			METHOD	335.3		

RECEIVED MAY 26 1987