US EPA RECORDS CENTER REGION 5
484367

SAMPLING DATA

ecology and environment, inc.

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

International Specialists in the Environment

CRL Receipt Date 7/25 FIT Receipt Date 8/18 Review Completed 8/30/89

TO: Mazyck

FROM: Mary Gzyra

SUBJECT: United Recovery

PAN: IL0445SA (1 hour charged for review) Case # 12190

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	# 7	Low Soil
	Low Water		Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status ___ Completed!!

___ Incomplete, awaiting ___

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

___ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. ___ Date Sampled 6/19

0759:2

recycled paper

Zf 8/30/89

Table 4-> Cont.

2070-13 Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number >_1	>_2	>_3	>_4	>_5	>_6	>_7	>_8	>_9	>_10	>_11	>_12
				Analyte Detected (values in > mg/kg or µg/L)	MEFE 37	38	39	40	41	42	43					
Solid	A,D	MES	CSC	aluminum	2010	4720	1530	6380	8880	7460	7170					
Solid	A,D	MES	HM	antimony		8.3 B	7.8 B									
Solid	A,D	MES	HM	arsenic	17 JN*	14.1 JN*	3.8 JN*	2.7 JN*	4.0 JN*	19.4 JN*	3.1 JN*					
Solid	A,D	MES	CSC	barium	242	155	50.1	105	97.1	102	123					
Solid	A,D	MES	M	beryllium	1.3 B	0.79 B	0.72 B									
Solid	A,D	MES	HM	cadmium	10	8.0	3.0				0.55 JB					
Solid	D	MES	CSC	calcium	2970	5430	116000	3520	13000	2750	4390					
Solid	A,D	MES	HM	chromium	17100	9970	1030	20.6	67.7	12.4	15.3					
Solid	A,D	MES	HM	cobalt	1570	883	98.1	5.6 B	12 B	5.2 B	6.0 B					
Solid	A,D	MES	HM	copper	398	236	122	7.9	16.9	7.7	16					
Solid	A,D	MES	HM,CSC	iron	398000	237000	30200	9580	14600	10400	10400					
Solid	A,D	MES	HM	lead	26.2	14.1	44.1	15.7	18.8	11.7	27.9					
Solid	A,D	MES	CSC	magnesium	1540	3300	70600	2150	7760	1900	2000					
Solid	A,D	MES	HM	manganese	1370	999	299	566	465	605	671					
Liquid	A,D	MES	HM	mercury												
Solid	A,D	MES	HM	nickel	692	420	57.4	11.2	14.7	7.9 B	11.5					
Solid	D	MES	CSC	potassium		393 B		357 JB	629 B	539 B	1110 B					
Solid	A,D	MES	M	selenium												
Solid	A,D	MES	HM	silver												
Solid	D	MES	CSC	sodium	327 JB	432 B	194 JB	134 JB	140 JB	110 JB	112 JB					
Solid	A,D	MES	HM	thallium	1.2 B	1.1 B	0.67 B	0.34 B	0.52 B	0.48 B						
Solid	A,D	MES	HM	vanadium	5850	3420	336	18.8	46.3	27.5	22					
Solid	A,D	MES	CSC,HM	zinc	76.1	91.4	275	39.6	51.4	42.6	55.3					
Solid	A	IOC	IOC	cyanide	3.0											

— Not detected.

8/28

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 8-15-89

SUBJECT: Review of Region V CLP Data
Received for Review on 7-25-89

8/18/89

FROM. Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thulper

TO: Data User: Fit

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

SITE NAME: United Recovery SMO Case No. 12190

EPA Data Set No. SF 6310 No. of Samples: 7 D.U./Activity Numbers TFA/TFA102

CRL No. 89FM22513-519

SMO Traffic No. OMEFE 37-43

CLP Laboratory: Columbia Hrs. Required for Review: 3

+1/2 px 8/14/8

Following are our findings:

MF see next page

8/11/89

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications referenced above. See Data Qualifier sheets and Calibration Outlier forms for flags and additional comments.
( ) Data are preliminary - pending verification by Contractor Laboratory. See Case Summary above.
( ) Data are unacceptable.

cc: Carla Dempsey, CLP Quality Assurance Officer, Analytical Operations Branch
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

The laboratory portion of case 12190 contains 7 low level soils analyzed for total metals and total cyanide.

SOIL SAMPLES(MEFE37-43)

ICP ANALYSES: The lab flagged the duplicate of Cd(27.4%) however the duplicate limits for soils (35% RPD) were not exceeded.

The continuing calibration blank was found to contain: Cd(2.3 ug/l),K(455.2 ug/l), and Na(62.9 ug/l). The preparation blank was found to contain: Na(72.89 mg/Kg). The following are estimated(J) due to contamination: Na(all samples except MEFE38), Cd(MEFE43), and K(MEFE40). The rest of the Cd data are acceptable.

GFAA ANALYSES: The matrix spike of As(-5%) is out of control. The lab flagged(*) on the duplicate of As(+/- CRDL). All As data are estimated(J) due to a very low bias and poor precision.

The matrix spike of Se(0.0%) is out of control. The lab flagged(W) on Se for MEFE39. All Se data are < IDL and are unusable(R).

OTHER QUALIFIERS: All CN data are acceptable.

The correlation coefficient of Hg is < .995. All Hg data are estimated(UJ) due to poor linearity.

Reviewed by: M. Fletcher
Date: 8/11/89

DPO: [ ] ACTION [ ] FYI Region 5

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 12190 LABORATORY Columbia

SDG NO. MEFE37 DATA USER Fit

SOW 7/87 REVIEW COMPLETION DATE 8/11/89

NO. OF SAMPLES _____ WATER 7 SOIL _____ OTHER -

REVIEWER [ ] ESD [M] ESAT [ ] OTHER, CONTRACT/CONTRACTOR _____

	ICP	AA	Hg	CYANIDE
1. HOLDING TIMES	O	O	O	O
2. INITIAL CALIBRATIONS	O	O	O	O
3. CONTINUING CALIBRATIONS	O	O	O	O
4. FIELD BLANKS ("F" = not applicable)	O	O	O	O
5. LABORATORY BLANKS	X	O	O	O
6. ICS	O			
7. LCS	O	O		
8. DUPLICATE ANALYSIS	O	M	O	O
9. MATRIX SPIKE	O	M	O	O
10. MSA		O		
11. SERIAL DILUTION	O			
12. SAMPLE VERIFICATION	O	O	O	O
13. REGIONAL QC ("F" = not applicable)	O	O	O	O
14. OVERALL ASSESSMENT	X	M	O	O

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

QC EXCEPTION SUMMARY REPORT

CASE # 12190
DATA SET # SF6310
LAB Q.C.#
DATE: 1/89

SITE United Recovery
LAB Columbia
REVIEWED BY M. Fletcher

MATRIX: Soil
CONC. : low
MATRIX:
CONC. :

WATER SAMPLE SPK.
WATER SAMPLE DUP.
SOIL SAMPLE SPK.
SOIL SAMPLE DUP.

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Ind. 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	Blnd Blank	Blnd Spike %R	Spik Sample RPD	
Aluminum																								
Antimony																								
Arsenic										38.9	-5													
Barium																								
Beryllium																								
Cadmium		2.3																						
Calcium																								
Chromium																								
Cobalt																								
Copper																								
Iron																								
Lead																								
Magnesium																								
Manganese																								
Mercury																								
Nickel																								
Potassium		455.2																						
Selenium											0.0													
Silver																								
Sodium						72.89																		
Thallium																								
Tin																								
Vanadium																								
Zinc																								
Cyanide																								

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

SOW No.: 7/87

EPA Sample No.	Lab Sample ID.
MEFE37	
MEFE37D	
MEFE37S	
MEFE38	
MEFE39	
MEFE40	
MEFE41	
MEFE42	
MEFE43	

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Higher than usual levels of Mo and V required additional correction for interelement interferences from these elements after raw data generation.

Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Lab Manager: Thomas C. Lach

Date: 7-24-89

12190 50001 B

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE37

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 75.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2010			P
7440-36-0	Antimony	5.3	U		P
7440-38-2	Arsenic	17.0		N*	F
7440-39-3	Barium	242			P
7440-41-7	Beryllium	1.3	B		P
7440-43-9	Cadmium	10.0		*	P
7440-70-2	Calcium	2970			P
7440-47-3	Chromium	17100			P
7440-48-4	Cobalt	1570			P
7440-50-8	Copper	398			P
7439-89-6	Iron	398000			P
7439-92-1	Lead	26.2			F
7439-95-4	Magnesium	1560			P
7439-96-5	Manganese	1370			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	692			P
7440-09-7	Potassium	105	U		P
7782-49-2	Selenium	0.53	U	N	F
7440-22-4	Silver	0.79	U		P
7440-23-5	Sodium	327	B		P
7440-28-0	Thallium	1.2	B		F
7440-62-2	Vanadium	5850			P
7440-66-6	Zinc	76.1			P
	Cyanide	3.0			C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50002

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE38

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 80.7

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4720			P
7440-36-0	Antimony	8.3	B		P
7440-38-2	Arsenic	14.1		N*	F
7440-39-3	Barium	155			P
7440-41-7	Beryllium	0.79	B		P
7440-43-9	Cadmium	8.0		*	P
7440-70-2	Calcium	5430			P
7440-47-3	Chromium	9920			P
7440-48-4	Cobalt	893			P
7440-50-8	Copper	236			P
7439-89-6	Iron	237000			P
7439-92-1	Lead	14.1			F
7439-95-4	Magnesium	3300			P
7439-96-5	Manganese	999			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	420			P
7440-09-7	Potassium	393	B		P
7782-49-2	Selenium	0.50	U	N	F
7440-22-4	Silver	0.74	U		P
7440-23-5	Sodium	432	B		P
7440-28-0	Thallium	1.1	B		F
7440-62-2	Vanadium	3420			P
7440-66-6	Zinc	91.4			P
	Cyanide	1.2	U		C

Color Before: BLACK Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50003

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE39

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 92.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1530			P
7440-36-0	Antimony	7.8	B		P
7440-38-2	Arsenic	3.8		N*	F
7440-39-3	Barium	50.1			P
7440-41-7	Beryllium	0.72	B		P
7440-43-9	Cadmium	3.0		*	P
7440-70-2	Calcium	116000			P
7440-47-3	Chromium	1030			P
7440-48-4	Cobalt	98.1			P
7440-50-8	Copper	122			P
7439-89-6	Iron	30200			P
7439-92-1	Lead	44.1			F
7439-95-4	Magnesium	70600			P
7439-96-5	Manganese	298			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	57.4			P
7440-09-7	Potassium	86.4	U		P
7782-49-2	Selenium	0.43	U	NW	F
7440-22-4	Silver	0.65	U		P
7440-23-5	Sodium	194	B		P
7440-28-0	Thallium	0.67	B		F
7440-62-2	Vanadium	336			P
7440-66-6	Zinc	275			P
	Cyanide	1.1	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50004

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE40

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 88.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6380			P
7440-36-0	Antimony	4.5	U		P
7440-38-2	Arsenic	2.7		N*	F
7440-39-3	Barium	105			P
7440-41-7	Beryllium	0.45	U		P
7440-43-9	Cadmium	0.45	U	*	P
7440-70-2	Calcium	3520			P
7440-47-3	Chromium	20.6			P
7440-48-4	Cobalt	5.6	B		P
7440-50-8	Copper	7.9			P
7439-89-6	Iron	9580			P
7439-92-1	Lead	15.7			F
7439-95-4	Magnesium	2150			P
7439-96-5	Manganese	566			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	11.2			P
7440-09-7	Potassium	357	B		P
7782-49-2	Selenium	0.45	U	N	F
7440-22-4	Silver	0.68	U		P
7440-23-5	Sodium	134	B		P
7440-28-0	Thallium	0.34	B		F
7440-62-2	Vanadium	18.8			P
7440-66-6	Zinc	39.6			P
	Cyanide	1.1	U		C

Color Before: BLACK Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50005

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE41

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 80.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8880			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	4.0		N*	F
7440-39-3	Barium	97.1			P
7440-41-7	Beryllium	0.50	U		P
7440-43-9	Cadmium	0.50	U	*	P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	67.7			P
7440-48-4	Cobalt	12.9	B		P
7440-50-8	Copper	16.9			P
7439-89-6	Iron	14000			P
7439-92-1	Lead	15.8			F
7439-95-4	Magnesium	7760			P
7439-96-5	Manganese	465			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	14.7			P
7440-09-7	Potassium	629	B		P
7782-49-2	Selenium	0.50	U	N	F
7440-22-4	Silver	0.74	U		P
7440-23-5	Sodium	140	B		P
7440-28-0	Thallium	0.52	B		F
7440-62-2	Vanadium	45.3			P
7440-66-6	Zinc	51.4			P
	Cyanide	1.2	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50006

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE42

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 83.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7460			P
7440-36-0	Antimony	4.8	U		P
7440-38-2	Arsenic	19.4		N*	F
7440-39-3	Barium	102			P
7440-41-7	Beryllium	0.48	U		P
7440-43-9	Cadmium	0.48	U	*	P
7440-70-2	Calcium	2750			P
7440-47-3	Chromium	12.4			P
7440-48-4	Cobalt	5.2	B		P
7440-50-8	Copper	7.7			P
7439-89-6	Iron	10400			P
7439-92-1	Lead	11.7			F
7439-95-4	Magnesium	1900			P
7439-96-5	Manganese	605			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	7.9	B		P
7440-09-7	Potassium	539	B		P
7782-49-2	Selenium	0.48	U	N	F
7440-22-4	Silver	0.72	U		P
7440-23-5	Sodium	110	B		P
7440-28-0	Thallium	0.48	B		F
7440-62-2	Vanadium	22.5			P
7440-66-6	Zinc	42.6			P
	Cyanide	1.2	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50007

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEFE43

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Lab Sample ID:

Level (low/med): LOW Date Received: 06/20/89

% Solids: 88.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7170			P
7440-36-0	Antimony	4.5	U		P
7440-38-2	Arsenic	3.1		N*	F
7440-39-3	Barium	123			P
7440-41-7	Beryllium	0.45	U		P
7440-43-9	Cadmium	0.55	B	*	P
7440-70-2	Calcium	4380			P
7440-47-3	Chromium	15.3			P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	16.0			P
7439-89-6	Iron	10400			P
7439-92-1	Lead	27.9			F
7439-95-4	Magnesium	2000			P
7439-96-5	Manganese	671			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	11.5			P
7440-09-7	Potassium	1110	B		P
7782-49-2	Selenium	0.45	U	N	F
7440-22-4	Silver	0.68	U		P
7440-23-5	Sodium	112	B		P
7440-28-0	Thallium	0.23	U		F
7440-62-2	Vanadium	22.0			P
7440-66-6	Zinc	55.3			P
	Cyanide	1.1	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:

12190 50008

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3
BLANKS

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.0	U	10.0	U	10.0	U	20.9	B	3.672	B	P
Antimony	20.0	U	35.4	B	20.0	U	20.0	U	4.000	U	P
Arsenic	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	F
Barium	0.2	U	0.2	U	0.2	U	0.2	U	0.040	U	P
Beryllium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cadmium	2.6	B	2.0	U	2.3	B	2.0	U	0.400	U	P
Calcium	50.0	U	50.0	U	50.0	U	54.1	B	12.586	B	P
Chromium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Cobalt	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Copper	2.0	U	-2.2	B	2.0	U	2.0	U	0.400	U	P
Iron	5.0	U	5.0	U	61.6	B	64.6	B	1.000	U	P
Lead	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	F
Magnesium	30.0	U	30.0	U	30.0	U	-33.6	B	-7.026	B	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Potassium	400.0	U	400.0	U	455.2	B	400.0	U	80.000	U	P
Selenium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	F
Silver	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Sodium	50.0	U	50.0	U	50.0	U	62.9	B	72.890	B	P
Thallium	1.0	U	1.0	U	1.0	U	1.1	B	0.200	U	F
Vanadium	3.0	U	3.0	U	3.0	U	-3.2	B	-0.770	B	P
Zinc	5.5	B	2.1	B	2.0	U	2.0	U	0.680	B	P
Cyanide	10.0	U	10.0	U	10.0	U			1.000	U	C

12190 50012

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3
BLANKS

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			27.6	B							P
Antimony			20.0	U							P
Arsenic			1.0	U							F
Barium			0.2	U							P
Beryllium			2.0	U							P
Cadmium			2.0	U							P
Calcium			66.1	B							P
Chromium			4.0	U							P
Cobalt			10.0	U							P
Copper			-2.2	B							P
Iron			47.1	B							P
Lead			1.0	U							F
Magnesium			30.0	U							P
Manganese			1.0	U							P
Mercury											NR
Nickel			10.0	U							P
Potassium			400.0	U							P
Selenium			2.0	U							F
Silver			3.0	U							P
Sodium			57.8	B							P
Thallium			1.0	U							F
Vanadium			3.0	U							P
Zinc			3.0	B							P
Cyanide											NR

12190 50013

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEFE37S

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Level (low/med): LOW

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	101.5810		5.2701	U	131.8	77.1		P
Arsenic	75-125	16.4954		17.0224		10.5	-5.0	N	F
Barium	75-125	737.8630		241.6232		527.0	94.2		P
Beryllium	75-125	13.3597		1.2912	B	13.2	91.4		P
Cadmium	75-125	22.9038		10.0132		13.2	97.7		P
Calcium									NR
Chromium		16611.6780		17119.8940		52.7	-964.4		P
Cobalt		1589.1963		1573.7549		131.8	11.7		P
Copper		452.1739		398.0158		65.9	82.2		P
Iron									NR
Lead		22.2661		26.2187		5.3	-74.6		F
Magnesium									NR
Manganese		1485.4545		1369.7576		131.8	87.8		P
Mercury	75-125	0.6285		0.1231	U	0.6	104.8		CV
Nickel		799.9236		692.4269		131.8	81.6		P
Potassium									NR
Selenium	75-125	0.5270	U	0.5270	U	2.6	0.0	N	F
Silver	75-125	13.9394		0.7905	U	13.2	105.6		P
Sodium									NR
Thallium	75-125	12.7273		1.1858	B	13.2	87.4		F
Vanadium		5841.8972		5847.1673		131.8	-4.0		P
Zinc	75-125	201.8972		76.1107		131.8	95.4		P
Cyanide	75-125	8.9783		3.0026		6.6	90.5		C

Comments:

12190 50015

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEFE37D

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 75.9 % Solids for Duplicate: 75.9

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		2011.0672		2077.0988		3.2		P
Antimony	15.8	5.2701	U	5.2701	U			P
Arsenic	2.6	17.0224		11.4799		38.9	*	F
Barium	52.7	241.6232		219.5705		9.6		P
Beryllium	1.3	1.2912	B	0.9302	B	32.5		P
Cadmium		10.0132		13.1937		27.4	*	P
Calcium	1317.5	2970.3030		2481.2069		17.9		P
Chromium		17119.8940		16796.0520		1.9		P
Cobalt		1573.7549		1618.7088		2.8		P
Copper		398.0158		397.8920		0.0		P
Iron		397623.8400		394298.6800		0.8		P
Lead		26.2187		26.7457		2.0		F
Magnesium	1317.5	1558.4743		1447.0408		7.4		P
Manganese		1369.7576		1393.0487		1.7		P
Mercury	0.1	0.1231	U	0.1161	U			CV
Nickel		692.4269		706.6087		2.0		P
Potassium	1317.5	105.4018	U	118.6087	B	200.0		P
Selenium	1.3	0.5270	U	0.5270	U			F
Silver	2.6	0.7905	U	0.7905	U			P
Sodium	1317.5	326.5270	B	327.6100	B	0.3		P
Thallium	2.6	1.1858	B	1.1067	B	6.9		F
Vanadium		5847.1673		5781.8656		1.1		P
Zinc		76.1107		81.1858		6.5		P
Cyanide	0.7	3.0026		2.8623		4.8		C

12190 50017

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11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

ICP ID Number: TJA-1 Date: 07/15/89

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200.0	10.0	P
Antimony	206.80		60.0	20.0	P
Arsenic	193.60		10.0	30.0	P
Barium	493.40		200.0	0.2	P
Beryllium	313.00		5.0	2.0	P
Cadmium	288.80		5.0	2.0	P
Calcium	317.90		5000.0	50.0	P
Chromium	267.70		10.0	4.0	P
Cobalt	228.60		50.0	10.0	P
Copper	324.70		25.0	2.0	P
Iron	259.90		100.0	5.0	P
Lead	220.30		5.0	20.0	P
Magnesium	383.20		5000.0	30.0	P
Manganese	257.60		15.0	1.0	P
Mercury			0.2		
Nickel	231.60		40.0	10.0	P
Potassium	766.50		5000.0	400.0	P
Selenium	196.00		5.0	30.0	P
Silver	328.00		10.0	3.0	P
Sodium	588.90		5000.0	50.0	P
Thallium			10.0		
Vanadium	292.40		50.0	3.0	P
Zinc	213.80		20.0	2.0	P

Comments:

12190 50022

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11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

ICP ID Number: Date: 07/15/89

Flame AA ID Number:

Furnace AA ID Number: VARIAN-4

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.70	BZ	10.0	1.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			5.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

12190 50023

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11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

ICP ID Number: Date: 07/15/89

Flame AA ID Number:

Furnace AA ID Number: VARIAN-2

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	5.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium	276.80	BZ	10.0	1.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

12190 50024

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11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEFE37

ICP ID Number: Date: 04/15/89

Flame AA ID Number: VARIAN-3

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			5.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury	253.70	BD	0.2	0.2	CV
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

12190 50025

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11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COLUMBIA ANALYTICAL INC. Contract: 68-W8-0024

Lab Code: COLUMB Case No.: 12190 SAS No.: SDG No.: MEPE37

ICP ID Number: Date: 07/15/89

Flame AA ID Number:

Furnace AA ID Number: VARIAN-5

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			5.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.00	BZ	5.0	2.0	F
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

12190 50026

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

CRL Receipt Date 7/25 FIT Receipt Date 8/15 Review Completed 8/30/89

TO: Mayra
FROM: Mary Gzyra
SUBJECT: United Recovery
PAN: ILO445SA (1 hour charged for review) Case # 12190

Sample Description

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

Project Data Status _____ Completed!!

✓ Incomplete, awaiting Soil Moisture.

FIT Data Review Findings:

✓ ***Check Data Sheets for Transcription Errors***

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/19

0759:2

recycled paper

8/30/89

Table 4-_>_
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED >_____ SAMPLES

2070-13				Sample Collection Information and Parameters	Sample Number											
Physical State*	Waste Characteristics**	Category***	SI Memo		>_1	>_2	>_3	>_4	>_5	>_6	>_7	>_8	>_9	>_10	>_11	>_12
				Date												
				Time												
				Organic Traffic Report Number	EER 76	EER 77	EER 78	EER 79	EER 80	EER 81	EER 82					
				Inorganic Traffic Report Number												
				Temperature (°C)												
				Specific Conductivity (µmhos)												
				pH												
				Compound Detected (values in > µg/L or µg/kg)												
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride	13 JB			6			6					
Liquid	E,H,I,A	SOL	K,CLA	acetone				42 J								
Liquid	A,H,I	SOL	SH	carbon disulfide		110 J										
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform												
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane												
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane												
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene		16 J										
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene		43 J										
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene		9 J										
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)		27 J										

Table 4-> Cont.

2070-13				Sample Collection Information and Parameters	Sample Number											
Physical State*	Waste CHARACTERISTICS	CATEGORY**	SI Memo		≥ 1	≥ 2	≥ 3	≥ 4	≥ 5	≥ 6	≥ 7	≥ 8	≥ 9	≥ 10	≥ 11	≥ 12
				Semivolatile Organics												
S, thick liquid	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	H-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HH	hexachloroethane												
Liquid	A,D	OCC	HA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene												
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene							150 J					

Table 4-> Cont.

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number ≥ 1	≥ 2	≥ 3	≥ 4	≥ 5	≥ 6	≥ 7	≥ 8	≥ 9	≥ 10	≥ 11	≥ 12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate			55000 J				81 J					
Solid	A,D	OCC	PAH	fluoranthene							310 J					
Solid	A,D	OCC	PAH	pyrene							270 J					
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene							100 J					
Solid	A,D	OCC	PAH	chrysene							170 J					
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate	4100 J	3400 J	8700 J				95 J					
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene							270 J					
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene							140 J					
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

8/28

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 8/14/89

8/15/89

SUBJECT: Review of Region V CLP Data
Received for Review on 7-25-89

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

TO: Data User: Zit

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

SITE NAME: United Recovery SMO Case No. 12190

EPA Data Set No. SF 6310 No. of Samples: 7 D.U./Activity Numbers TFA/TFA102

CRL No. 89FM22513-19

SMO Traffic No. 9ER 76-82

CLP Laboratory: EMSI Hrs. Required for Review: 5.0

+1 = 6 hrs. AA 8/16/90

Following are our findings:

The following case consist of 7 soil samples for full organic analysis. Semi-volatile sample EEK78 was analyzed as a medium level sample. Semi-volatile sample EEK77 had a low surrogate recovery (10%) for nitrobenzene in the base/neutral fraction. Therefore, positive results are estimated and flagged "J", negative results unusable and flagged "R". Several VOA samples were reanalyzed due to poor surrogate and internal standard recoveries. The review narrative and qualification follows.

Wanda Freeman
Neston-Esat
August 10, 1989

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualifications referenced above.
See Data Qualifier sheets and Calibration Outlier forms for flags and additional comments.
( ) Data are preliminary - pending verification by Contractor Laboratory.
See Case Summary above.
( ) Data are unacceptable.

cc: Carla Dempsey, CLP Quality Assurance Officer, Analytical Operations Branch
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

Region V

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. 12190

SITE United Recovery

LABORATORY EMSL

NO. OF SAMPLES/ MATRIX 7 Soils

SDG # EER76

REVIEWER (IF NOT ESD) ESAT

SOW#

REVIEWER'S NAME Wanda Freeman

DPO: ACTION _____ FYI _____

COMPLETION DATE August 10, 1989

DATA ASSESSMENT SUMMARY

		VOA	BNA	PEST	OTHER
1.	HOLDING TIMES	OX	OX	O	
2.	GC/MS TUNE/INSTR. PERFORM.	O	O	O	
3.	CALIBRATIONS	OX	OX	O	
4.	BLANKS	OX	O	O	
5.	SURROGATES	OX	OX	O	
6.	MATRIX SPIKE/DUP	O	OX	O	
7.	OTHER QC	O	O	O	
8.	INTERNAL STANDARDS	OX	O	N/A	
9.	COMPOUND IDENTIFICATION	N/A	N/A	NA	
10.	SYSTEM PERFORMANCE	N/A	N/A	N/A	
11.	OVERALL ASSESSMENT	O	O	O	

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: _____

AREAS OF CONCERN: _____

NOTABLE PERFORMANCE: _____

DATA QUALIFIERS

Contractor: EMSI

Case 12190

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

1. Holding Times -
Volatile soil fractions EER76 - EER78 and EER80 - EER82 and EER76RE - EER78RE were analyzed within the 10 day holding time for analysis.
Samples EER79 and EER82RE exceeded the 10 day holding time for analysis by one day. Therefore, positive results should be considered estimated and flagged "J" sample quantitation limits "UJ" for aromatics only.
Semi-volatile soil sample EER78 exceeded the 10 day holding time for extraction by 13 days. Positive results should be considered estimated and flagged "J", sample quantitation limits "UJ". Soil samples EER76 - EER77, EER79 - EER82 were extracted within the 10 day holding time for extractions.
Pesticide/PCB soil fractions EER76 - EER82 were extracted within the 10 day holding time for extractions.

2. GC/MS Tuning and GC Instrument Performance -
All GC/MS BFB and DFTPP tuning criteria were within QC limits. The DDT and endrin breakdown were below 20% and the DDT retention time was above 12 minutes.

3. Calibration -
Volatile and semi-volatile outliers for initial and continuing calibrations are noted on the calibration outliers forms. The pesticide/PCB %RSD and %D values were within QC limits.

Reviewed by: Wanda Freeman
Phone: 353-2960
Date: August 10, 1989

DATA QUALIFIERS

Contractor: EMSI

Case 12190

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

Method Blanks -

Volatile blanks VB1K01 contained common contaminant methylene chloride. Blank VB1K02 contained common contaminant methylene chloride and acetone. Blank VB1K03 was free of contaminants. No TIC's were found in any of the blanks. Samples associated with each blank can be found on form IV VOA. Samples that contain the common contaminants with results (10 X less than) the blank level are estimated and flagged "U" for not detected. Annotation flags can be found on sample form I's.

Semi-Volatile blank SB1K01, SB1K02, SB1K03 and SB1K04 were free of contaminants. No TIC's were found in the blanks except blank B1K02 had 2 TIC's. Pesticide/PCB blank PB1K01 was free of contaminants.

Surrogate Recovery -

Soil VOA fractions were within QC limits except sample EER76, EER77 and EER78RE had high values for toluene-d8 (TOL) and low values for Bromo-fluorobenzene (BFB) outside QC limits. Samples EER76RE, EER77RE, EER78 and EER81RE had high values for TOL outside QC limits. Therefore, positive results are estimated and flagged "J" sample quantitation limits "UJ" for the above listed sample VOA's.

Semi-Volatile soil fractions were within QC limits except sample EER77 had a low value < 10% for nitrobenzene in the base/neutral fraction.

Reviewed by: Wanda Freeman

Phone: 353-2960

Date: August 10, 1989

DATA QUALIFIERS

Contractor: EMSL

Case 12190.

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

5. Surrogate Recovery (Continued) -
Therefore, positive results are estimated and flagged "(5)"; negative results unusable and flagged "(R)". For B/N Fraction of EER77:
Pesticide/PCB soil fractions were all within the advisory QC limits.

6. MS/MSD -
VOA soil EER81 MS/MSD and %RPD were within QC limits.
Semi-volatile medium level soil EER78 MS/MSD and %RPD were within QC limits. Semi-volatile soil EER82 MS were within QC limits except 4-chloro-3-methylphenol had a slightly high value outside QC limits. The MSD and %RPD were all within QC limits. Therefore, for the unspiked sample positive result should be considered estimated for 4-chloro-3-methylphenol.
Pesticide/PCB soil EER79 MS/MSD and %RPD were within QC limits.

7. Field Duplicates/Blanks -
No field duplicate or blanks were included in this case.

8. Internal Standard Performance -
VOA soil fractions were within required limits except samples EER76, EER76RE, EER77, EER78 and EER78RE

Reviewed by: Wanda Freeman
Phone: 353-2960
Date: August 16, 1989

DATA QUALIFIERS

Contractor: EMSI

Case 12190

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

8. Internal Standard Performance -
Low values for 1,4-dif uorobenzene (DFB) and Chlorobenzene (CBZ) outside the required limits. Samples EER77RE and E 82 had low values for CBZ. Therefore, positive results are estimated and flagged "J". Sample quantitation limits "UJ" of compounds associated with the internal standard can be found on table 4.
Semi-volatile soil fractions were within the required limits.

9. Compound Quantitation and Reported Detection Limits -
All volatile, semi-volatile and pesticide/PCB fractions were quantitated and calculated correctly.

10. Additional Problems -
No additional problems were found in this case.

Reviewed by: Wanda Freeman
Phone: 353-2960
Date: August 10, 1989

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

CASE/SAS # - 12190 CONTRACTOR EMSI

Instrument # ISDH	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6-23-89			6-26-89 7:09											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane				.483	34.7	J									
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone	.347			.594	71.8	J									
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	.0322	16.3	R	.025	27.3	R									
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate	.753			1.038	37.9	J									
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
Cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform	.387			.454	25.1	J									
2-Methyl-2-Pentanone	.510			.697	36.7	J									
2-Hexanone	.348			.463	33.1	J									
Tetrachloroethene															
1,1,2,2-Tetrachloroethane	.668			.847	30.4	J									
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VB1L01
EE1376

Reviewer's Initials/Date: WWA 8/10/89

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

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

CASE/SAS # 12190 CONTRACTOR EMSI

Instrument # ISDB	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	5-4-89			6-27-89 7:06			6-29-89 7:24								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane	1.046			1.455	39.1	J	1.565	49.9	J						
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone	.304	33.1	J	.481	58.2	J	.334								
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	.024	31.3	R	.025	10.7	R	.014	20.5	R						
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride	.659			.411	38.1	J	.515								
Vinyl Acetate	.701			.501	28.5	J	.469	33.2	J						
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
2-Methyl-2-Pentanone															
2-Hexanone	.148			.282	42.4	J	.150								
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VBIK02	VBK03
EER76RE	EER74
EER77	EER63RE
EER78	
EER81	
EER80	
EER77RE	
EER76RE	
EER82	
EER81MS	
EER81MSD	

Reviewer's Initials/Date: WJK 8/10/89

* 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/SAS # 12190 CONTRACTOR EMSI

Instrument # 4500B	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	5-6-89			6-27-89 18:47			7-3-89 11:34			7-5-89 12:01			7-12-89 20:38		
	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															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane	.264			.613			.712			.715			.684		
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol	.177			.048	44.6	J	.102	42.4	J	.101	42.9	J	.113		
Benzoic Acid	.111			.068	38.7	J	.047	57.7	R	.047	38.7	J	.047	57.7	R
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline	.175			.110	37.1	J	.123	29.7	J	.123	29.7	J	.093	46.9	J
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene	.292			.283			.233			.234			.247		
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline	.354			.371	28.1	J	.470			.428			.423	9.7	J
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline	.276			.204	26.1	J	.242			.231			.242		
Acenaphthene															
2,4-Dinitrophenol	.164			.121	34.2	J	.125	32.1	J	.148			.137	23.5	J
4-Nitrophenol															
Dibenzofuran															

AFFECTED SAMPLES:

SB1K01	SB1K02	EER70	SB1L03
EER87			EER70
EER82MS			
EER82MSD			
EER81			

Reviewer Initials/Date: WA 8/10/89

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

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

CASE/SAS # 12190 CONTRACTOR EMSI

Instrument # 45006	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	5-6-89			6-27-89 11:47			7-3-89 11:34			7-5-89 12:01			7-12-89 22:58		
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline	.242			.114	52.9	J	.133	45.0	J	.152	37.2	J	.142	41.3	J
4,6-Dinitro-2-Methylphenol	.123			.091	26.0	J	.106			.112			.098		
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene	.161			.189			.178			.169			.148		
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															
Dibenz(a,h)Anthracene	.764			.469	20.0	J	.459			.404			1.037	34.9	J
Benzo(g,h,i)Perylene	.745			.496	33.7	J	.547	27.1	J	.520			1.083	45.2	J

SEE PAGE 1 FOR AFFECTED SAMPLES.

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

Reviewer's Initials/Date: WA 8/10/89

8/87

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

CASE/SAS # 12190 CONTRACTOR EMSI

Instrument # 4500B	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	5-6-89			7-14-89 13:11			7-18-89 13:33								
	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															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene	.264			.255			.190	25.0	J						
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol	.177			.107	39.6	J	.099	44.1	J						
Benzoic Acid	.111			.059	46.9	J	.080	27.9	J						
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline	.175			.079	54.9	J	.137								
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene	.292			.217	25.7	J	.234								
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline	.454			.474			.343	27.6	J						
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline	.276			.231			.237								
Acenaphthene															
2,4-Dinitrophenol	.184			.199			.113	35.6	J						
4-Nitrophenol															
Dibenzofuran															

AFFECTED SAMPLES:

		SBIK04	EER77		
		EER79			
		EER80			

Reviewer Initials/Date: WJT 8/10/89

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

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

CASE/SAS # 12190 CONTRACTOR EMSI

Instrument # 4500 B	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	5-6-89			7-14-89 12:13			7-15-89 13:22								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline	.242			.163	34.6	J	.159	34.3	J						
4,6-Dinitro-2-Methylphenol	.123						.084	31.7	J						
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene	.161			.138			.210	30.4	J						
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															
Dibenz(a,h)Anthracene	.768			.971	26.7	J	.967	25.8	J						
Benzo(g,h,i)Perylene	.745			1.050	40.9	J	.994	33.4	J						

SEE PAGE 1 FOR AFFECTED SAMPLES.

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

Reviewer's Initials/Date: WA 8/10/89

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

CASE/SAS # 12190 CONTRACTOR EMSI

Instrument # 4500A	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6-22-84			7-17-84 15:27											
	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															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol	.131			.082	37.4	J									
Benzoic Acid	.065			.094	44.6	J									
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline	.050	53.2	J	.061											
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene	.355			.204	42.5	J									
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol	.179			.117	34.6	J									
4-Nitrophenol															
Dibenzofuran															

EER78MS
EER78MSD

AFFECTED SAMPLES:

Reviewer Initials/Date: CDA 8/10/89

* 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/SAS # 12190 CONTRACTOR EMSI

Instrument # 4500A	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6-22-89			7-17-89 15:25											
	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	.274			.156	43.1	J									
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															
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.

Reviewer's Initials/Date: WMA 8/10/89

8/87

EXPLAINATION OF DATA QUALIFIERS

For reporting results to the USEPA, the following contract specific qualifiers are to be used. The seven qualifiers defined below are not subject to modification by the laboratory. Up to five qualifiers may be reported on Form I for each compound.

The seven EPA-defined qualifiers to be used are as follows:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

at 24% moisture, $D = \frac{100-24}{100} = 0.76$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

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

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak separately exceeds 200 ug/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. Begin by using "X". If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some samples.

The combination of flags "BU" or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are also detected in the sample.

If analyses at two different dilution factors are required (see Exhibit D), follow the data reporting instructions given in Exhibit D and with the "D" and "E" flags above.

TABLE 4

VOLATILE INTERNAL STANDARDS WITH CORRESPONING TCL ANALYTES ASSIGNED FOR QUANTITATION

Bromochloromethane	1,4-Difluorobenzene	Chlorobenzene-d_5
Chloromethane	2- Butanone	2-Hexanone
Bromomethane	1,1,1-Trichloroethane	4-Methyl-2-Pentanone
*Vinyl Chloride	Carbon Tetrachloride	Tetrachloroethene
Chloroethane	Vinyl Acetate	1,1,2,2-Tetrachloroethane
Methylene Chloride	Bromodichloromethane	*Toluene
Acetone	*1,2-Dichloropropane	Chlorobenzene
Carbon Disulfide	trans-1,3-Dichloropropane	*Ethylbenzene
*1,1-Dichloroethene	Trichloroethene	Styrene
1,1-Dichloroethane	Dibromochloromethane	Xylene (total)
1,2-Dichloroethene (total)	1,1,2-Trichloroethane	Bromofluorobenzene (surr)
*Chloroform	Benzene	
1,2-Dichloroethane	cis-1,3-Dichloropropene	Toluene-d_8 (surr)
1,2-Dichloroethane-d_4 (surr)	Bromoform	

(surr) = surrogate compound
*Calibration check compounds

SEMIVOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

1,4-Dichlorobenzene-d_4	Naphthalene-d_8	Acenaphthene-d_{10}	Phenanthrene-d_{10}	Chrysene-d_{12}	Perylene-d_{12}
Phenol	Nitrobenzene	Hexachlorocyclopentadiene	4,6-Dinitro-2-methylphenol	Pyrene	Di-n-octyl Phthalate
bis(2-Chloroethyl) ether	Isophorone	2,4,6-Trichlorophenol	N-nitrosodiphenylamine	Butylbenzyl Phthalate	Benzo(b)fluoranthene
2-Chlorophenol	2-Nitrophenol	2,4,5-Trichlorophenol	1,2-Diphenylhydrazine	3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
1,3-Dichlorobenzene	2,4-Dimethylphenol	2-Chloronaphthalene	4-Bromophenyl Phenyl Ether	Benzo(a)anthracene	Benzo(a)pyrene
1,4-Dichlorobenzene	Benzoic acid	2-Nitroaniline	Hexachlorobenzene	bis(2-ethylhexyl Phthalate	Indeno(1,2,3-cd) pyrene
Benzyl Alcohol	bis(2-Chloroethoxy)methane	Dimethyl Phthalate	Pentachlorophenol	Chrysene	Dibenz(a,h) anthracene
1,2-Dichlorobenzene	2,4-Dichlorophenol	Acenaphthylene	Phenanthrene	Terphenyl-d_{14} (surr)	Benzo(g,h,i) perylene
2-Methylphenol	1,2,4-Trichlorobenzene	3-Nitroaniline	Anthracene		
bis(2-Chloroisopropyl)ether	Naphthalene	Acenaphthene	Di-n-butyl Phthalate		
4-Methylphenol	4-Chloroaniline	2,4-Dinitrophenol	Fluoranthene		
N-nitroso-Di-n-propylamine	Hexachlorobutadiene	4-Nitrophenol			
Hexachloroethane	4-Chloro-3-methylphenol	Dibenzofuran			
2-Fluorophenol (surr)	2-Methylnaphthalene	2,4-Dinitrotoluene			
Phenol-d_6 (surr)	Nitrobenzene-d_5 (surr)	2,6-Dinitrotoluene			
		Diethyl Phthalate			
		4-Chlorophenyl-phenyl ether			
		Fluorene			
		4-Nitroaniline			
		2-Fluorobiphenyl (surr)			
		2,4,6-Tribromo Phenol (surr)			

Surr = surrogate compound

JUN 28 1989

SUPERFUND 6310

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY

SAMPLE DATES: 6/19-20/89
low soils
LOG IN DATE: 7/7/89
DUE DATE: 8/28/89

CASE NUMBER/SAS No. 12190 SITE NAME United Recovery LABORATORY EMSI / COLUMB DATE SHIPPED 6/19/89

SUPERFUND DU NUMBER TFA102 EPA RPM or OSC (S.M.S.I./CES) CERCLIS NUMBER ILD981098411 PAGE 1 OF 2

ACTIVITY NUMBER ZZ

	CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	WATER OR LIQUIDS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN UG/L TOX17534	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/L TOX17544	WATER POLYCHLORINATED BIPHENYLS UG/L PES17144	WATER CHLORINATED PESTICIDES UG/L PES17134	TOTAL METALS IN WATER UG/L MET111	WATER CYANIDE UG/L MIN74918	NITRATE/NITRITE MG/L MIN7294	AMMONIA MG/L MIN7284	RESIDUE, FILTERABLE TDS MG/L MIN7342	RESIDUE, NON-FILT TSS MG/L MIN7272			SEDIMENTS or SOILS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN MG/KG TOX215722	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG/KG TOX215622	SEDIMENTS POLYCHLORINATED BIPHENYLS MG/KG PES211422	SEDIMENT CHLORINATED PESTICIDES MG/KG 211222	TOTAL METALS MG/KG MET413	CYANIDE MG/KG MIN4830	EP TOXICITY METALS MG/KG	AMMONIA MG/KG MIN42725				
1	89FM03S13	EER 76	MEFE37												✓	✓	✓	✓	✓	✓						
2	S14	77	38																							
3	S15	78	39																							
4	S16	79	40																							
5	S17	80	41																							
6	S18	81	42																							
7	S19	82	43												✓	✓	✓	✓	✓	✓						

RUTH BLEYLER

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 12190
SAS No. (if applicable):

1. Sample Description *(Enter in Column A)*
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) *(Specify)*

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): Jeff Dickson
3. Ship To: Envir. Monitoring Services, 4765 Calle Quetzal, Camarillo, Ca. 93010, attn Sue Ozdemir

4. Date Shipped: 06/19/89
Airbill Number: 9071156754
Carrier: F

Triple volume required for matrix spike/duplicate aqueous sample.
Ship medium and high concentration samples in paint cans.
See reverse for additional instructions.

5. Date Received: 6-20-89, 10:00
Received by: Michael [signature]
Laboratory Contract Number: 68-01-7396
Unit Price: $871.00
6. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
EER 76	5	L	X	X	X		S1	6/19/89 / 1400	MEFE 37				
EER 77	5	L	X	X	X		S2	6/19/89 / 1400	MEFE 38				
EER 78	5	L	X	X	X		S3	6/19/89 / 1400	MEFE 39				
EER 79	5	L	X	X	X		S4	6/19/89 / 1430	MEFE 40				
EER 80	5	L	X	X	X		S5	6/19/89 / 1440	MEFE 41				
EER 81	5	L	X	X	X		S6	6/19/89 / 1510	MEFE 42				
EER 82	5	L	X	X	X		S7	6/19/89 / 1520	MEFE 43	SDG-FINAL SAMPLE			

Shipment is complete

Michael [signature] 6-20-89 10:00

2 001

EPA Form 31.0-2 (8-88) Replaces EPA Form 2075-7 which may be used. Blue - SMO Copy Pink - Region Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

1.0 NARRATIVE

EPA Contract No. 68-01-7396
EPA Case Number 12190
SDG Number EER76

Introduction

The results of analysis of seven (7) soil samples (EER76-EER82) from EPA Case No. 12190 are discussed in this narrative. These samples were received on June 20, 1989.

Sample Extraction and Analysis

The semivolatile samples were extracted on June 21 and 27, and July 11 and 13, 1989. The pesticide samples were extracted on June 21, 1989. Semivolatile samples EER78, EER78MS and EER78MSD were extracted outside holding time deadlines. All other extractions were performed within holding time deadlines.

The samples were analyzed for volatile organics on June 26, 27 and 29, 1989. The samples were analyzed for semivolatiles on June 27, and July 3, 5, 12, 14, 17 and 18, 1989. The samples were analyzed for pesticides on July 8, 1989. All analyses were performed within holding time deadlines.

Surrogate Recoveries

Soil volatile surrogate recovery QC limits were exceeded for Toluene-d8 on EER76, EER76RE, EER77, EER77RE, EER78, EER78RE, EER82, and EER82RE. Also, QC limits were exceeded for Bromofluorobenzene on EER76, EER77, and EER78RE.

Semivolatile surrogate recoveries QC limts were exceeded for 2-Fluorophenol on sample EER76 and for Nitrobenzene-d5 on sample EER77.

All other surrogate recoveries were within QC limits.

Matrix Spike/Matrix Spike Duplicate

Semi volatile matrix spike percent recovery on sample EER76 slightly exceed QC limits for 4-Chloro-3-methylphenol.

All other MS and MSD percent recoveries were within QC limits.

Data Package Submittal

The data package for EPA Case No. 12190 was shipped via Federal Express on July 24, 1989 for next day delivery to Ms. Leslie Braun (SMO, Alexandria, VA), Data Audit Staff (USEPA/EMSL, Las Vegas, NV) and Mr. Curtis Ross (USEPA Region V, Chicago, IL).

Conclusion

The reported data appears good and meets all contractual requirements, except where noted. However, should there be questions or other matters which require clarification, please contact Sue Ozdemir directly.

for

Sue Ozdemir, Manager
Analytical Chemistry Operations

7/24/89
Date

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

for

Sue Ozdemir, Manager
Analytical Chemistry Operations

7/24/89
Date

John McVoy
QC Coordinator

7/24/89
Date

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	EER76	126 *	73 *	91		2
02	EER76RE	125 *	78	91		1
03	EER77	131 *	73 *	92		2
04	EER77RE	130 *	74	95		1
05	EER78	139 *	92	89		1
06	EER78RE	145 *	57 *	89		2
07	EER79	108	89	88		0
08	EER80	113	87	99		0
09	EER81	108	87	96		0
10	EER82	121 *	78	96		1
11	EER82RE	123 *	79	88		1
12	EER81MS	103	91	97		0
13	EER81MSD	109	88	99		0
14	VBLK01	102	94	94		0
15	VBLK02	100	98	99		0
16	VBLK03	99	101	93		0

/ WMA 8/10/89

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	EER76	51	61	85	41	23 *	55		1
02	EER77	4 *	54	73	49	36	73		1
03	EER79	55	79	89	70	56	92		0
04	EER80	49	86	84	76	59	88		0
05	EER81	57	68	75	69	66	85		0
06	EER82	67	76	82	83	81	90		0
07	EER82MS	62	76	84	80	68	100		0
08	EER82MSD	62	70	80	77	70	94		0
09	SBLK01	65	70	78	72	68	66		0
10	SBLK02	66	78	75	79	76	75		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	EER78	68	75	95	91	85	99		0
02	EER78MS	59	62	59	66	61	71		0
03	EER78MSD	63	72	63	74	69	77		0
04	SBLK03	59	65	64	79	74	87		0
05	SBLK04	81	97	93	102	94	116		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC) #	OTHER
01	EER76	101	0
02	EER77	98	0
03	EER78	97	0
04	EER79	71	0
05	EER79MS	71	0
06	EER79MSD	70	0
07	EER80	74	0
08	EER81	58	0
09	EER82	72	0
10	PBLK01	49	0
11			
12			
13			
14			
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29			
30			

ADVISORY QC LIMITS (20-150)

S1 (DBC) = Dibutylchlorendate

Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

FORM II PEST-2 1/87 Rev.

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix Spike - EPA Sample No.: EER81 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	56.2	0	44.0	78	59-172
Trichloroethene	56.2	0	46.5	83	62-137
Benzene	56.2	0	48.4	86	66-142
Toluene	56.2	0	51.1	91	59-139
Chlorobenzene	56.2	0	53.3	95	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56.2	47.6	85	-9	22	59-172
Trichloroethene	56.2	49.3	88	-6	24	62-137
Benzene	56.2	53.1	94	-9	21	66-142
Toluene	56.2	58.1	103	-12	21	59-139
Chlorobenzene	56.2	57.9	103	-8	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP,12190,,EER81,L,S,,V,,5.0G
60C TO 220C @ 10C/MIN ON INCOS 50 B

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix Spike - EPA Sample No.: EER82 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	14300	0	12000	84	26- 90
2-Chlorophenol	14300	0	11000	77	25-102
1,4-Dichlorobenzene	7130	0	4490	63	28 104
N-Nitroso-di-n-prop.(1)	7130	0	5260	74	41 126
1,2,4-Trichlorobenzene	7130	0	4910	69	38 107
4-Chloro-3-methylphenol	14300	0	14800	104 *	26 103
Acenaphthene	7130	0	5970	84	31-137
4-Nitrophenol	14300	0	13200	92	11-114
2,4-Dinitrotoluene	7130	0	6230	87	28- 89
Pentachlorophenol	14300	0	12400	87	17-109
Pyrene	7130	267	6620	89	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	14500	11300	78	7	35	26- 90
2-Chlorophenol	14500	10800	74	4	50	25-102
1,4-Dichlorobenzene	7230	4450	62	2	27	28 104
N-Nitroso-di-n-prop.(1)	7230	5070	70	6	38	41 126
1,2,4-Trichlorobenzene	7230	4890	68	1	23	38 107
4-Chloro-3-methylphenol	14500	13700	94	10	33	26 103
Acenaphthene	7230	5460	76	10	19	31-137
4-Nitrophenol	14500	12400	86	7	50	11-114
2,4-Dinitrotoluene	7230	5950	82	6	47	28- 89
Pentachlorophenol	14500	10900	75	15	47	17-109
Pyrene	7230	6220	82	8	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: CLP,12190,,EER82,L,S,,B,,6/21
1.5 MIN @ 35C, THEN 10C/MIN TO 300C (FINN 4500B)

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix Spike - EPA Sample No.: EER78 Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	222000	0	143000	64	26- 90
2-Chlorophenol	222000	0	144000	65	25-102
1,4-Dichlorobenzene	111000	0	72400	65	28 104
N-Nitroso-di-n-prop.(1)	111000	0	78900	71	41 126
1,2,4-Trichlorobenzene	111000	0	68000	61	38 107
4-Chloro-3-methylphenol	222000	0	152000	68	26 103
Acenaphthene	111000	0	67800	61	31-137
4-Nitrophenol	222000	0	169000	76	11-114
2,4-Dinitrotoluene	111000	0	70200	63	28- 89
Pentachlorophenol	222000	0	140000	63	17-109
Pyrene	111000	0	76400	69	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	222000	166000	75	-16	35	26- 90
2-Chlorophenol	222000	164000	74	-13	50	25-102
1,4-Dichlorobenzene	111000	81300	73	-12	27	28 104
N-Nitroso-di-n-prop.(1)	111000	87800	79	-11	38	41 126
1,2,4-Trichlorobenzene	111000	73800	66	-8	23	38 107
4-Chloro-3-methylphenol	222000	166000	75	-10	33	26 103
Acenaphthene	111000	80900	73	-18	19	31-137
4-Nitrophenol	222000	180000	81	-6	50	11-114
2,4-Dinitrotoluene	111000	81100	73	-15	47	28- 89
Pentachlorophenol	222000	160000	72	-13	47	17-109
Pyrene	111000	83600	75	-8	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: 8044-12190 EER78 RE-EX 7/11 (MED SOIL)
1.5 MIN @ 35C, THEN 10C/MIN TO 300C (FINN 4500B)

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: SDG No.: EER76

Matrix Spike - EPA Sample No.: EER79 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	115.6	0.0	59.3	51	46-127
Heptachlor	115.6	0.0	69.7	60	35-130
Aldrin	115.6	0.0	61.3	53	34-132
Dieldrin	289.0	0.0	163.6	57	31-134
Endrin	289.0	0.0	177.2	61	42-139
4,4'-DDT	289.0	2.93	190.8	65	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	117.3	58.9	50	2	50	46-127
Heptachlor	117.3	67.4	58	5	31	35-130
Aldrin	117.3	61.3	52	2	43	34-132
Dieldrin	293.3	160.1	55	4	38	31-134
Endrin	293.3	172.7	59	4	45	42-139
4,4'-DDT	293.3	185.3	62	4	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: MS/MSD were double spiked.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 062689T04 Lab Sample ID: _____

Date Analyzed: 06/26/89 Time Analyzed: 0821

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: I50A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EER76		062689T06	0926

COMMENTS: VBLK01 S06178902
60C FOR 2MIN TO 220C @ 10C /MIN (INCOS 50A)

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 062789V04 Lab Sample ID: _____

Date Analyzed: 06/27/89 Time Analyzed: 0900

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: I50B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EER76RE		062789V05	0942
02	EER77		062789V06	1048
03	EER77RE		062789V12	1426
04	EER78		062789V07	1124
05	EER78RE		062789V13	1458
06	EER80		062789V11	1328
07	EER81		062789V09	1226
08	EER82		062789V15	1603
09	EER81MS		062789V16	1639
10	EER81MSD		062789V17	1713

COMMENTS: VBLK02
60C TO 220C @ 10C/MIN ON INCOS 50 B

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 062989V04 Lab Sample ID: _____

Date Analyzed: 06/29/89 Time Analyzed: 0900

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: I50B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EER79		062989V05	0955
02	EER82RE		062989V06	1028

COMMENTS: VBLK03 (SOIL)
60C TO 220C @ 10C/MIN ON INCOS 50 B

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 062789S03 Lab Sample ID: _____

Date Extracted: 06/21/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 06/27/89 Time Analyzed: 1951

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 4500B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EER77		071889S03	07/18/89
02	EER79		071489S12	07/14/89
03	EER80		071489S13	07/14/89
04	EER81		062789S07	06/27/89
05	EER82		062789S04	06/27/89
06	EER82MS		062789S05	06/27/89
07	EER82MSD		062789S06	06/27/89

COMMENTS: CLP,12190,,SBLK01 METHOD BLANK,L,,B,BLANK,06/21/89
1.5 MIN @ 35C, THEN 10C/MIN TO 300C (FINN 4500B)

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 070389S10 Lab Sample ID: _____

Date Extracted: 06/27/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 07/03/89 Time Analyzed: 1914

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 4500B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EER76		070589S13	07/05/89

COMMENTS: CLP,12190,,SBLK02 METHOD BLANK,L,S,,B,,6/27 SOIL
1.5 MIN @ 35C, THEN 10C/MIN TO 300C (FINN 4500B)

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 071289S09 Lab Sample ID: _____

Date Extracted: 07/11/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 07/13/89 Time Analyzed: 0045

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 4500B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EER78		071289S20	07/13/89

COMMENTS: SBLK03 8044-12190 METHOD BLANK 07/11/89 (MED SOIL/FOR RE-EX)
1.5 MIN @ 35C, THEN 10C/MIN TO 300C (FINN 4500B)

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Lab File ID: 071489S08 Lab Sample ID: _____

Date Extracted: 07/13/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 07/14/89 Time Analyzed: 1842

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 4500B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EER78MS		071789B11	07/17/89
02	EER78MSD		071789B12	07/17/89

COMMENTS: SBLK04 8044-12190 METHOD BLANK 07/13/89 (MED SOIL)
1.5 MIN @ 35C, THEN 10C/MIN TO 300C (FINN 4500B)

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Lab sample ID: RAS-100314 Lab File ID:

Matrix: (soil/water) SOIL Level: (low/med) LOW

Date Extracted: 06/21/89 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 07/08/89 Date Analyzed (2): 07/08/89

Time Analyzed (1): 04:52 Time Analyzed (2): 04:52

Instrument ID (1): 001364 Instrument ID (2): 001364

GC Column ID (1): DB171125 GC Column ID (2): DB51332

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EER76	RAS-003824	07/08/89	07/08/89
02	EER77	RAS-003825	07/08/89	07/08/89
03	EER78	RAS-003826	07/08/89	07/08/89
04	EER79	RAS-003827	07/08/89	
05	EER79MS	RAS-400386	07/08/89	
06	EER79MSD	RAS-400387	07/08/89	
07	EER80	RAS-003828	07/08/89	07/08/89
08	EER81	RAS-003829	07/08/89	
09	EER82	RAS-003830	07/08/89	07/08/89
10				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062689T04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/26/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062689T04

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	23	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK02

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062989V04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/29/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	u
67-64-1	Acetone	10	u
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

WMT 8/10/89

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062989V04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/29/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 062789S03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	650	U
111-44-4	bis(2-Chloroethyl)Ether	650	U
95-57-8	2-Chlorophenol	650	U
541-73-1	1,3-Dichlorobenzene	650	U
106-46-7	1,4-Dichlorobenzene	650	U
100-51-6	Benzyl Alcohol	650	U
95-50-1	1,2-Dichlorobenzene	650	U
95-48-7	2-Methylphenol	650	U
108-60-1	bis(2-Chloroisopropyl)Ether	650	U
106-44-5	4-Methylphenol	650	U
621-64-7	N-Nitroso-Di-n-Propylamine	650	U
67-72-1	Hexachloroethane	650	U
98-95-3	Nitrobenzene	650	U
78-59-1	Isophorone	650	U
88-75-5	2-Nitrophenol	650	U
105-67-9	2,4-Dimethylphenol	650	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	650	U
120-83-2	2,4-Dichlorophenol	650	U
120-82-1	1,2,4-Trichlorobenzene	650	U
91-20-3	Naphthalene	650	U
106-47-8	4-Chloroaniline	650	U
87-68-3	Hexachlorobutadiene	650	U
59-50-7	4-Chloro-3-Methylphenol	650	U
91-57-6	2-Methylnaphthalene	650	U
77-47-4	Hexachlorocyclopentadiene	650	U
88-06-2	2,4,6-Trichlorophenol	650	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	650	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	650	U
208-96-8	Acenaphthylene	650	U
606-20-2	2,6-Dinitrotoluene	650	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 062789S03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	650	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	650	U
121-14-2	2,4-Dinitrotoluene	650	U
84-66-2	Diethylphthalate	650	U
7005-72-3	4-Chlorophenyl-phenylether	650	U
86-73-7	Fluorene	650	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	650	U
101-55-3	4-Bromophenyl-phenylether	650	U
118-74-1	Hexachlorobenzene	650	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	650	U
120-12-7	Anthracene	650	U
84-74-2	Di-n-Butylphthalate	650	U
206-44-0	Fluoranthene	650	U
129-00-0	Pyrene	650	U
85-68-7	Butylbenzylphthalate	650	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	650	U
218-01-9	Chrysene	650	U
117-81-7	bis(2-Ethylhexyl)Phthalate	650	U
117-84-0	Di-n-Octyl Phthalate	650	U
205-99-2	Benzo(b)Fluoranthene	650	U
207-08-9	Benzo(k)Fluoranthene	650	U
50-32-8	Benzo(a)Pyrene	650	U
193-39-5	Indeno(1,2,3-cd)Pyrene	650	U
53-70-3	Dibenz(a,h)Anthracene	650	U
191-24-2	Benzo(g,h,i)Perylene	650	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK01

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 062789S03

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK02

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 070389S10

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/03/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
108-60-1	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U
606-20-2	2,6-Dinitrotoluene	660	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK02

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 070389S10

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/03/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-Butylphthalate	660	U
206-44-0	Fluoranthene	660	U
129-00-0	Pyrene	660	U
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	660	U
218-01-9	Chrysene	660	U
117-81-7	bis(2-Ethylhexyl)Phthalate	660	U
117-84-0	Di-n-Octyl Phthalate	660	U
205-99-2	Benzo(b)Fluoranthene	660	U
207-08-9	Benzo(k)Fluoranthene	660	U
50-32-8	Benzo(a)Pyrene	660	U
193-39-5	Indeno(1,2,3-cd)Pyrene	660	U
53-70-3	Dibenz(a,h)Anthracene	660	U
191-24-2	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK02

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 070389S10

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/03/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-1	UNKNOWN	6.82	660	J
2. 000-00-2	METHYL PROPYL CYCLOHEXANE IS	7.45	460	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK03

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 071289S09

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/11/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/13/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
108-60-1	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK03

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 071289S09

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/11/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/13/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	96000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	96000	U
100-02-7	4-Nitrophenol	96000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	96000	U
534-52-1	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	96000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	20000	U
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenz(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK03

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 071289S09

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/11/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/13/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK04

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 071489S08

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/13/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
108-60-1	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK04

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 071489S08

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/13/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	96000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	96000	U
100-02-7	4-Nitrophenol	96000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	96000	U
534-52-1	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	96000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	20000	U
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenz(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK04

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 071489S08

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/13/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK01

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-100314

Sample wt/vol: 30.60 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16.	U
319-85-7	beta-BHC	16.	U
319-86-8	delta-BHC	16.	U
58-89-9	gamma-BHC (Lindane)	16.	U
76-44-8	Heptachlor	16.	U
309-00-2	Aldrin	16.	U
1024-57-3	Heptachlor epoxide	16.	U
959-98-8	Endosulfan I	16.	U
60-57-1	Dieldrin	32.	U
72-55-9	4,4'-DDE	32.	U
72-20-8	Endrin	32.	U
33213-65-9	Endosulfan II	32.	U
72-54-8	4,4'-DDD	32.	U
1031-07-8	Endosulfan sulfate	32.	U
50-29-3	4,4'-DDT	32.	U
72-43-5	Methoxychlor	160.	U
53494-70-5	Endrin ketone	32.	U
5103-71-9	alpha-Chlordane	160.	U
5103-74-2	gamma-Chlordane	160.	U
8001-35-2	Toxaphene	320.	U
12674-11-2	Aroclor-1016	160.	U
11104-28-2	Aroclor-1221	160.	U
11141-16-5	Aroclor-1232	160.	U
53469-21-9	Aroclor-1242	160.	U
12672-29-6	Aroclor-1248	160.	U
11097-69-1	Aroclor-1254	320.	U
11096-82-5	Aroclor-1260	320.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER76

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062689T06

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 Date Analyzed: 06/26/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	13	~~B~~
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	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	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

8/30/89
10/3/89
8/10/89

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER76

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062689T06

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 Date Analyzed: 06/26/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-69-4	METHANE, TRICHLOROFLUORO-	5.33	8.6	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER76RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V05

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	9	~~B~~ u
67-64-1	Acetone	15	~~B~~ u
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	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	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

WHA 8/10/89

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER76RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V05

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER77

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V06

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	9	~~B~~ U
67-64-1	Acetone	25	~~B~~ U
75-15-0	Carbon Disulfide	61	
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	12	
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	34	
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	7	
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	22	

WYA 8/10/89

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER77

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V06

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-69-4	METHANE, TRICHLOROFLUORO-	5.75	8.8	J
2. 000-00-0	UNKNOWN HYDROCARBON	9.50	6.3	J
3. 000-00-0	METHYL PENTADIENE ISOMER	11.17	7.5	J
4. 000-00-0	UNKNOWN HYDROCARBON	11.59	7.5	J
5. 000-00-0	UNKNOWN	12.59	14	J
6. 110-54-3	HEXANE (DOT)	13.89	14	J
7. 000-00-0	UNKNOWN ALKENE	15.59	14	J
8. 000-00-0	UNKNOWN HYDROCARBON	16.39	45	J
9. 000-00-0	UNKNOWN HYDROCARBON	17.05	25	J
10. 000-00-0	UNKNOWN HYDROCARBON	20.39	30	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER77RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 062789V12

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	18	~~B~~ U
67-64-1	Acetone	25	~~B~~ U
75-15-0	Carbon Disulfide	110	
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	16	
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	43	
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	9	
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	27	

WMA 8/10/89

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER77RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 062789V12

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-69-4	METHANE, TRICHLOROFLUORO-	5.72	15	J
2. 000-00-0	UNKNOWN HYDROCARBON	9.50	15	J
3. 000-00-0	UNKNOWN HYDROCARBON	11.14	14	J
4. 000-00-0	UNKNOWN HYDROCARBON	11.55	14	J
5. 000-00-0	UNKNOWN	12.59	18	J
6. 110-54-3	HEXANE (DOT)	13.89	28	J
7. 000-00-0	UNKNOWN ALKENE	15.59	26	J
8. 000-00-0	UNKNOWN HYDROCARBON	16.39	43	J
9. 000-00-0	UNKNOWN HYDROCARBON	17.05	38	J
10. 000-00-0	UNKNOWN HYDROCARBON	20.39	40	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER78

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V07

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 10 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	15	~~B~~
67-64-1	Acetone	29	~~B~~
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

LWA 8/10/89

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER78

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V07

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 10 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-69-4	METHANE, TRICHLOROFLUORO-	5.75	37	J
2. 000-00-0	SATURATED ALIPHATIC HYDROCAR	15.34	6.7	J
3. 000-00-0	UNKNOWN ALIPHATIC	16.39	17	J
4. 000-00-0	UNKNOWN ALIPHATIC	16.75	13	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER78RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 10 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	16	~~B~~ U
67-64-1	Acetone	115	~~BJ~~ U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

WHA 8/10/89

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER78RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 10 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-69-4	METHANE, TRICHLOROFLUORO-	5.75	37	J
2. 000-00-0	SATURATED ALIPHATIC HYDROCAR	15.34	5.6	J
3. 000-00-0	UNKNOWN ALIPHATIC	16.39	16	J
4. 000-00-0	UNKNOWN ALIPHATIC	20.09	11	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER79

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062989V05

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 Date Analyzed: 06/29/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	6	~~B~~
67-64-1	Acetone	42	~~B~~
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

WA 8/10/89

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER79

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062989V05

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 Date Analyzed: 06/29/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER80

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V11

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	9	~~B~~ U
67-64-1	Acetone	16	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

Draft 8/10/89

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER80

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V11

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER81

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V09

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 11 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7	~~B~~ U
67-64-1	Acetone	15	~~B~~ U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

WA 8/10/89

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER81

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V09

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 11 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER82

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V15

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 Date Analyzed: 06/27/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	8	~~B~~ U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

DWK 8/10/89

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER82

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062789V15

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 Date Analyzed: 06/27/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER82RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062989V06

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 Date Analyzed: 06/29/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	6	~~B~~
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-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
10061-02-6	Trans-1,3-Dichloropropene	5	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	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

WSA 8/10/89

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER82RE

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 062989V06

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 Date Analyzed: 06/29/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER76

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 070589S13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 dec. 19 Date Extracted: 06/27/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/05/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	8100	U
111-44-4	bis(2-Chloroethyl)Ether	8100	U
95-57-8	2-Chlorophenol	8100	U
541-73-1	1,3-Dichlorobenzene	8100	U
106-46-7	1,4-Dichlorobenzene	8100	U
100-51-6	Benzyl Alcohol	8100	U
95-50-1	1,2-Dichlorobenzene	8100	U
95-48-7	2-Methylphenol	8100	U
108-60-1	bis(2-Chloroisopropyl)Ether	8100	U
106-44-5	4-Methylphenol	8100	U
621-64-7	N-Nitroso-Di-n-Propylamine	8100	U
67-72-1	Hexachloroethane	8100	U
98-95-3	Nitrobenzene	8100	U
78-59-1	Isophorone	8100	U
88-75-5	2-Nitrophenol	8100	U
105-67-9	2,4-Dimethylphenol	8100	U
65-85-0	Benzoic Acid	39000	U
111-91-1	bis(2-Chloroethoxy)Methane	8100	U
120-83-2	2,4-Dichlorophenol	8100	U
120-82-1	1,2,4-Trichlorobenzene	8100	U
91-20-3	Naphthalene	8100	U
106-47-8	4-Chloroaniline	8100	U
87-68-3	Hexachlorobutadiene	8100	U
59-50-7	4-Chloro-3-Methylphenol	8100	U
91-57-6	2-Methylnaphthalene	8100	U
77-47-4	Hexachlorocyclopentadiene	8100	U
88-06-2	2,4,6-Trichlorophenol	8100	U
95-95-4	2,4,5-Trichlorophenol	39000	U
91-58-7	2-Chloronaphthalene	8100	U
88-74-4	2-Nitroaniline	39000	U
131-11-3	Dimethyl Phthalate	8100	U
208-96-8	Acenaphthylene	8100	U
606-20-2	2,6-Dinitrotoluene	8100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER76

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 070589S13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 dec. 19 Date Extracted: 06/27/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/05/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	39000	U
83-32-9	Acenaphthene	8100	U
51-28-5	2,4-Dinitrophenol	39000	U
100-02-7	4-Nitrophenol	39000	U
132-64-9	Dibenzofuran	8100	U
121-14-2	2,4-Dinitrotoluene	8100	U
84-66-2	Diethylphthalate	8100	U
7005-72-3	4-Chlorophenyl-phenylether	8100	U
86-73-7	Fluorene	8100	U
100-01-6	4-Nitroaniline	39000	U
534-52-1	4,6-Dinitro-2-Methylphenol	39000	U
86-30-6	N-Nitrosodiphenylamine (1)	8100	U
101-55-3	4-Bromophenyl-phenylether	8100	U
118-74-1	Hexachlorobenzene	8100	U
87-86-5	Pentachlorophenol	39000	U
85-01-8	Phenanthrene	8100	U
120-12-7	Anthracene	8100	U
84-74-2	Di-n-Butylphthalate	8100	U
206-44-0	Fluoranthene	8100	U
129-00-0	Pyrene	8100	U
85-68-7	Butylbenzylphthalate	8100	U
91-94-1	3,3'-Dichlorobenzidine	16000	U
56-55-3	Benzo(a)Anthracene	8100	U
218-01-9	Chrysene	8100	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4100	J
117-84-0	Di-n-Octyl Phthalate	8100	U
205-99-2	Benzo(b)Fluoranthene	8100	U
207-08-9	Benzo(k)Fluoranthene	8100	U
50-32-8	Benzo(a)Pyrene	8100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	8100	U
53-70-3	Dibenz(a,h)Anthracene	8100	U
191-24-2	Benzo(g,h,i)Perylene	8100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER76

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 070589S13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 dec. 19 Date Extracted: 06/27/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/05/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 20

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	SATURATED ALIPHATIC HYDROCAR	27.24	20000	J
2. 000-00-0	SATURATED ALIPHATIC HYDROCAR	28.16	38000	J
3. 000-00-0	UNKNOWN	28.61	17000	J
4. 000-00-0	UNKNOWN HYDROCARBON	28.97	19000	J
5. 000-00-0	UNKNOWN	33.49	25000	J
6. 000-00-0	UNKNOWN HYDROCARBON	33.96	25000	J
7. 000-00-0	UNKNOWN	34.79	61000	J
8. 000-00-0	UNKNOWN	36.59	41000	J
9. 000-00-0	UNKNOWN	39.12	25000	J
10. 000-00-0	UNKNOWN	39.77	12000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER77

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 071889S03

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 dec. 20 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/18/89

GPC Cleanup: (Y/N) N pH: 6.7 Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	8200	U
111-44-4	bis(2-Chloroethyl)Ether	8200	U
95-57-8	2-Chlorophenol	8200	U
541-73-1	1,3-Dichlorobenzene	8200	U
106-46-7	1,4-Dichlorobenzene	8200	U
100-51-6	Benzyl Alcohol	8200	U
95-50-1	1,2-Dichlorobenzene	8200	U
95-48-7	2-Methylphenol	8200	U
108-60-1	bis(2-Chloroisopropyl)Ether	8200	U
106-44-5	4-Methylphenol	8200	U
621-64-7	N-Nitroso-Di-n-Propylamine	8200	U
67-72-1	Hexachloroethane	8200	U
98-95-3	Nitrobenzene	8200	U
78-59-1	Isophorone	8200	U
88-75-5	2-Nitrophenol	8200	U
105-67-9	2,4-Dimethylphenol	8200	U
65-85-0	Benzoic Acid	40000	U
111-91-1	bis(2-Chloroethoxy)Methane	8200	U
120-83-2	2,4-Dichlorophenol	8200	U
120-82-1	1,2,4-Trichlorobenzene	8200	U
91-20-3	Naphthalene	8200	U
106-47-8	4-Chloroaniline	8200	U
87-68-3	Hexachlorobutadiene	8200	U
59-50-7	4-Chloro-3-Methylphenol	8200	U
91-57-6	2-Methylnaphthalene	8200	U
77-47-4	Hexachlorocyclopentadiene	8200	U
88-06-2	2,4,6-Trichlorophenol	8200	U
95-95-4	2,4,5-Trichlorophenol	40000	U
91-58-7	2-Chloronaphthalene	8200	U
88-74-4	2-Nitroaniline	40000	U
131-11-3	Dimethyl Phthalate	8200	U
208-96-8	Acenaphthylene	8200	U
606-20-2	2,6-Dinitrotoluene	8200	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER77

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 071889S03

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 dec. 20 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/18/89

GPC Cleanup: (Y/N) N pH: 6.7 Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	40000	U
83-32-9	Acenaphthene	8200	U
51-28-5	2,4-Dinitrophenol	40000	U
100-02-7	4-Nitrophenol	40000	U
132-64-9	Dibenzofuran	8200	U
121-14-2	2,4-Dinitrotoluene	8200	U
84-66-2	Diethylphthalate	8200	U
7005-72-3	4-Chlorophenyl-phenylether	8200	U
86-73-7	Fluorene	8200	U
100-01-6	4-Nitroaniline	40000	U
534-52-1	4,6-Dinitro-2-Methylphenol	40000	U
86-30-6	N-Nitrosodiphenylamine (1)	8200	U
101-55-3	4-Bromophenyl-phenylether	8200	U
118-74-1	Hexachlorobenzene	8200	U
87-86-5	Pentachlorophenol	40000	U
85-01-8	Phenanthrene	8200	U
120-12-7	Anthracene	8200	U
84-74-2	Di-n-Butylphthalate	8200	U
206-44-0	Fluoranthene	8200	U
129-00-0	Pyrene	8200	U
85-68-7	Butylbenzylphthalate	8200	U
91-94-1	3,3'-Dichlorobenzidine	16000	U
56-55-3	Benzo(a)Anthracene	8200	U
218-01-9	Chrysene	8200	U
117-81-7	bis(2-Ethylhexyl)Phthalate	3400	J
117-84-0	Di-n-Octyl Phthalate	8200	U
205-99-2	Benzo(b)Fluoranthene	8200	U
207-08-9	Benzo(k)Fluoranthene	8200	U
50-32-8	Benzo(a)Pyrene	8200	U
193-39-5	Indeno(1,2,3-cd)Pyrene	8200	U
53-70-3	Dibenz(a,h)Anthracene	8200	U
191-24-2	Benzo(g,h,i)Perylene	8200	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER77

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 071889S03

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 dec. 20 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/18/89

GPC Cleanup: (Y/N) N pH: 6.7 Dilution Factor: 20

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	SATURATED ALIPHATIC HYDROCAR	18.77	13000	J
2. 000-00-0	UNKNOWN	18.99	9100	J
3. 000-00-0	SATURATED ALIPHATIC HYDROCAR	20.89	12000	J
4. 000-00-0	SATURATED ALIPHATIC HYDROCAR	22.00	9100	J
5. 000-00-0	SATURATED ALIPHATIC HYDROCAR	23.35	16000	J
6. 000-00-0	SATURATED ALIPHATIC HYDROCAR	23.74	9100	J
7. 000-00-0	SATURATED ALIPHATIC HYDROCAR	23.82	11000	J
8. 000-00-0	SATURATED ALIPHATIC HYDROCAR	24.35	31000	J
9. 000-00-0	SATURATED ALIPHATIC HYDROCAR	25.11	20000	J
10. 000-00-0	SATURATED ALIPHATIC HYDROCAR	25.34	13000	J
11. 000-00-0	SATURATED ALIPHATIC HYDROCAR	26.04	17000	J
12. 000-00-0	UNKNOWN	26.69	25000	J
13. 000-00-0	UNKNOWN	27.21	21000	J
14. 000-00-0	SATURATED ALIPHATIC HYDROCAR	27.56	24000	J
15. 000-00-0	SATURATED ALIPHATIC HYDROCAR	27.81	15000	J
16. 000-00-0	SATURATED ALIPHATIC HYDROCAR	28.06	22000	J
17. 000-00-0	UNKNOWN	28.49	12000	J
18. 000-00-0	SATURATED ALIPHATIC HYDROCAR	28.86	13000	J
19. 000-00-0	SATURATED ALIPHATIC HYDROCAR	29.14	11000	J
20. 000-00-0	SATURATED ALIPHATIC HYDROCAR	29.89	9100	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER78

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.1 (g/mL) G Lab File ID: 071289S20

Level: (low/med) MED Date Received: 06/20/89

% Moisture: not dec. 10 dec. 10 Date Extracted: 07/11/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/13/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
108-60-1	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	97000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	97000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	97000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER78

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.1 (g/mL) G Lab File ID: 071289S20

Level: (low/med) MED Date Received: 06/20/89

% Moisture: not dec. 10 dec. 10 Date Extracted: 07/11/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/13/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	97000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	97000	U
100-02-7	4-Nitrophenol	97000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	97000	U
534-52-1	4,6-Dinitro-2-Methylphenol	97000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	97000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	55000	
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	8700	J
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenz(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER78

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 1.1 (g/mL) G Lab File ID: 071289S20

Level: (low/med) MED Date Received: 06/20/89

% Moisture: not dec. 10 dec. 10 Date Extracted: 07/11/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/13/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	UNKNOWN HYDROCARBON	15.90	12000	J
2. 000-00-0	UNKNOWN	18.64	26000	J
3. 000-00-0	SATURATED ALIPHATIC HYDROCAR	20.97	18000	J
4. 000-00-0	SATURATED ALIPHATIC HYDROCAR	22.02	55000	J
5. 000-00-0	SATURATED ALIPHATIC HYDROCAR	23.04	79000	J
6. 000-00-0	BRANCHED SATURATED ALIPHATIC	23.37	40000	J
7. 000-00-0	SATURATED ALIPHATIC HYDROCAR	23.75	36000	J
8. 000-00-0	SATURATED ALIPHATIC HYDROCAR	24.00	55000	J
9. 000-00-0	SATURATED ALIPHATIC HYDROCAR	24.37	79000	J
10. 000-00-0	SATURATED ALIPHATIC HYDROCAR	24.60	36000	J
11. 000-00-0	SATURATED ALIPHATIC HYDROCAR	25.11	34000	J
12. 000-00-0	UNKNOWN HYDROCARBON	25.81	30000	J
13. 000-00-0	SATURATED ALIPHATIC HYDROCAR	26.14	30000	J
14. 000-00-0	SATURATED ALIPHATIC HYDROCAR	26.69	79000	J
15. 000-00-0	UNKNOWN HYDROCARBON AND PHTH	27.21	61000	J
16. 000-00-0	SATURATED ALIPHATIC HYDROCAR	27.57	61000	J
17. 000-00-0	SATURATED ALIPHATIC HYDROCAR	27.82	55000	J
18. 000-00-0	SATURATED ALIPHATIC HYDROCAR	28.84	32000	J
19. 000-00-0	SATURATED ALIPHATIC HYDROCAR	29.91	26000	J
20. 000-00-0	SATURATED ALIPHATIC HYDROCAR	31.22	30000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER79

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 071489S12

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3600	U
111-44-4	bis(2-Chloroethyl)Ether	3600	U
95-57-8	2-Chlorophenol	3600	U
541-73-1	1,3-Dichlorobenzene	3600	U
106-46-7	1,4-Dichlorobenzene	3600	U
100-51-6	Benzyl Alcohol	3600	U
95-50-1	1,2-Dichlorobenzene	3600	U
95-48-7	2-Methylphenol	3600	U
108-60-1	bis(2-Chloroisopropyl)Ether	3600	U
106-44-5	4-Methylphenol	3600	U
621-64-7	N-Nitroso-Di-n-Propylamine	3600	U
67-72-1	Hexachloroethane	3600	U
98-95-3	Nitrobenzene	3600	U
78-59-1	Isophorone	3600	U
88-75-5	2-Nitrophenol	3600	U
105-67-9	2,4-Dimethylphenol	3600	U
65-85-0	Benzoic Acid	17000	U
111-91-1	bis(2-Chloroethoxy)Methane	3600	U
120-83-2	2,4-Dichlorophenol	3600	U
120-82-1	1,2,4-Trichlorobenzene	3600	U
91-20-3	Naphthalene	3600	U
106-47-8	4-Chloroaniline	3600	U
87-68-3	Hexachlorobutadiene	3600	U
59-50-7	4-Chloro-3-Methylphenol	3600	U
91-57-6	2-Methylnaphthalene	3600	U
77-47-4	Hexachlorocyclopentadiene	3600	U
88-06-2	2,4,6-Trichlorophenol	3600	U
95-95-4	2,4,5-Trichlorophenol	17000	U
91-58-7	2-Chloronaphthalene	3600	U
88-74-4	2-Nitroaniline	17000	U
131-11-3	Dimethyl Phthalate	3600	U
208-96-8	Acenaphthylene	3600	U
606-20-2	2,6-Dinitrotoluene	3600	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER79

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 071489S12

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	17000	U
83-32-9	Acenaphthene	3600	U
51-28-5	2,4-Dinitrophenol	17000	U
100-02-7	4-Nitrophenol	17000	U
132-64-9	Dibenzofuran	3600	U
121-14-2	2,4-Dinitrotoluene	3600	U
84-66-2	Diethylphthalate	3600	U
7005-72-3	4-Chlorophenyl-phenylether	3600	U
86-73-7	Fluorene	3600	U
100-01-6	4-Nitroaniline	17000	U
534-52-1	4,6-Dinitro-2-Methylphenol	17000	U
86-30-6	N-Nitrosodiphenylamine (1)	3600	U
101-55-3	4-Bromophenyl-phenylether	3600	U
118-74-1	Hexachlorobenzene	3600	U
87-86-5	Pentachlorophenol	17000	U
85-01-8	Phenanthrene	3600	U
120-12-7	Anthracene	3600	U
84-74-2	Di-n-Butylphthalate	3600	U
206-44-0	Fluoranthene	3600	U
129-00-0	Pyrene	3600	U
85-68-7	Butylbenzylphthalate	3600	U
91-94-1	3,3'-Dichlorobenzidine	7200	U
56-55-3	Benzo(a)Anthracene	3600	U
218-01-9	Chrysene	3600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	3600	U
117-84-0	Di-n-Octyl Phthalate	3600	U
205-99-2	Benzo(b)Fluoranthene	3600	U
207-08-9	Benzo(k)Fluoranthene	3600	U
50-32-8	Benzo(a)Pyrene	3600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	3600	U
53-70-3	Dibenz(a,h)Anthracene	3600	U
191-24-2	Benzo(g,h,i)Perylene	3600	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER79

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 071489S12

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	UNKNOWN	28.06	3600	J
2. 000-00-0	UNKNOWN	30.72	7600	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER80

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 071489S13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3600	U
111-44-4	bis(2-Chloroethyl)Ether	3600	U
95-57-8	2-Chlorophenol	3600	U
541-73-1	1,3-Dichlorobenzene	3600	U
106-46-7	1,4-Dichlorobenzene	3600	U
100-51-6	Benzyl Alcohol	3600	U
95-50-1	1,2-Dichlorobenzene	3600	U
95-48-7	2-Methylphenol	3600	U
108-60-1	bis(2-Chloroisopropyl)Ether	3600	U
106-44-5	4-Methylphenol	3600	U
621-64-7	N-Nitroso-Di-n-Propylamine	3600	U
67-72-1	Hexachloroethane	3600	U
98-95-3	Nitrobenzene	3600	U
78-59-1	Isophorone	3600	U
88-75-5	2-Nitrophenol	3600	U
105-67-9	2,4-Dimethylphenol	3600	U
65-85-0	Benzoic Acid	17000	U
111-91-1	bis(2-Chloroethoxy)Methane	3600	U
120-83-2	2,4-Dichlorophenol	3600	U
120-82-1	1,2,4-Trichlorobenzene	3600	U
91-20-3	Naphthalene	3600	U
106-47-8	4-Chloroaniline	3600	U
87-68-3	Hexachlorobutadiene	3600	U
59-50-7	4-Chloro-3-Methylphenol	3600	U
91-57-6	2-Methylnaphthalene	3600	U
77-47-4	Hexachlorocyclopentadiene	3600	U
88-06-2	2,4,6-Trichlorophenol	3600	U
95-95-4	2,4,5-Trichlorophenol	17000	U
91-58-7	2-Chloronaphthalene	3600	U
88-74-4	2-Nitroaniline	17000	U
131-11-3	Dimethyl Phthalate	3600	U
208-96-8	Acenaphthylene	3600	U
606-20-2	2,6-Dinitrotoluene	3600	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER80

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 071489S13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	17000	U
83-32-9	Acenaphthene	3600	U
51-28-5	2,4-Dinitrophenol	17000	U
100-02-7	4-Nitrophenol	17000	U
132-64-9	Dibenzofuran	3600	U
121-14-2	2,4-Dinitrotoluene	3600	U
84-66-2	Diethylphthalate	3600	U
7005-72-3	4-Chlorophenyl-phenylether	3600	U
86-73-7	Fluorene	3600	U
100-01-6	4-Nitroaniline	17000	U
534-52-1	4,6-Dinitro-2-Methylphenol	17000	U
86-30-6	N-Nitrosodiphenylamine (1)	3600	U
101-55-3	4-Bromophenyl-phenylether	3600	U
118-74-1	Hexachlorobenzene	3600	U
87-86-5	Pentachlorophenol	17000	U
85-01-8	Phenanthrene	3600	U
120-12-7	Anthracene	3600	U
84-74-2	Di-n-Butylphthalate	3600	U
206-44-0	Fluoranthene	3600	U
129-00-0	Pyrene	3600	U
85-68-7	Butylbenzylphthalate	3600	U
91-94-1	3,3'-Dichlorobenzidine	7200	U
56-55-3	Benzo(a)Anthracene	3600	U
218-01-9	Chrysene	3600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	3600	U
117-84-0	Di-n-Octyl Phthalate	3600	U
205-99-2	Benzo(b)Fluoranthene	3600	U
207-08-9	Benzo(k)Fluoranthene	3600	U
50-32-8	Benzo(a)Pyrene	3600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	3600	U
53-70-3	Dibenz(a,h)Anthracene	3600	U
191-24-2	Benzo(g,h,i)Perylene	3600	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER80

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 071489S13

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/14/89

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 10

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	UNKNOWN	27.59	2500	J
2. 000-00-0	SATURATED ALIPHATIC HYDROCAR	28.07	2200	J
3. 000-00-0	UNKNOWN	29.99	8700	J
4. 000-00-0	UNKNOWN OXYGENATED	30.86	11000	J
5. 000-00-0	UNKNOWN	32.94	2200	J
6. 000-00-0	UNKNOWN	33.21	2900	J
7. 000-00-0	UNKNOWN	34.46	4000	J
8. 000-00-0	UNKNOWN	36.24	2500	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER81

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 062789S07

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 11 dec. 11 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(2-Chloroethyl)Ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
100-51-6	Benzyl Alcohol	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
108-60-1	bis(2-Chloroisopropyl)Ether	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-Di-n-Propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
65-85-0	Benzoic Acid	3500	U
111-91-1	bis(2-Chloroethoxy)Methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	730	U
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-Methylphenol	730	U
91-57-6	2-Methylnaphthalene	730	U
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	3500	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethyl Phthalate	730	U
208-96-8	Acenaphthylene	730	U
606-20-2	2,6-Dinitrotoluene	730	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER81

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 062789S07

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 11 dec. 11 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3500	U
83-32-9	Acenaphthene	730	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
132-64-9	Dibenzofuran	730	U
121-14-2	2,4-Dinitrotoluene	730	U
84-66-2	Diethylphthalate	730	U
7005-72-3	4-Chlorophenyl-phenylether	730	U
86-73-7	Fluorene	730	U
100-01-6	4-Nitroaniline	3500	U
534-52-1	4,6-Dinitro-2-Methylphenol	3500	U
86-30-6	N-Nitrosodiphenylamine (1)	730	U
101-55-3	4-Bromophenyl-phenylether	730	U
118-74-1	Hexachlorobenzene	730	U
87-86-5	Pentachlorophenol	3500	U
85-01-8	Phenanthrene	730	U
120-12-7	Anthracene	730	U
84-74-2	Di-n-Butylphthalate	730	U
206-44-0	Fluoranthene	730	U
129-00-0	Pyrene	730	U
85-68-7	Butylbenzylphthalate	730	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	730	U
218-01-9	Chrysene	730	U
117-81-7	bis(2-Ethylhexyl)Phthalate	730	U
117-84-0	Di-n-Octyl Phthalate	730	U
205-99-2	Benzo(b)Fluoranthene	730	U
207-08-9	Benzo(k)Fluoranthene	730	U
50-32-8	Benzo(a)Pyrene	730	U
193-39-5	Indeno(1,2,3-cd)Pyrene	730	U
53-70-3	Dibenz(a,h)Anthracene	730	U
191-24-2	Benzo(g,h,i)Perylene	730	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER81

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 062789S07

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 11 dec. 11 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	UNKNOWN HYDROCARBON	30.62	520	J
2. 000-00-0	UNKNOWN HYDROCARBON	31.47	520	J
3. 000-00-0	UNKNOWN HYDROCARBON	31.59	520	J
4. 000-00-0	SATURATED ALIPHATIC HYDROCAR	35.11	440	J
5. 000-00-0	UNKNOWN	40.19	890	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER82

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 062789S04

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 dec. 8 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
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
108-60-1	bis(2-Chloroisopropyl)Ether	710	U
106-44-5	4-Methylphenol	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	3500	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	710	U
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	710	U
77-47-4	Hexachlorocyclopentadiene	710	U
88-06-2	2,4,6-Trichlorophenol	710	U
95-95-4	2,4,5-Trichlorophenol	3500	U
91-58-7	2-Chloronaphthalene	710	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethyl Phthalate	710	U
208-96-8	Acenaphthylene	710	U
606-20-2	2,6-Dinitrotoluene	710	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER82

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: _____ SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID: _____

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 062789S04

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 dec. 8 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3500	U
83-32-9	Acenaphthene	710	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
132-64-9	Dibenzofuran	710	U
121-14-2	2,4-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	3500	U
534-52-1	4,6-Dinitro-2-Methylphenol	3500	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	3500	U
85-01-8	Phenanthrene	150	J
120-12-7	Anthracene	710	U
84-74-2	Di-n-Butylphthalate	81	J
206-44-0	Fluoranthene	310	J
129-00-0	Pyrene	270	J
85-68-7	Butylbenzylphthalate	710	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)Anthracene	100	J
218-01-9	Chrysene	170	J
117-81-7	bis(2-Ethylhexyl)Phthalate	95	J
117-84-0	Di-n-Octyl Phthalate	710	U
205-99-2	Benzo(b)Fluoranthene	270	J
207-08-9	Benzo(k)Fluoranthene	710	U
50-32-8	Benzo(a)Pyrene	140	J
193-39-5	Indeno(1,2,3-cd)Pyrene	710	U
53-70-3	Dibenz(a,h)Anthracene	710	U
191-24-2	Benzo(g,h,i)Perylene	710	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER82

Lab Name: EMSI Contract: 68-01-7396

Lab Code: EMSI Case No.: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 062789S04

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 dec. 8 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000-00-0	UNKNOWN HYDROCARBON	27.14	430	J
2. 000-00-0	UNKNOWN HYDROCARBON	29.01	580	J
3. 000-00-0	UNKNOWN HYDROCARBON	30.69	4600	J
4. 000-00-0	UNKNOWN HYDROCARBON	31.61	4500	J
5. 000-00-0	UNKNOWN HYDROCARBON	34.04	720	J
6. 000-00-0	SATURATED ALIPHATIC HYDROCAR	35.24	3600	J
7. 000-00-0	UNKNOWN	35.42	510	J
8. 000-00-0	UNKNOWN	38.99	430	J
9. 000-00-0	UNKNOWN	40.29	800	J
10. 000-00-0	SATURATED ALIPHATIC HYDROCAR	40.71	720	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER76

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003824

Sample wt/vol: 30.50 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 19 dec. 19 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19.	U
319-85-7	beta-BHC	19.	U
319-86-8	delta-BHC	19.	U
58-89-9	gamma-BHC (Lindane)	19.	U
76-44-8	Heptachlor	19.	U
309-00-2	Aldrin	19.	U
1024-57-3	Heptachlor epoxide	19.	U
959-98-8	Endosulfan I	19.	U
60-57-1	Dieldrin	39.	U
72-55-9	4,4'-DDE	39.	U
72-20-8	Endrin	39.	U
33213-65-9	Endosulfan II	39.	U
72-54-8	4,4'-DDD	39.	U
1031-07-8	Endosulfan sulfate	39.	U
50-29-3	4,4'-DDT	39.	U
72-43-5	Methoxychlor	190.	U
53494-70-5	Endrin ketone	39.	U
5103-71-9	alpha-Chlordane	190.	U
5103-74-2	gamma-Chlordane	190.	U
8001-35-2	Toxaphene	390.	U
12674-11-2	Aroclor-1016	190.	U
11104-28-2	Aroclor-1221	190.	U
11141-16-5	Aroclor-1232	190.	U
53469-21-9	Aroclor-1242	190.	U
12672-29-6	Aroclor-1248	190.	U
11097-69-1	Aroclor-1254	390.	U
11096-82-5	Aroclor-1260	390.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER77

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003825

Sample wt/vol: 30.30 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 20 dec. 20 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 6.7 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20.	U
319-85-7	beta-BHC	20.	U
319-86-8	delta-BHC	20.	U
58-89-9	gamma-BHC (Lindane)	20.	U
76-44-8	Heptachlor	20.	U
309-00-2	Aldrin	20.	U
1024-57-3	Heptachlor epoxide	20.	U
959-98-8	Endosulfan I	20.	U
60-57-1	Dieldrin	40.	U
72-55-9	4,4'-DDE	40.	U
72-20-8	Endrin	40.	U
33213-65-9	Endosulfan II	40.	U
72-54-8	4,4'-DDD	40.	U
1031-07-8	Endosulfan sulfate	40.	U
50-29-3	4,4'-DDT	40.	U
72-43-5	Methoxychlor	200.	U
53494-70-5	Endrin ketone	40.	U
5103-71-9	alpha-Chlordane	200.	U
5103-74-2	gamma-Chlordane	200.	U
8001-35-2	Toxaphene	400.	U
12674-11-2	Aroclor-1016	200.	U
11104-28-2	Aroclor-1221	200.	U
11141-16-5	Aroclor-1232	200.	U
53469-21-9	Aroclor-1242	200.	U
12672-29-6	Aroclor-1248	200.	U
11097-69-1	Aroclor-1254	400.	U
11096-82-5	Aroclor-1260	400.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER78

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003826

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 10 dec. 10 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	36.	U
72-55-9	4,4'-DDE	36.	U
72-20-8	Endrin	36.	U
33213-65-9	Endosulfan II	36.	U
72-54-8	4,4'-DDD	36.	U
1031-07-8	Endosulfan sulfate	36.	U
50-29-3	4,4'-DDT	36.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	36.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	360.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	360.	U
11096-82-5	Aroclor-1260	360.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER79

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003827

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	35.	U
72-55-9	4,4'-DDE	35.	U
72-20-8	Endrin	35.	U
33213-65-9	Endosulfan II	35.	U
72-54-8	4,4'-DDD	35.	U
1031-07-8	Endosulfan sulfate	35.	U
50-29-3	4,4'-DDT	35.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	35.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	350.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	350.	U
11096-82-5	Aroclor-1260	350.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER80

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003828

Sample wt/vol: 30.10 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 9 dec. 9 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 7.1 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	35.	U
72-55-9	4,4'-DDE	35.	U
72-20-8	Endrin	35.	U
33213-65-9	Endosulfan II	35.	U
72-54-8	4,4'-DDD	35.	U
1031-07-8	Endosulfan sulfate	35.	U
50-29-3	4,4'-DDT	35.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	35.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	350.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	350.	U
11096-82-5	Aroclor-1260	350.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER81

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003829

Sample wt/vol: 30.20 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 11 dec. 11 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC (Lindane)	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	36.	U
72-55-9	4,4'-DDE	36.	U
72-20-8	Endrin	36.	U
33213-65-9	Endosulfan II	36.	U
72-54-8	4,4'-DDD	36.	U
1031-07-8	Endosulfan sulfate	36.	U
50-29-3	4,4'-DDT	36.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	36.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	360.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	360.	U
11096-82-5	Aroclor-1260	360.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER82

Lab Name: Environmental Monitoring Contract: 68-01-7396

Lab Code: EMSI Case: 12190 SAS No.: SDG No.: EER76

Matrix: (soil/water) SOIL Lab sample ID: RAS-003830

Sample wt/vol: 30.20 (g/ml) G Lab File ID:

Level: (low/med) LOW Date Received: 06/20/89

% Moisture: not dec. 8 dec. 8 Date Extracted: 06/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/08/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	17.	U
319-85-7	beta-BHC	17.	U
319-86-8	delta-BHC	17.	U
58-89-9	gamma-BHC (Lindane)	17.	U
76-44-8	Heptachlor	17.	U
309-00-2	Aldrin	17.	U
1024-57-3	Heptachlor epoxide	17.	U
959-98-8	Endosulfan I	17.	U
60-57-1	Dieldrin	35.	U
72-55-9	4,4'-DDE	35.	U
72-20-8	Endrin	35.	U
33213-65-9	Endosulfan II	35.	U
72-54-8	4,4'-DDD	35.	U
1031-07-8	Endosulfan sulfate	35.	U
50-29-3	4,4'-DDT	35.	U
72-43-5	Methoxychlor	170.	U
53494-70-5	Endrin ketone	35.	U
5103-71-9	alpha-Chlordane	170.	U
5103-74-2	gamma-Chlordane	170.	U
8001-35-2	Toxaphene	350.	U
12674-11-2	Aroclor-1016	170.	U
11104-28-2	Aroclor-1221	170.	U
11141-16-5	Aroclor-1232	170.	U
53469-21-9	Aroclor-1242	170.	U
12672-29-6	Aroclor-1248	170.	U
11097-69-1	Aroclor-1254	350.	U
11096-82-5	Aroclor-1260	350.	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:
5HR-11-SSI

Thomas Crause, Manager
Hazardous Substances Planning Unit
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

Site Name: United Recovery
Location: Rockford Il
U.S. EPA ID#: ILD981098411
Date: 9/23/90

Dear Mr. Crause:

Attached is a copy of the screening site inspection report (SSIR) which has been prepared for the site listed above. This document is considered to be final and any changes and modifications based on comments made by your agency and the U.S. Environmental Protection Agency (U.S. EPA) during the 30 calendar day comment period have already been incorporated.

Because this is considered to be the final form of this document, this version of the SSIR may be distributed outside of your agency without prior notification and approval of U.S. EPA.

Please remember that the revised estimate of the Hazard Ranking System (HRS) score, which has already been furnished to your agency by **FIT** is still considered to be predecisional. Therefore, it should not be released. If you have any questions concerning the release of this information, please contact Ms. Jeanne Griffin, of my staff, at (312) 886-3007.

As was previously agreed upon, one set of original photographs for this SSIR has already been sent to your agency enclosed in the draft version of this SSIR. It is your agencies responsibility to see that these photographs are mounted in the photo logs enclosed in the final version of this SSIR. At this point the final version of the SSIR supersedes the draft version and the draft version of this SSIR should be removed from your agency files to ensure that the confidential draft version of this SSIR is not inadvertently released by your staff.

If you have any comments or questions, please contact Bill Messenger at (312) 353-1057.

Sincerely yours,

Thomas F. Geishecker

Thomas F. Geishecker
Technical Support Section
Enclosure
cc: Bill Messenger

Illinois Environmental Protection Agency · P.O. Box 19276, Springfield, IL 62794-9276

217/782-6761

February 9, 1990

RECEIVED
FEB 20 1990
Pre-Remedial Unit

Mr. Allen Alter
U.S. EPA
Pre-Remedial Program
230 S. Dearborn
Chicago, IL 60604

Dear Mr. Alter:

The Illinois Environmental Protection Agency has reviewed the following reports and is happy to provide the enclosed comments and suggested revisions.

Mapco Gas Products (042849547)

The Agency has reviewed this report and finds no apparent deficiencies in the sampling methodology used by the inspection team or the reports narrative content. We can not, however, concur with the contractors recommendation of "no further action" status for this site. The author indicates that extenuating circumstances exist which should preclude the site from further CERCLA investigation, but does not provide any rational for this recommendation. Absent, sound rational for this recommendation, we would recommend that the site progress to the Listing Site Inspection stage of investigation.

Creve Coeur Pulbic Well #3 (981960784)

The Agency have reviewed this document and has no comments on the report or the conclusions drawn by its author.

Belvidere Muni #2 (000605113)

The Agency has reviewed this report and has no comments on the document or the conclusions drawn by its author.

Banner Western Disposal (180010068)

The Agency have reviewed this report and has no comments on the document or the conclusions drawn by its author.

United Recovery (981098411)

The Agency has reviewed this report and has no comments, or suggested changes in its content. We would like to point out however, that this site is adjacent to a National Listed Priority Site (the Beloit Corporation). It may be beneficial for the contractors to review the hydrological data for the Beloit Corporation, prior to the installation of monitoring wells at this site.

As always, should you have any questions or comments on the enclosed, feel free to contact me at the above telephone number.

Sincerely,

Thomas Crause
Pre-Remedial Program Manager
State Site Management Unit
Remedial Project Management Section
Division of Land Pollution Control

TC:pss

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

CRL Receipt Date 7/6 FIT Receipt Date 7/26 Review Completed 7/30

TO: Mayers
FROM: Mary Gzyra
SUBJECT: United Recovery
PAN: ILO445SA (1 hour charged for review) Case # 12190/4476

Sample Description

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

Project Data Status _____ Completed!!

✓ Incomplete, awaiting DW VOA, P/P, inorg; Soil org & inorg

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/20

0759:2

recycled paper

Table 4-> Cont.

7/30/89

2070-13				Sample Collection Information and Parameters	Sample Number											
Physical State*	Waste CHARACTERISTICS	CATEGORY**	SI Mono		>_1	>_2	>_3	>_4	>_5	>_6	>_7	>_8	>_9	>_10	>_11	>_12
				Semivolatile Organics	RW1 EER83	Dup 84	RW2 85	RW3 86	RW4 87	RW5 88	BER 89					
S, thick liquid	A,B,E	OCC	P	phenol	5	6	1 J	2	2		3					
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	H-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HH	hexachloroethane												
Liquid	A,D	OCC	HA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene												
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene												

Table 4-> Cont.

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number ≥ 1	≥ 2	≥ 3	≥ 4	≥ 5	≥ 6	≥ 7	≥ 8	≥ 9	≥ 10	≥ 11	≥ 12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene												
Solid	A,D	OCC	PAH	pyrene												
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene												
Solid	A,D	OCC	PAH	chrysene												
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate	19 B											
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene												
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7/24/89

7/26/89

SUBJECT: Review of Region V CLP Data Received for Review on 6 July 1989

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

TO: Data User: FIT

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

SITE NAME: United Recovery SMO Case No. 12190/SAS4476E

EPA Data Set No. SF6310 No. of Samples: 7 D.U./Activity Numbers TFA/TFA102

CRL No. 89FM22S01 - S05, D01, 89FM11R15

SMO Traffic No. EER 83-89

CLP Laboratory: Gulf South Environmental Hrs. Required for Review: 4 HI-ST

Following are our findings:

This review covers seven water samples (EER 83 through EER 89) for semi-volatile organic analysis at special low levels according to the SAS 4476 E requirements.

The reviewer's narrative and data qualifiers follow.

Al Venuto (Weston/ESAT)
19 July 1989

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualifications referenced above. See Data Qualifier sheets and Calibration Outlier forms for flags and additional comments.
( ) Data are preliminary - pending verification by Contractor Laboratory. See Case Summary above.
( ) Data are unacceptable.

cc: Carla Dempsey, CLP Quality Assurance Officer, Analytical Operations Branch
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

DATA QUALIFIERS

Contractor: GULF SOUTH ENVIRON

Case 12190 SAS4476E

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

① Holding Times:
The seven day holding time from date of receipt to date of extraction was met by all samples and they were subsequently promptly analyzed.

② GC/MS Tuning:
The GC tuning and mass calibration were all within the required Q.C. limits

③ Calibration:
There were no semi-volatile calibration outliers but the forms are included for reference.

④ Method Blanks:
The semi-volatile method blank was found to contain only the common phthalate ester bis(2-ethylhexyl) phthalate plus a single TIC (2-cyclohexen-1-one); associated samples EER83 through EER86 and EER85MS and -MSD also contained the phthalate ester, but only EER83 also contained the TIC.

⑤ Surrogate Recoveries:
All surrogate recoveries were within the Q.C. limits.

⑥ Matrix Spikes and Matrix Spike Duplicates:
All RPDs were within the Q.C. limits, but the recoveries for phenol and 4-nitrophenol in both EER85MS and EER85MSD were above the limits,

Reviewed by: Al Venuto
Phone: (312) 353-2959
Date: 19 July 1989

DATA QUALIFIERS

Contractor: GULF SOUTH ENVIRON. | Case 12/90 SAS 4476 E

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

and the recoveries for 1,4-dichlorobenzene and 1,2,4-trichlorobenzene in EER85MSD only were below the limits. The results for these four compounds in sample EER85 should therefore be considered estimated, J or UJ, as above.

(7) Field Duplicates:

Sample EER84 was identified as a duplicate of EER83. Both had similar results except for the level of bis(2-ethylhexyl) phthalate which was much higher in sample EER83.

Sample EER84 was identified as a field blank and contained only a small amount of phenol.

(8) Internal Standards Performance:

All internal standard areas for the semi-volatile fraction were well within the Q.C. limits.

(9) Compound Quantitation and Reported Detection Limits:

A list of special low limits was included with this case. No dilutions were made, therefore no adjustments were necessary.

(10) Additional Case-Specific Problems:

None noted.

Reviewed by: Al Vesuto

Phone: (312) 353-2959

Date: 19 July 1989

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

CASE/SAS # 12190 SAS 4476E CONTRACTOR GULF SOUTH ENVIRON. LAB.

Instrument # B	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME: 6-29-89 12:26	6-29-89 12:26			6-30-89 7:57											
	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															
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															
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol															
4-Nitrophenol															
Dibenzofuran															

AFFECTED SAMPLES:

SBLKW1	EER85MS
EER83	EER85MSD
EER84	EER86
EER85	EER87
	EER88
	EER89

Reviewer Initials/Date: AV 7-14-89

* 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/SAS # 12190/4476E CONTRACTOR GULF SOUTH ENVIRON. LAB

Instrument # B	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE TIME: 6-29-89 12:26	6-29-89 12:26			6-30-89 7:57											
	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															
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.

Reviewer's Initials/Date: AV 7-19-89

For reporting results to the USEPA, the following contract specific qualifiers are to be used. The seven qualifiers defined below are not subject to modification by the laboratory. Up to five qualifiers may be reported on Form I for each compound.

The seven EPA-defined qualifiers to be used are as follows:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

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

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak separately exceeds 200 ug/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. Begin by using "X". If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

The combination of flags "BU" or"UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are also detected in the sample.

If analyses at two different dilution factors are required (see Exhibit D), follow the data reporting instructions given in Exhibit D and with the "D" and "E" flags above.

JUN 28 1989

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

SUPERFUND 6310

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY

SAMPLE DATES: 6/19-24/89
drk H_2O
LOG IN DATE: 7/17/89
DUE DATE: 8/28/89

CASE NUMBER/SAS No. 12190 \ 4476E SITE NAME United Recovery LABORATORY ~~CRL (UGA, AR)~~ GULF (BHA) / ~~CRL~~ DATE SHIPPED 6/20/89

SUPERFUND DU NUMBER TFA102 EPA RPM or OSC (S.M.S.) (CES) CERCLIS NUMBER ILD981098411 PAGE 2 OF 2

ACTIVITY NUMBER ZZ

	CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER	WATER OR LIQUIDS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN UG/L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/L TOX17564	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES17134	TOTAL METALS IN WATER UG/L MET111	WATER CYANIDE UG/L MIN74819	NITRATE/NITRITE MG/L MIN7294	AMMONIA MG/L MIN7294	RESIDUE, FILTERABLE TDS MG/L MIN7362	RESIDUE, NON-FILT TSS MG/L MIN7372			SEDIMENTS or SOILS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN MG/KG TOX215722	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG/KG TOX215622	SEDIMENTS POLYCHLORINATED BIPHENYLS MG/KG PES211422	SEDIMENT CHLORINATED PESTICIDES MG/KG 211322	TOTAL METALS MG/KG MET413	CYANIDE MG/KG MIN44930	EP TOXICITY METALS MG/KG	AMMONIA MG/KG MIN42925			
MW1	89FM22S01	EER83	~~CRL~~	✓	✓	✓	✓	✓	✓																	
2	S02	85																								
3	S03	86																								
4	S04	87																								
5	S05	88																								
D	D01	84																								
D	89FM11R15	89																								

[signature] 6/28/89

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER83

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E - Set 12190 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR01

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5	
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER83

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR01

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	19	~~B~~
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

7/30/89 7-19-89

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER83

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12/90 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR01

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 930-68-7	2-CYCLOHEXEN-1-ONE	6.15	0.49	~~BJ~~ U

AV
7-19-89

000014

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER84

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR03

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	6	
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER84

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Sat 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR03

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~0.6~~ 1	~~BU~~ U
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

AV 7-19-89

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER84

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E SDG No.: EER83

Sct 12/90

Matrix: (soil/water) WATER Lab Sample ID: CIR03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR03

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER85

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E SDG No.: EER83

Sut 12190

Matrix: (soil/water) WATER Lab Sample ID: CIR05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR05

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	1	
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

000037

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER85

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR05

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	~~B~~ U
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

AV 7-19-89

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER85

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12/90 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR05

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	14.82	1.4	J

000039

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER86

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Sut 12/90) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR10

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR10

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	2	
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER86

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12/90 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR10

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR10

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1 ~~0.6~~	~~BN~~ V
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

AV 7-19-89

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER86

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12/90 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR10

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR10

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000053

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER87

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12190 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR12

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR12

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

000063

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER87

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR12

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR12

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER87

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Oct 18190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR12

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR12

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	18.49	0.78	J
2.	UNKNOWN FATTY ACID	18.99	0.79	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER88

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Sut 12190 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR14

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR14

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	0.9	U
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER88

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR14

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR14

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER88

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12/90 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR14

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR14

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER89

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR16

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR16

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	3.	
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EER89

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Set 12190) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR16

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR16

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EER89

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E set 12/90 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: CIR16

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIR16

Level: (low/med) LOW Date Received: 06/21/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/30/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000085

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number	SAS No. (if applicable)
12190	[illegible]

1. Sample Description *(Enter in Column A)*
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Rinsate
   5. Soil/Sediment
   6. Oil (SAS)
   7. Waste (SAS)
   8. Other (SAS) *(Specify)*

2. Region Number	Sampling Co.	4. Date Shipped	Airbill Number	5. Date Received	Received by
V	FIT	6/[illegible]	[illegible]	6-21-89	Leslie LeSaichere

Sampler (Name)	Carrier	Laboratory Contract Number	Unit Price
Jeff Dickson	F		

3. Ship To: [illegible]

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

6. Transfer to	Date Received

Received by	

Contract Number	Price

CLP Sample Number *(From labels)*	(A) Sample Description *(From box 1)*	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding ~~CLP~~ CRL Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases *(Check below)* Solid	Water—MIS Liq.	Non Water—MIS Liq.
[illegible] 83		L		X			TW1	6/20/89 10:00	89F M22S01				
[illegible] 84	2	L		X			TWP	6/20/89 10:00	89F M22D01	PARAMETER: ICE PRESENT?	YES ✓	NO	
[illegible] 85	2	L		X			TW2	6/20/89 1045	89F M22S02	BOTTLES BROKEN?	✓	✓	
[illegible] 86	2	L		X			TW3	6/20/89 1115	89F M22S03	EPA TAG PRESENT? SHIPPING SEALS?	✓		
[illegible] 87	2	L		X			TW4	6/20/89 1200	89F M22S04	CONTAINER SEALS?	✓	✓	
[illegible] 88	2	L		X			TW5	6/20/89 1335	89F M22S05	CUSTODY FORM OK? LABELS ACCURATE?	✓		
[illegible] 89	3	L		X		Blank	Blank	6/20/89 1030	89F M11F15	NOTES COMMENTS (if none)	✓		

SDG No. EER83

Final SDG No. EER89

Shipment complete

000001

EPA Form 9110-2 (8-88) Replaces EPA Form 2075-7, which may be used. Blue - SMO Copy Pink - Region Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

Gulf South Environmental Laboratory
4476E Set-12190

GSELI Project No. 6200-3602
SDG No. EER83

Narrative

4476E Set 12190 consisted of seven (7) water samples which were received by Gulf South Environmental laboratory on June 21, 1989 and logged in as Episode CIR. The samples were identified as follows:

EER83 EER84 EER85 EER86 EER87 EER88 EER89

The samples were analyzed for semivolatile organics only, following the methodology outlined for low detection limit organics in SAS 4476E.

No problems were encountered with the analyses.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Richard R. Whitney , Ph.D.
GC/MS Laboratory Manager

7/5/89
Date

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12190 SDG No.: EER83

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	EER83	67	58	72	78	72	84		0
02	EER84	76	62	70	85	86	82		0
03	EER85	75	68	71	81	83	82		0
04	EER86	78	52	82	82	67	70		0
05	EER87	66	46	86	56	43	60		0
06	EER88	72	49	84	80	65	73		0
07	EER89	66	48	76	73	60	68		0
08	EER85MS	70	51	76	78	64	74		0
09	EER85MSD	68	55	81	74	56	75		0
10	SBLKW1	78	52	69	84	89	79		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

000001

FORM II SV-1 1/87 Rev.

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12190 SDG No.: EER83

Matrix Spike - EPA Sample No.: EER85

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	20.0	1.14	21.4	101 *	12- 89
2-Chlorophenol	20.0	0	15.6	78	27-123
1,4-Dichlorobenzene	10.0	0	3.57	36	36 97
N-Nitroso-di-n-prop.(1)	10.0	0	4.91	49	41 116
1,2,4-Trichlorobenzene	10.0	0	3.86	39	39 98
4-Chloro-3-methylphenol	20.0	0	14.8	74	23 97
Acenaphthene	10.0	0	6.30	63	46-118
4-Nitrophenol	20.0	0	16.2	81 *	10- 80
2,4-Dinitrotoluene	10.0	0	7.15	72	24- 96
Pentachlorophenol	20.0	0	16.9	84	9-103
Pyrene	10.0	0	7.10	71	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	20.0	19.7	93 *	8	42	12- 89
2-Chlorophenol	20.0	13.9	70	11	40	27-123
1,4-Dichlorobenzene	10.0	3.30	33 *	9	28	36 97
N-Nitroso-di-n-prop.(1)	10.0	4.18	42	15	38	41 116
1,2,4-Trichlorobenzene	10.0	3.66	37 *	5	28	39 98
4-Chloro-3-methylphenol	20.0	14.4	72	3	42	23 97
Acenaphthene	10.0	6.35	64	-2	31	46-118
4-Nitrophenol	20.0	17.5	88 *	-8	50	10- 80
2,4-Dinitrotoluene	10.0	7.50	75	-4	38	24- 96
Pentachlorophenol	20.0	18.0	90	-7	50	9-103
Pyrene	10.0	7.50	75	-5	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 6 out of 22 outside limits

COMMENTS: EER85 (WATER) SAS:4476E SET 12190
0.32MM DB-5 FSCC (1.0U) 45/4-300@12 INST B

000002

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (Set 12/90) SDG No.: EER83

Lab File ID: SVCIRSBW1 Lab Sample ID: SBLKW1

Date Extracted: 06/26/89 Extraction:(SepF/Cont/Sonc) CONT

Date Analyzed: 06/29/89 Time Analyzed: 1704

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EER83	CIR01	SVCIR01	06/29/89
02	EER84	CIR03	SVCIR03	06/29/89
03	EER85	CIR05	SVCIR05	06/29/89
04	EER86	CIR10	SVCIR10	06/30/89
05	EER87	CIR12	SVCIR12	06/30/89
06	EER88	CIR14	SVCIR14	06/30/89
07	EER89	CIR16	SVCIR16	06/30/89
08	EER85MS	CIR06MS	SVCIR06MS	06/30/89
09	EER85MSD	CIR07MSD	SVCIR07MSD	06/30/89

COMMENTS: SBLKW1 (WATER - BLANK #1) SAS:4476E SET 12190
0.32MM DB-5 FSCC (1.0U) 45/4-300@12 INST B

000003

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW1

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (set 12/90) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: SBLKW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIRSBW1

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	0.9	U
111-44-4	bis(2-Chloroethyl)Ether	0.6	U
95-57-8	2-Chlorophenol	0.6	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.8	U
100-51-6	Benzyl Alcohol	0.9	U
95-50-1	1,2-Dichlorobenzene	0.7	U
95-48-7	2-Methylphenol	0.7	U
108-60-1	bis(2-Chloroisopropyl)Ether	0.8	U
106-44-5	4-Methylphenol	0.6	U
621-64-7	N-Nitroso-Di-n-Propylamine	0.9	U
67-72-1	Hexachloroethane	0.5	U
98-95-3	Nitrobenzene	0.8	U
78-59-1	Isophorone	0.5	U
88-75-5	2-Nitrophenol	0.4	U
105-67-9	2,4-Dimethylphenol	0.9	U
65-85-0	Benzoic Acid	2	U
111-91-1	bis(2-Chloroethoxy)Methane	0.6	U
120-83-2	2,4-Dichlorophenol	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.7	U
91-20-3	Naphthalene	0.8	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	0.7	U
59-50-7	4-Chloro-3-Methylphenol	0.5	U
91-57-6	2-Methylnaphthalene	0.8	U
77-47-4	Hexachlorocyclopentadiene	0	U
88-06-2	2,4,6-Trichlorophenol	0.6	U
95-95-4	2,4,5-Trichlorophenol	0.8	U
91-58-7	2-Chloronaphthalene	0.7	U
88-74-4	2-Nitroaniline	0.9	U
131-11-3	Dimethyl Phthalate	0.4	U
208-96-8	Acenaphthylene	0.6	U
606-20-2	2,6-Dinitrotoluene	0.5	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW1

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E (set 12/90) SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: SBLKW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIRSBW1

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	1	U
83-32-9	Acenaphthene	0.6	U
51-28-5	2,4-Dinitrophenol	3	U
100-02-7	4-Nitrophenol	1	U
132-64-9	Dibenzofuran	0.5	U
121-14-2	2,4-Dinitrotoluene	0.5	U
84-66-2	Diethylphthalate	0.4	U
7005-72-3	4-Chlorophenyl-phenylether	0.6	U
86-73-7	Fluorene	0.6	U
100-01-6	4-Nitroaniline	4	U
534-52-1	4,6-Dinitro-2-Methylphenol	1	U
86-30-6	N-Nitrosodiphenylamine (1)	0.6	U
101-55-3	4-Bromophenyl-phenylether	0.4	U
118-74-1	Hexachlorobenzene	0.4	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	0.4	U
120-12-7	Anthracene	0.4	U
84-74-2	Di-n-Butylphthalate	0.7	U
206-44-0	Fluoranthene	0.5	U
129-00-0	Pyrene	0.8	U
85-68-7	Butylbenzylphthalate	0.7	U
91-94-1	3,3'-Dichlorobenzidine	0.5	U
56-55-3	Benzo(a)Anthracene	0.5	U
218-01-9	Chrysene	0.6	U
117-81-7	bis(2-Ethylhexyl)Phthalate	0.5	J
117-84-0	Di-n-Octyl Phthalate	0.9	U
205-99-2	Benzo(b)Fluoranthene	1	U
207-08-9	Benzo(k)Fluoranthene	1	U
50-32-8	Benzo(a)Pyrene	0.5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	0.6	U
53-70-3	Dibenz(a,h)Anthracene	0.7	U
191-24-2	Benzo(g,h,i)Perylene	0.6	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW1

Lab Name: G S E L I Contract: _____

Lab Code: GULF Case No.: _____ SAS No.: 4476E Set 12190 SDG No.: EER83

Matrix: (soil/water) WATER Lab Sample ID: SBLKW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVCIRSBW1

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/29/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 930-68-7	2-CYCLOHEXEN-1-ONE	6.75	0.58	J

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

CRL Receipt Date 6/21 FIT Receipt Date 8/1 Review Completed 8/2/89

TO: Mayeroz
FROM: Mary Gzyra
SUBJECT: United Recovery
PAN: IL0445SA (1 hour charged for review) Case # 12190

Sample Description

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

Project Data Status _____ Completed!!

✓ Incomplete, awaiting DW moisture

Soil org & cyan

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/20

0759:2

recycled paper

Table 4-_>_
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED >_____ SAMPLES

3 8/2/89

2070-13				Sample Collection Information and Parameters	Sample Number											
Physical State*	Waste Characteristics**	Category***	SI Memo		>_1 RW-1	>_2 Trip	>_3 RW2	>_4 RW3	>_5 RW4	>_6 RW5	>_7 Blk	>_8	>_9	>_10	>_11	>_12
				Date												
				Time												
				Organic Traffic Report Number	89FM22S01	89FM22D01	89FM22S02	89FM22S03	89FM22S04	89FM22S05	89FM11R15					
				Inorganic Traffic Report Number												
				Temperature (°C)												
				Specific Conductivity (µmhos)												
				pH												
				Compound Detected (values in > µg/L or µg/kg)												
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride												
Liquid	E,H,I,A	SOL	K,CLA	acetone												
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene			1 J									
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform							2 J					
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane			9 J									
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane							1 J					
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene			90 J									
Liquid	A,G,E	SOL	A,CLA	toluene							1 J					
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4-> Cont.

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number >_1	>_2	>_3	>_4	>_5	>_6	>_7	>_8	>_9	>_10	>_11	>_12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene												
Solid	A,D	OCC	PAH	pyrene												
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene												
Solid	A,D	OCC	PAH	chrysene												
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate												
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene												
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: JUL 28 1989

SUBJECT: Review of Region 5 data for United Recovery

FROM: Curtis Ross, Director A. Alwan for.
Region 5 Central Regional Laboratory

To: Data User:

Attached are the results for:

CRL Data Set Numbers: SF-6232
Sample Numbers: 89FM22S01-S05, D01, 89FM11R15 (7)
Parameter(s): VOA - WATER
Laboratory: CRL (ESAT/WESTON)

Results Status:

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

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

Comments by the Quality Control Coordinator:

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)

TRANSMITTED BY
S. Griffin
JUL 28 1989

U.S. EPA CENTRAL
REGIONAL LAB

RECEIVED BY/DATE: 8/1/89
Comments:

DATA SET	SITE	OU/ACT.
SF-6232	United Recovery	TFA 302

SAMPLES	PARAMETER(S)
89FMIIRIS 89FM22S01-S05, D01, (7)	VOA - WATER

SAMPLED	RECEIVED	DUE	LAB
6/20/89	6/21/89	7/12/89	CRL (WESTON/ESAT)

SHIPPED	DATA RECEIVED	CONTRACT

TEAM LEADER	SECTION CHIEF	QC COORD.	DATA COORD.
A. Alwan		R. Johnson	

Comments By Reviewer:

The data is qualified. The results are estimated because the holding time was exceeded (9 - 17 days) from sampling for the initial and reanalyses.

A. Alwan
7/20/89

DATA MANAGEMENT COORDINATOR

CEIVED	TRANSMITTED		CLERICAL SUPPORT RECEIVED	COMPLETED
(X) REVIEWED	( ) UNREVIEWED	TEAM LEADER/DATE A. Alwan		
( ) REVIEWED	( ) UNREVIEWED	SECTION CHIEF/DATE		
(X) REVIEWED	( ) UNREVIEWED	QC COORDINATOR/DATE 7/18/89		

REVIEWED BY CONTRACT COORDINATOR/DATE

CEIVED	TRANSMITTED	DATA MANAGEMENT COORDINATOR

CC: QUALITY CONTROL COORDINATOR

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

METHOD BLANK ~~BLK~~

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ669
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/29/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

METHODBLANK

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ669

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/29/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

METHOD BLK

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF535
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

METHOD BLK

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF535

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM11R15

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ670
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/29/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q	
74-87-3	Chloromethane	3.	U	
74-83-9	Bromomethane	3.	U	
75-01-4	Vinyl Chloride	3.	U	
75-00-3	Chloroethane	3.	U	
75-09-2	Methylene Chloride	1.	U	
107-02-8	Acrolein	25.	U	X
67-64-1	Acetone	50.	U	
107-13-1	Acrylonitrile	50.	U	
75-15-0	Carbon Disulfide	2.	U	
75-35-4	1,1-Dichloroethene	1.	U	
75-34-3	1,1-Dichloroethane	1.	U	
156-60-5	1,2-Dichloroethene (total)	1.	U	
67-66-3	Chloroform	2.		
107-06-2	1,2-Dichloroethane	1.	U	
78-93-3	2-Butanone	20.	U	
71-55-6	1,1,1-Trichloroethane	1.	U	
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	10.	U	
75-27-4	Bromodichloromethane	1.	J	
78-87-5	1,2-Dichloropropane	1.	U	
10061-01-5	cis-1,3-Dichloropropene	1.	U	
79-01-6	Trichloroethene	1.	U	
71-43-2	Benzene	1.	U	
124-48-1	Dibromochloromethane	1.	U	
10061-02-6	trans-1,3-Dichloropropene	1.	U	
79-00-5	1,1,2-Trichloroethane	1.	U	
110-75-8	2-Chloroethyl Vinylether	1.	U	
75-25-2	Bromoform	1.	U	
108-10-1	4-Methyl-2-pentanone	4.	U	
591-78-6	2-Hexanone	4.	U	
127-18-4	Tetrachloroethene	1.	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	
108-88-3	Toluene	1.	J	
108-90-7	Chlorobenzene	1.	U	
100-41-4	Ethylbenzene	1.	U	
100-42-5	Styrene	2.	U	
108-38-3	Meta Xylene	2.	U	
95-47-6	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM11R15

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ670

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S01

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ672
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/29/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S01

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ672

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/29/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22D01

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ673
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/29/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22D01

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ673

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/29/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S02

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ674
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/29/89

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	3.	IU
74-83-9	Bromomethane	3.	IU
75-01-4	Vinyl Chloride	3.	IU
75-00-3	Chloroethane	3.	IU
75-09-2	Methylene Chloride	1.	IU
107-02-8	Acrolein	75.	IU
67-64-1	Acetone	50.	IU
107-13-1	Acrylonitrile	50.	IU
75-15-0	Carbon Disulfide	2.	IU
75-35-4	1,1-Dichloroethene	1.	IJ *
75-34-3	1,1-Dichloroethane	1.	IU
156-60-5	1,2-Dichloroethene (total)	1.	IU
67-66-3	Chloroform	1.	IU
107-02-2	1,2-Dichloroethane	1.	IU
78-93-3	2-Butanone	20.	IU
71-55-6	1,1,1-Trichloroethane	9.	*
56-23-5	Carbon Tetrachloride	1.	IU
108-05-4	Vinyl Acetate	10.	IU
75-27-4	Bromodichloromethane	1.	IU
78-87-5	1,2-Dichloropropane	1.	IU
10061-01-5	cis-1,3-Dichloropropene	1.	IU
79-01-6	Trichloroethene	1.	IU
71-43-2	Benzene	1.	IU
124-48-1	Dibromochloromethane	1.	IU
10061-02-6	trans-1,3-Dichloropropene	1.	IU
79-00-5	1,1,2-Trichloroethane	1.	IU
110-75-8	2-Chloroethyl Vinylether	1.	IU
75-25-2	Bromoform	1.	IU
108-10-1	4-Methyl-2-pentanone	4.	IU
591-78-6	2-Hexanone	4.	IU
127-18-4	Tetrachloroethene	61.	IE
79-34-5	1,1,2,2-Tetrachloroethane	1.	IU
108-88-3	Toluene	1.	IU
108-90-7	Chlorobenzene	1.	IU
100-41-4	Ethylbenzene	1.	IU
100-42-5	Styrene	2.	IU
108-38-3	Meta Xylene	2.	IU
95-47-6	O-&/or P-Xylene	2.	IU

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

* Use results 7/20/89 DF

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S02

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ674

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/29/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S02~~RE~~DL

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF536
Dilution Factor: ~~1.00000~~ 10.0 12/13/89

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	30.	U
74-83-9	Bromomethane	30.	U
75-01-4	Vinyl Chloride	30.	U
75-00-3	Chloroethane	30.	U
75-09-2	Methylene Chloride	10.	U
107-02-8	Acrolein	750.	U
67-64-1	Acetone	500.	U
107-13-1	Acrylonitrile	500.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-02-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	200.	U
71-55-6	1,1,1-Trichloroethane	11.	
56-23-5	Carbon Tetrachloride	10.	U
108-05-4	Vinyl Acetate	100.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
71-43-2	Benzene	10.	U
124-48-1	Dibromochloromethane	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
110-75-8	2-Chloroethyl Vinylether	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-pentanone	40.	U
591-78-6	2-Hexanone	40.	U
127-18-4	Tetrachloroethene	90.	*
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	20.	U
108-38-3	Meta Xylene	20.	U
95-47-6	O-&/or P-Xylene	20.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

* Use result of re-analysis 7/20/89 CKP

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S02~~RED~~ L

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF536

Date Received: 06/21/89

Dilution Factor: ~~1.00000~~ 10.0 12/13/89 CF

Date Analyzed: 07/07/89

CONCENTRATION UNITS: ug/L or ug/Kg ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S02M

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ675
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/29/89

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	3.	IU
74-83-9	Bromomethane	3.	IU
75-01-4	Vinyl Chloride	3.	IU
75-00-3	Chloroethane	3.	IU
75-09-2	Methylene Chloride	1.	IU
107-02-8	Acrolein	75.	IU
67-64-1	Acetone	50.	IU
107-13-1	Acrylonitrile	50.	IU
75-15-0	Carbon Disulfide	2.	IU
75-35-4	1,1-Dichloroethene	6.	I
75-34-3	1,1-Dichloroethane	1.	IU
156-60-5	1,2-Dichloroethene (total)	1.	IU
67-66-3	Chloroform	1.	IU
107-02-2	1,2-Dichloroethane	1.	IU
78-93-3	2-Butanone	20.	IU
71-55-6	1,1,1-Trichloroethane	8.	I
56-23-5	Carbon Tetrachloride	1.	IU
108-05-4	Vinyl Acetate	10.	IU
75-27-4	Bromodichloromethane	1.	IU
78-87-5	1,2-Dichloropropane	1.	IU
10061-01-5	cis-1,3-Dichloropropene	1.	IU
79-01-6	Trichloroethene	6.	I
71-43-2	Benzene	8.	I
124-48-1	Dibromochloromethane	1.	IU
10061-02-6	trans-1,3-Dichloropropene	1.	IU
79-00-5	1,1,2-Trichloroethane	1.	IU
110-75-8	2-Chloroethyl Vinylether	1.	IU
75-25-2	Bromoform	1.	IU
108-10-1	4-Methyl-2-pentanone	4.	IU
591-78-6	2-Hexanone	4.	IU
127-18-4	Tetrachloroethene	53.	IE
79-34-5	1,1,2,2-Tetrachloroethane	1.	IU
108-88-3	Toluene	7.	I
108-90-7	Chlorobenzene	7.	I
100-41-4	Ethylbenzene	1.	IU
100-42-5	Styrene	2.	IU
108-38-3	Meta Xylene	2.	IU
95-47-6	O-&/or P-Xylene	2.	IU

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S02M

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ675

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/29/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S02MRE

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF537
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	7.	*
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	11.	*
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	9.	*
71-43-2	Benzene	9.	*
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	84.	E
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	10.	*
108-90-7	Chlorobenzene	10.	*
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

* Use results of re-analysis 7/20/89 DF

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S02MRE

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF537

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S02D

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ676
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/30/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	6.	
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	8.	
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	6.	
71-43-2	Benzene	8.	
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	55.	E
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	7.	
108-90-7	Chlorobenzene	7.	
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S02D

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ676

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/30/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
89FM22S02DRE

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF538
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	7.	*
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	11.	*
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	9.	*
71-43-2	Benzene	10.	*
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	82.	E
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	10.	*
108-90-7	Chlorobenzene	10.	*
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

* Use results of reanalysis 7/20/89 CLP

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S02DRE

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF538

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S03

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ677
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/30/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S03

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ677

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/30/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
89FM22S03RE

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF539
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S03RE

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF539

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S04

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ678
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/30/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	IU
74-83-9	Bromomethane	3.	IU
75-01-4	Vinyl Chloride	3.	IU
75-00-3	Chloroethane	3.	IU
75-09-2	Methylene Chloride	1.	IU
107-02-8	Acrolein	75.	IU
67-64-1	Acetone	50.	IU
107-13-1	Acrylonitrile	50.	IU
75-15-0	Carbon Disulfide	2.	IU
75-35-4	1,1-Dichloroethene	1.	IU
75-34-3	1,1-Dichloroethane	1.	IU
156-60-5	1,2-Dichloroethene (total)	1.	IU
67-66-3	Chloroform	1.	IU
107-02-2	1,2-Dichloroethane	1.	IU
78-93-3	2-Butanone	20.	IU
71-55-6	1,1,1-Trichloroethane	1.	IU
56-23-5	Carbon Tetrachloride	1.	IU
108-05-4	Vinyl Acetate	10.	IU
75-27-4	Bromodichloromethane	1.	IU
78-87-5	1,2-Dichloropropane	1.	IU
10061-01-5	cis-1,3-Dichloropropene	1.	IU
79-01-6	Trichloroethene	1.	IU
71-43-2	Benzene	1.	IU
124-48-1	Dibromochloromethane	1.	IU
10061-02-6	trans-1,3-Dichloropropene	1.	IU
79-00-5	1,1,2-Trichloroethane	1.	IU
110-75-8	2-Chloroethyl Vinylether	1.	IU
75-25-2	Bromoform	1.	IU
108-10-1	4-Methyl-2-pentanone	4.	IU
591-78-6	2-Hexanone	4.	IU
127-18-4	Tetrachloroethene	1.	IU
79-34-5	1,1,2,2-Tetrachloroethane	1.	IU
108-88-3	Toluene	1.	IU
108-90-7	Chlorobenzene	1.	IU
100-41-4	Ethylbenzene	1.	IU
100-42-5	Styrene	2.	IU
108-38-3	Meta Xylene	2.	IU
95-47-6	O-&/or P-Xylene	2.	IU

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S04

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ678

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/30/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
89FM22S04RE

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF540
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	IU
74-83-9	Bromomethane	3.	IU
75-01-4	Vinyl Chloride	3.	IU
75-00-3	Chloroethane	3.	IU
75-09-2	Methylene Chloride	1.	IU
107-02-8	Acrolein	75.	IU
67-64-1	Acetone	50.	IU
107-13-1	Acrylonitrile	50.	IU
75-15-0	Carbon Disulfide	2.	IU
75-35-4	1,1-Dichloroethene	1.	IU
75-34-3	1,1-Dichloroethane	1.	IU
156-60-5	1,2-Dichloroethene (total)	1.	IU
67-66-3	Chloroform	1.	IU
107-02-2	1,2-Dichloroethane	1.	IU
78-93-3	2-Butanone	20.	IU
71-55-6	1,1,1-Trichloroethane	1.	IU
56-23-5	Carbon Tetrachloride	1.	IU
108-05-4	Vinyl Acetate	10.	IU
75-27-4	Bromodichloromethane	1.	IU
78-87-5	1,2-Dichloropropane	1.	IU
10061-01-5	cis-1,3-Dichloropropene	1.	IU
79-01-6	Trichloroethene	1.	IU
71-43-2	Benzene	1.	IU
124-48-1	Dibromochloromethane	1.	IU
10061-02-6	trans-1,3-Dichloropropene	1.	IU
79-00-5	1,1,2-Trichloroethane	1.	IU
110-75-8	2-Chloroethyl Vinylether	1.	IU
75-25-2	Bromoform	1.	IU
108-10-1	4-Methyl-2-pentanone	4.	IU
591-78-6	2-Hexanone	4.	IU
127-18-4	Tetrachloroethene	1.	IU
79-34-5	1,1,2,2-Tetrachloroethane	1.	IU
108-88-3	Toluene	1.	IU
108-90-7	Chlorobenzene	1.	IU
100-41-4	Ethylbenzene	1.	IU
100-42-5	Styrene	2.	IU
108-38-3	Meta Xylene	2.	IU
95-47-6	O-&/or P-Xylene	2.	IU

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S04RE

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF540

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S05

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CJ679
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 6/30/89

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S05

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CJ679

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 06/30/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM22S05RE

Study Name: UNITED RECOVERY
Data Set: SF-6232
Lab File ID: >CF541
Dilution Factor: 1.00000

Matrix: water
Date Received: 06/21/89
Date Analyzed: 7/07/89

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
74-87-3	Chloromethane	3.	U
74-83-9	Bromomethane	3.	U
75-01-4	Vinyl Chloride	3.	U
75-00-3	Chloroethane	3.	U
75-09-2	Methylene Chloride	1.	U
107-02-8	Acrolein	75.	U
67-64-1	Acetone	50.	U
107-13-1	Acrylonitrile	50.	U
75-15-0	Carbon Disulfide	2.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	1.	U
75-25-2	Bromoform	1.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	JU 7/13/89
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	2.	U
108-38-3	Meta Xylene	2.	U
95-47-6	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated. D = DILUTED OUT
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.
B = Contaminant found in blank.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM22S05RE

Study Name: UNITED RECOVERY

Data Set: SF-6232

Matrix: WATER

Lab File ID: >CF541

Date Received: 06/21/89

Dilution Factor: 1.00000

Date Analyzed: 07/07/89

CONCENTRATION UNITS:
ug/L or ug/Kg
ug/L

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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NARRATIVE

TO: Alwan Alwan

FROM: Carsten Falkenberg

DATE: 13 July 1989

RE: Data Set SF-6232 United Recovery

Data Set SF-6232 consisted of seven (7) low level water samples submitted for volatile organic analysis (VOA) by GC/MS utilizing EPA method 624 NS.

All samples were initially analyzed within nine days of sampling. Reanalysis occurred eight days after the initial analysis. The holding time was exceeded by two days due to physical plant limitations. All results should be considered estimated.

All tunings were acceptable with BFB meeting all QC requirements (Form 5).

There were two initial calibrations associated with this data set. All compounds had % RSD's less than 35% (Form 6). The continuing calibrations were acceptable with all compounds having % Ds less than 35% except acrylonitrile (100.4%D /RF 0.221), carbon disulfide (35.7%D /RF 2.305), vinyl acetate (85.4%D /RF 0.055), trichloroethene (40.9%D /RF 1.258) and 1,1,2-trichloroethane (36.3%D /RF 0.393) on 6/29/89. On 7/7/89, the continuing calibration was acceptable with all compounds having %Ds less than 35%,except vinyl acetate (205%D /RF 0.328).

All internal standard areas and retention times were within QC limits (Form 8).

The initial analysis reported surrogate S-1 (toluene-d8) out of QC limits for samples 89FM22S02M, S02D, S03, S04 and S05. All surrogates were within limits upon reanalysis.

Sample 89FM22S02 was used for the matrix spike and the matrix spike duplicate. The reanalysis of the matrix spike and the matrix, spike duplicate demonstrated that % recoveries and % RPDs for all compounds were within QC limits (Form 3). There were two Method Blanks associated with the samples; no target compounds or TICs were identified in either one.

There was one Field Blank (89FM11R15) associated with the samples. Chloroform (above but near the MDL), and toluene (below the MDL) were identified. No TICs were detected.

89FM22S01 and 89FM22D01 are duplicate samples. No target compounds or TICs were identified in either sample.

89FM22S02 contained 1,1-dichloroethene (below the MDL), 1,1,1-trichloroethane (above the MDL), tetrachloroethene (far above the calibration range). Reanalysis of a diluted sample (1:10) brought this compound within the calibration range.

Samples 89FM22S01, S03, S03RE, S04, S04RE, S05, and S05RE did not report any target compounds or TICs.

All results are summarized on their respective Forms 1A.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: JUL 13 1989

SUBJECT: Review of Region 5 data for United Recovery

FROM: Curtis Ross, Director
Region 5 Central Regional Laboratory

To: Data User:

Attached are the results for:

CRL Data Set Numbers: SF 6232
Sample Numbers: 89FM22S01 – S05; D01; 89FM11R15
Parameter(s): PCB/Pesticides
Laboratory: CRL

Results Status:

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

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

Comments by the Quality Control Coordinator:

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)

TRANSMITTED BY
S. Griffin
JUL 13 1989

RECEIVED BY/DATE: 7/14/89

U.S. EPA CENTRAL REGIONAL LAB

Comments:

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC FORM

DIVISION/BRANCH: Super Fund Sampling Date: 6/20/89 Arrival Date: 6/21/89 Analysis Due Date: 7/21/89

Sample#/
D.U. Number: TFA D.S. ~~Group#~~ 6232 Activity#: Study: United Recovery

ALL UNITS ARE MICROGRAMS PER LITER OR MILLIGRAMS PER KILOGRAM. Sample type: Water

Pesticide / Sample #	Y-BHC Lindane	Heptachlor	Aldrin	Heptachlor Epoxide	Endosulfan I	Dieldrin	Endrin	Endosulfan II	pp-DDE	Beta-BHC	Delta-BHC	Alpha-BHC	pp-DDD	pp-DDT	Methoxychlor	Endosulfan Sulfate	Endrin Aldehyde	Endrin Ketone	T-Chlordane	Toxaphene
1. 89FM22 S01	0.002 U	.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	0.2 U	1 U
2. S02	0.002 U	.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	.2 U	1 U
3. S03	0.002 U	.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	.2 U	1 U
4. S04	0.002 U	.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	.2 U	1 U
5. S05	0.002 U	.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	.2 U	1 U
6. D01	0.002 U	.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	.2 U	1 U
7. 89FM11 R15	0.002 U	0.03 U	.02 U	.01 U	.01 U	.01 U	.01 U	.01 U	.02 U	.02 U	.02 U	.02 U	.04 U	.02 U	.02 U	.13 U	.05 U	.03 U	.2 U	1 U
8.																				
9.																				
10.																				
11.																				
12.																				
13.																				

U - undetected; Below MDL

M Whitbeck 7/8/89

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

DIVISION/BRANCH: Sup Fund Sampling Date: 6/20/89 (Month Day Year) Arrival Date: 6/21/89 (Month Day Year) Analysis Due Date: 7/12/89 (Month Day Year)

D.U. Number: TFA Data Set #: 6282 Activity #: _____ Study: United Recovery

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	
	89FM22										
1	S01	0.2U	0.2U	0.2U	0.2U						
2	S02	0.2U	0.2U	0.2U	0.2U						
3	S03	0.2U	0.2U	0.2U	0.2U						
4	S04	0.2U	0.2U	0.2U	0.2U						
5	S05	0.2U	0.2U	0.2U	0.2U						
6	D01	0.2U	0.2U	0.2U	0.2U						
7	89FM11 R15	0.2U	0.2U	0.2U	0.2U						
8											
9											
10											
11											
12											
13											
14											
15											
16	U - Below Method Detection Limit; Not detected										

Mark Williams 7/6/89

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

CRL Receipt Date 6/21 FIT Receipt Date 8/22 Review Completed 8/23/89

TO: Mayers
FROM: Mary Czyra
SUBJECT: United Recovery
PAN: ILO 445SA (1 hour charged for review) Case # 12190

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	#	Low Soil
	Low Water		Low Water
	Drinking Water	7	Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓ Incomplete, awaiting soil org + inorg

FIT Data Review Findings:

✓ ***Check Data Sheets for Transcription Errors***

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/20

0759:2

recycled paper

Zj 8/23/89

Table 4-> Cont.

2070-13 Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1 RW1	2 Dup	3 RW2	4 RW3	5 RW4	6 RW5	7 Blk	8	9	10	11	12
				Analyte Detected (values in > mg/kg or µg/L)	89FW32501	001	S02	S03	S04	S05	89FM11215					
Solid	A,D	MES	CSC	aluminum												
Solid	A,D	MES	HM	antimony												
Solid	A,D	MES	HM	arsenic					3							
Solid	A,D	MES	CSC	barium	169	17	13.4	11.5	42.5	14.9						
Solid	A,D	MES	M	beryllium												
Solid	A,D	MES	HM	cadmium						0.3						
Solid	D	MES	CSC	calcium	59100	59500	91200	74300	103000	62500						
Solid	A,D	MES	HM	chromium												
Solid	A,D	MES	HM	cobalt												
Solid	A,D	MES	HM	copper	12	11	8.6	7.5	9.0							
Solid	A,D	MES	HM,CSC	iron			136		5360							
Solid	A,D	MES	HM	lead												
Solid	A,D	MES	CSC	magnesium	32700	33000	45000	34500	35300	28600						
Solid	A,D	MES	HM	manganese					631							
Liquid	A,D	MES	HM	mercury												
Solid	A,D	MES	HM	nickel												
Solid	D	MES	CSC	potassium												
Solid	A,D	MES	M	selenium												
Solid	A,D	MES	HM	silver												
Solid	D	MES	CSC	sodium	2200	2100	10300	8600	18400	3500						
Solid	A,D	MES	HM	thallium												
Solid	A,D	MES	HM	vanadium												
Solid	A,D	MES	CSC,HM	zinc			60.8			149						
Solid	A	IOC	IOC	cyanide												

— Not detected.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: AUG 2 2 1989

SUBJECT: **Review of Region 5 data for** United Recovery

FROM: **Curtis Ross, Director** Chi Yang for
Region 5 Central Regional Laboratory

To: **Data User:** FIT

Attached are the results for:

CRL Data Set Numbers: SF 6232
Sample Numbers: 89FM22S01~S05, D01, 89FM11R15
Parameter(s): ICP metals
Laboratory: ESAT

Results Status:

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

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

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to David Payne, 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)

TRANSMITTED BY
Sylvia Griffin
AUG 2 2 1989

U.S. EPA CENTRAL
REGIONAL LAB

RECEIVED BY/DATE: [illegible] 8/22/89

Comments:

DATA SET	SITE	DU/ACT.
SF-6232	United Recovery	TFA302

SAMPLES	PARAMETER(S)
89FM11R15 89FM2250-505, D01	ICP metals

SAMPLED	RECEIVED	DUE	LAB
6/20/89	6/21/89	7/12/89	ESAT

SHIPPED	DATA RECEIVED	CONTRACT

C ments By Reviewer:

( ) VIEWED ( ) UNREVIEWED TEAM LEADER/DATE

(✓) REVIEWED ( ) UNREVIEWED SECTION CHIEF/DATE Chi Yang 8/11/89

( ) VIEWED ( ) UNREVIEWED QC COORDINATOR/DATE

REVIEWED BY CONTRACT COORDINATOR/DATE

CEIVED 8/22/89 TRANSMITTED 8/22/89 DATA MANAGEMENT COORDINATOR Sylvia Griffin

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM22S01 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	16.9	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	59100.	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	12.0	micrograms/Liter
Magnesium	32700.	micrograms/Liter
Iron	80.0U	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	5.0U	micrograms/Liter
Sodium	2200.	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	40.0U	micrograms/Liter

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM22D01 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	17.0	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	59500.	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	11.0	micrograms/Liter
Magnesium	33000.	micrograms/Liter
Iron	80.0U	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	5.0U	micrograms/Liter
Sodium	2100.	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	40.0U	micrograms/Liter

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM22S02 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	13.4	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	91200.	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	8.6	micrograms/Liter
Magnesium	45000.	micrograms/Liter
Iron	136.	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	5.0U	micrograms/Liter
Sodium	10300.	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	60.8	micrograms/Liter

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM22S03 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	11.5	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	74300.	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	7.5	micrograms/Liter
Magnesium	34500.	micrograms/Liter
Iron	80.0U	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	5.0U	micrograms/Liter
Sodium	8600.	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	40.0U	micrograms/Liter

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM22S04 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	42.5	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	103000.	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	9.0	micrograms/Liter
Magnesium	35300.	micrograms/Liter
Iron	5360.	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	631.	micrograms/Liter
Sodium	18400.	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	40.0U	micrograms/Liter

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM22S05 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	14.9	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	62500.	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	6.0U	micrograms/Liter
Magnesium	28600.	micrograms/Liter
Iron	80.0U	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	5.0U	micrograms/Liter
Sodium	3500.	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	149.	micrograms/Liter

SF 6232
R. Dilg
7-11-89

SAMPLE REPORT

Sample SF6232 89FM11R15 Operator

Date analyzed 07/10/89 Factor 1.22000 File name RUN696

Element	Concentration	Units
Silver	6.0U	micrograms/Liter
Aluminum	80.0U	micrograms/Liter
Barium	6.0U	micrograms/Liter
Beryllium	1.0U	micrograms/Liter
Calcium	500. U	micrograms/Liter
Cobalt	6.0U	micrograms/Liter
Chromium	8.0U	micrograms/Liter
Copper	6.0U	micrograms/Liter
Magnesium	100. U	micrograms/Liter
Iron	80.0U	micrograms/Liter
Potassium	5000. U	micrograms/Liter
Manganese	5.0U	micrograms/Liter
Sodium	1000. U	micrograms/Liter
Nickel	15.0U	micrograms/Liter
Vanadium	5.0U	micrograms/Liter
Zinc	40.0U	micrograms/Liter

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: AUG 22 1989

SUBJECT: Review of Region 5 data for United Recovery

FROM: Curtis Ross, Director Chi Fang for
Region 5 Central Regional Laboratory

To: Data User: FIT

Attached are the results for:

CRL Data Set Numbers: 89FM22S01205, 89FM22D01, 89FM11RL5
Sample Numbers: SF6232
Parameter(s): As, Sb, Se, Cd, TL, Pb
Laboratory: CRL/ESAT

Results Status:

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

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

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to David Payne, 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)

TRANSMITTED BY
Sylvia Griffin
AUG 22 1989

RECEIVED BY/DATE: [signature] 8/22/89
Comments:

U.S. EPA CENTRAL
REGIONAL LAB

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

TFA342

DIVISION/BRANCH Superfund FIT SAMPLE DATE 6/20/89 LAB ARRIVAL DATE 6/21/89 DUE DATE 7/17/89

DU NUMBER TFA DATA SET NUMBER 6232 STUDY United Recovery PRIORITY — CONTRACTOR —

CRL LOG NUMBER	SAMPLE DESCRIPTION	TOTAL METALS WATER TOTAL ICAP UG/L MET111	TOTAL METALS WATER AS UG/L MET181	TOTAL METALS WATER PB UG/L MET1191	TOTAL METALS WATER SB UG/L MET1201	TOTAL METALS WATER SE UG/L MET1211	TOTAL METALS WATER TL UG/L MET1221
89FM22S01	RW1 5-188235	✓	✓ 2u gwk 8/7/89	✓ 2u	✓ 2u	✓ 2u	✓ 2u gwk 8/10/89
S02	RW2 5-188251	✓	✓ 2u WK 7/25/89	✓ 2u	✓ 2u	✓ 2u	✓ —
S03	RW3 5-188269	✓	✓ 2u 7/25/89 WK	✓ 2u	✓ 2u	✓ 2u	✓
S04	RW4 5-188277	✓	✓ 3 7/25/89 WK	✓ 2u	✓ 2u	✓ 2u	—
S05	RW5 5-188285	✓	✓ 2u WK 7/25/89	✓ 2u	✓ 2u	✓ 2u	✓
~~S06~~	RW6	✓	✓	✓	✓	✓	✓
~~S07~~	RW7	✓	✓	✓	✓	✓	✓
D01	Dup 5-188243	✓	✓ 2u gwk 8/7/89	✓ 2u	✓ 2u	✓ 2u	✓ —
89FM11R15	BLK 5-188293	✓	✓ 2u gwk 8/7/89	✓ 2u	✓ 2u gwk 8/7/89	✓ 2u	✓ 2u gwk 8/10/89
				[illegible] 7/7/89	[illegible] 8/10/89	[illegible] 6/30/89	

9

ENVIRONMENTAL PROTECTION AGENCY TFA302
FOR THE TEAM: METALS

DIVISION/BRANCH SUPERFUND (FIT) SAMPLING DATE 6/20/89 LAB ARRIVAL DATE 6/21/89 DUE DATE 7/12/89

NUMBER TFA DATASET NUMBER 6232 STUDY UNITED RECOVERY PRIORITY N CONTRACTOR N

C. LOG NUMBER	SAMPLE DESCRIPTION	MATRIX WATER TEST CD UNITS UG/L ME1235826
89FM22		
S01	RW1 5-188235	X 0.2u
S02	RW2 5-188251	X 0.2u
S03	RW3 5-188269	X 0.2u
S04	RW4 5-188277	X 0.2u
S05	RW5 5-188285	X 0.3
D01	DUPLICATE 5-188243	X 0.2u
89FM11R15	BLANK 5-188293	X 0.2u
		J Gary
		8/8/89

CRL V.2: 3/89

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: JUL 20 1989

SUBJECT: Review of Region 5 data for United Recovery

FROM: Curtis Ross, Director JVM for CR
Region 5 Central Regional Laboratory

To: Data User:

Attached are the results for:

CRL Data Set Numbers: SF6232
Sample Numbers: 89 FM22501 - 505/001/R1B
Parameter(s): CN
Laboratory: CRL/ESAT

Results Status:

- [x] DATA ACCEPTABLE FOR USE*
- ( ) DATA QUALIFIED AS TO USE
- ( ) DATA UNACCEPTABLE FOR USE

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

Comments by the Quality Control Coordinator:

TRANSMITTED BY
S Griffin
JUL 20 1989

U.S. EPA CENTRAL
REGIONAL LAB

If there are any questions regarding the data, refer them to David Payne, 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: [signature] 7/20/89

Comments:

NM 19 July 89

OK-PP 7/18/89

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: MINERALS - NUTRIENTS

TFA302

SUPERFUND

DIVISION/BRANCH FIT SAMPLE DATE 6/20/89 LAB ARRIVAL DATE 6/21/89 DUE DATE 7/31/89

DU NUMBER TFA DATA SET NUMBER 6232 STUDY United Recovery PRIORITY — CONTRACTOR —

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER PHENOLICS UG PHENOL/L MIN 74818	WATER CYANIDE UG CN/L MIN 74919	WATER GROSS ALPHA P CI/L MIN 75020	WATER CR^{+6} UG CR^{+6}/L MIN 74616	WATER MERCURY UG HG/L MIN 74717
89FM22S01	RW1 5-188236		✓ 5u			
S02	RW2 5-188252		✓ 5u			
S03	RW3 5-188270		✓ 5u			
S04	RW4 5-188278		✓ 8u +			
S05	RW5 5-188[illegible]		✓ 5u			
6/20/89 WA ~~S06~~	~~RW6~~		✓			
~~S07~~	~~RW7~~		✓ —			
✓ D01	Dup 5-188244		✓ 5u			
89FM11R15	Blk 5-188244		✓ 5u			
			M. Fletcher 6/28/89			
			method # 335.3 ns - (Auto UV screen)			
			+ - Method # 335.2 ns			
			Manual distillation			

PW

SAMPLE PROPOSAL
FIT REGION V

1. Date Form Completed May 12, 1989
2. Account # FIL0445SA TDD # FOS-8811-004

   EPA I.D. # ILD981098411
3. Site Name, City, State United Recovery, Rockton, Illinois
4. Team Leader ~~Ted Nehrkorn~~ Tim Mayers Sampler Jeff Dickson
5. Number and Type of Samples:

   Soil/Sediment 6 Surface Water ____ Ground Water ____

   Residential/Municipal Wells 7 Other ____

   Number of Blanks 1 Number of Duplicates 1
6. RAS Parameters Requested:

   A/B/N X Pest/PCB X Volatiles X Metals X Cyanide X

   SAS Parameters Requested: Drinking Waters
7. Expected Sampling Date(s): June 19 + 20, 1989

   Expected Shipping Date(s): June 19 + 20, 1989
8. Lab Used For Analysis: Organic Emsl (soil) / GULF (RW-BNA) / CRL (RW-VOA,F

   Inorganic COLUMB (soil) / CRL (RW)

   SAS —
9. Case Number 12190 CLP SAS Number 4476-E
10. Airbill Numbers: GULF 9071156743

    CRL (VOA, P/P) 9071156791

    Organic Lab Emsl 9071156754 # Coolers 2 # Samples 7 RW 7 soils 6/20/89

    CRL same

    Inorganic Lab COLUMB 9071156765 # Coolers 2 # Samples 7 RW 7 soils 6/19/89

    CRL/SAS Lab ____ # Coolers ____ # Samples ____

complete

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW 1

SAMPLING DATE 6/20/89 SAMPLING TIME 10:00

ORGANIC TRAFFIC NUMBER EER 83

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22501

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188229	H9060054
3, 40 ml vial	VOA	5-188230-32	all B9109594
2, 1 litre amber	Extractables	5-188233-34	both H9060054
1, 1 litre plastic	metals	5-188235	C9065084
1, 1 litre plastic	CN	5-188236	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.64

CONDUCTIVITY 240 ppm

TEMPERATURE 7°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW2

SAMPLING DATE 6/20/89 SAMPLING TIME 1045

ORGANIC TRAFFIC NUMBER EER 85

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22302

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188245	H9060054
3, 40 ml vial	VOA	5-188246-48	all B9109594
2, 1 litre amber	Extractables	5-188249-50	both H9060054
1, 1 litre plastic	metals	5-188251	C9065084
1, 1 litre plastic	CN	5-188252	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 7.22

CONDUCTIVITY 375 ppm

TEMPERATURE 7°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION MSD / RW2

SAMPLING DATE 6/20/89 SAMPLING TIME 10:45

ORGANIC TRAFFIC NUMBER EER 85

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL traffic number 89FM22502

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
2, 1 litre amber	pest/PCB	5-188253-54	both H9060054
5, 40 ml vial	VOA	5-188255-59	all B9109594
3 1 litre amber	Extractables	5-188260-62	all H9136014

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no oder

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 7.22

CONDUCTIVITY 375 ppm

TEMPERATURE 7 °C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW3

SAMPLING DATE 6/20/89 SAMPLING TIME 1115

ORGANIC TRAFFIC NUMBER EER 86

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22503

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188263	H9136014
3, 40 ml vial	VOA	5-188264-66	all B9109594
2, 1 litre amber	Extractables	5-188267-68	both H9136014
1, 1 litre plastic	metals	5-188269	C9065084
1, 1 litre plastic	CN	5-188270	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 7.32

CONDUCTIVITY 280 ppm

TEMPERATURE 9°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW4

SAMPLING DATE 6/20/89 SAMPLING TIME 1200

ORGANIC TRAFFIC NUMBER EER 87

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22504

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188271	H 9136014
3, 40 ml vial	VOA	5-188272-74	all B9109594
2, 1 litre amber	Extractables	5-188275-76	both H9136014
1, 1 litre plastic	metals	5-188277	C9065084
1, 1 litre plastic	CN	5-188278	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, slight odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.73

CONDUCTIVITY 395 ppm

TEMPERATURE 9°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW5

SAMPLING DATE 6/20/89 SAMPLING TIME 1335

ORGANIC TRAFFIC NUMBER EER 88

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22505

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188279	H9060044
3, 40 ml vial	VOA	5-188280-82	all B9109594
2, 1 litre amber	Extractables	5-188283-84	both H9060044
1, 1 litre plastic	metals	5-188285	C9065084
1, 1 litre plastic	CN	5-188286	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Clear

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 7.57

CONDUCTIVITY 240 ppm

TEMPERATURE 9°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION DUP

SAMPLING DATE 6/20/89 SAMPLING TIME 1000

ORGANIC TRAFFIC NUMBER EER 84

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22D01

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188237	H 9060054
3, 40 ml vial	VOA	5-188238-40	all B9109594
2, 1 litre amber	Extractables	5-188241-42	both H9060054
1, 1 litre plastic	metals	5-188243	C9065084
1, 1 litre plastic	CN	5-188244	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 6.44

CONDUCTIVITY 240 ppm

TEMPERATURE 7°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION B1K

SAMPLING DATE 6/20/89 SAMPLING TIME 1030

ORGANIC TRAFFIC NUMBER EER 89

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM11R15

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188287	H9061044
3, 40 ml vial	VOA	5-188288-90	all B9109594
2, 1 litre amber	Extractables	5-188291-92	both H9061044
1, 1 litre plastic	metals	5-188293	C9065084
1, 1 litre plastic	CN	5-188294	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Clear

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 6.91

CONDUCTIVITY 2 ppm

TEMPERATURE 10°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 6/19/89 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER EER 76

INORGANIC TRAFFIC NUMBER MEFE 37

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188202	F8204034
1 8oz.	Extractable	5-188201	"
1 4oz.	VOA	5-188203	D8231044
1 4oz	VOA	5-188204	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black to Brown mottled silty clay

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S2

SAMPLING DATE 6/19/89 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER EER 77

INORGANIC TRAFFIC NUMBER MEFE 38

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188206	F9072044
1 8oz.	Extractable	5-188205	"
1 4oz.	VOA	5-188207	D8231044
1 4oz	VOA	5-188208	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black to Brown mottled silty clay

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S3

SAMPLING DATE 6/19/89 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER EER 78

INORGANIC TRAFFIC NUMBER MEFE 39

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188210	F9072124
1 8oz.	Extractable	5-188209	"
1 4oz.	VOA	5-188211	D8231044
1 4oz	VOA	5-188212	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Light brown sand and Gravel mixed with sawdust type material

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S4

SAMPLING DATE 6/19/89 SAMPLING TIME 1430

ORGANIC TRAFFIC NUMBER EER 79

INORGANIC TRAFFIC NUMBER MEFE 40

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188214	F9072094
1 8oz.	Extractable	5-188213	"
1 4oz.	VOA	5-188215	D8231044
1 4oz	VOA	5-188216	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black silty clay

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery FOS-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION SS

SAMPLING DATE 6/19/89 SAMPLING TIME 1440

ORGANIC TRAFFIC NUMBER EER 80

INORGANIC TRAFFIC NUMBER MEFE 41

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188218	F9041044
1 8oz.	Extractable	5-188217	"
1 4oz.	VOA	5-188219	D8231044
1 4oz	VOA	5-188220	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black clay & silt

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION 56

SAMPLING DATE 6/19/89 SAMPLING TIME 1510

ORGANIC TRAFFIC NUMBER EER81

INORGANIC TRAFFIC NUMBER MEFE42

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188222	F9041044
1 8oz.	Extractable	5-188221	"
1 4oz.	VOA	5-188223	D8231044
1 4oz	VOA	5-188224	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Dark brown silty loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S7

SAMPLING DATE 6/19/89 SAMPLING TIME 1520

ORGANIC TRAFFIC NUMBER EER 82

INORGANIC TRAFFIC NUMBER MEFE 43

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188226	F9072044
1 8oz.	Extractable	5-188225	F9041044
1 4oz.	VOA	5-188227	D8231044
1 4oz	VOA	5-188228	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black, well aerated loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Cooler ID # 136

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	CASE #	SAS #
FIL01115SA	F05-8811-004	12190	4476-E

SAMPLERS: (Signature) [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Liter Extractable						REMARKS TAG #	low conc. MATRIX
EER 83	6/20/89	10:00		X	RW1	2	2						5-188233, 234	WATER
EER 84	6/20/89	10:00		X	DUP.	2	2						5-188241, 242	WATER
EER 85	6/20/89	10:45		X	RW2 + MSD	5	5						5-188249, 250 (RW2)	WATER
													5-188260, 61, 62 (MSD)	
													Lot #S - RW1 H9060054	
													DUP "	
													RW2 "	
					Traffic report in cooler		136						MSD H9136014	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/20/89 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Shipped Fed Ex to GLCF Airbill # 9071156743 C.O.C. #s - 93905, 93906	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-00963

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Cooler ID # 138

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	CASE #	SAS #
FIL04453A	F05-8811-004	12190	-4476-E

SAMPLERS: (Signature) [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Liter extractable						REMARKS: TAG #'s	low conc. MARK
RW3	6/20/89	1115		X	RW3	2	2						~~RW3-H~~ SKP 188267, 68	WALM
RW4	6/20/89	1200		X	RW4	2	2						S-188275, 76	↓
RW5	6/20/89	1335		X	RW5	2	2						S-188283, 84	↓
Blank	6/20/89	1030		X	Blank	2	2						S-188291, 92	↓

lot #S RW3 - H9136014
RW4 "
RW5 H9061044
BLK "

Traffic report in cooler # 136

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/20/89 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

Shipped FED Ex to Gulf
Airbill # 907156743
C.O.C. #S - 93907, 93908

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-00799

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Cooler ID # EE125

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	CASE #
FIL04155A	F05-8811-004	12190

SAMPLERS: (Signature) [signature]

	STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	40 ml. VOA	1 liter (amber) Pest/PCB					REMARKS TAG #s	Low Conc. Matrix
m	22S01	6/20/89	1000		X	RW1	4	3	1					Pest/PCB: S-188229 VOA: S-188230-32	Water
m	22D01	6/20/89	1000		X	DUP	4	3	1					Pest/PCB: S-188237 VOA: S-188238-40	
m	22S02	6/20/89	1045		X	RW2 + MSD	11	8	3					Pest/PCB: S-188245 VOA: S-188246-48 [illegible] S-188253-54 [illegible] S-188255-57	
m	22S03	6/20/89	1115		X	RW3	4	3	1					Pest/PCB: S-188263, VOA S-188264-66	
m	22S04	6/20/89	1200		X	RW4	4	3	1					Pest/PCB S-188271, VOA S-188272-74	
m	22S05	6/20/89	1335		X	RW5	4	3	1					Pest/PCB S-188279, VOA S-188280-82	
M	11R15	6/20/89	1030		X	BLANK	4	3	1					Pest/PCB S-188287, VOA S-188288-90	
														1 of #s	
														all VOA B9109594	
														RW1: H9060054, DUP: H9060054, RW2: H9060054	
														MSD H9060054, H9060054, RW3: H9136014	
														~~RW4 H9136014, RW5: H9061044~~ RW5: H9061044	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/20/89 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Shipped FED Ex to CRL Airbill # - 9071156791 C.O.C. #'s - 93911, 939 R

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-00964

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Coolun
TD # EE133

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	CASE #
FK04455A	F05-8811-004	12190

SAMPLERS: (Signature) [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	1 liter plastic metals (HNO_3)	1 liter plastic CN ($NaOH$)					REMARKS TAG #'s	Low conc. MATRIX
22S01	6/20/89	1000	-	x	RW1	2	1	1					met: S-188235, CN 36	Water
22D01	6/20/89	1000	-	x	DUP.	2	1	1					metals: S-188243, CN 44	
22S02	6/20/89	1045	-	x	RW2	2	1	1					metals: S-188251, CN 52	
22S03	6/20/89	1115		x	RW3	2	1	1			-		metals: S-188269, CN 70	
22S04	6/20/89	1200		x	RW4	2	1	1			-		metals: S-188277, CN 78	
22S05	6/20/89	1335		x	RW5	2	1	1			-		metals: S-188285, CN 86	
11R15	6/20/89	1030		x	BLANK	2	1	1					metals: S-188293, CN 94	
													Tol #'s	
													all metals, CN ; C9065084	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/20/89 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks shipped Fed Ex to CCL Airbill # 9071156791 C.O.C. #'s - 93909, 93910	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-00965

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

Cooler # 01

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

PROJ. NO.: FIL0445 SA

PROJECT NAME: F05-8811-004 case# 12190

SAMPLERS: (Signature) [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable 8oz	VOA 4oz					REMARKS: TAG Number	low concentration matrix
EER 76	6/19/89	1400		✓	Soil S1	3	1	2					5-188201,03,04	soil
EER 77	6/19/89	1400		✓	Soil S2	3	1	2					5-188205,07,08	soil
EER 78	6/19/89	1400		✓	Soil S3	3	1	2					5-188209,11,12	soil
EER 79	6/19/89	1430		✓	Soil S4	3	1	2					5-188213,15,16	soil
EER 80	6/19/89	1440		✓	Soil S5	3	1	2					5-188217,19,20	soil
EER 81	6/19/89	1510		✓	Soil S6	3	1	2					5-188221,23,24	soil
EER 82	6/19/89	1520		✓	Soil S7	3	1	2					5-188225,27,28	soil
													Lot # all 4oz. D8231044	
													8oz: S1-F8204034, S2-F9072044;	
													S3-F9072124, S4-F9072094, S5-F9041044	
													S6-F9041044, S7 F9041044	
													OTR in Cooler #01	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/19/89 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Shipped FedEx to EMSI Airbill # 9071156754 Custody Seals 93901, 93902	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05- 00966

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

cooler # 69

PROJ. NO.: FIL 0445 SA

PROJECT NAME: F05-8811-004 case# 18190

SAMPLERS: (Signature) [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	metals, cyanide 8oz						REMARKS: TAG number	REMARKS: low conc matrix
MEFE37	6/19/89	1400		✓	Soil 51	1	1						5-188202	soil
MEFE38	6/19/89	1400		✓	Soil 52	1	1						5-188206	soil
MEFE39	6/19/89	1400		✓	Soil 53	1	1						5-188210	soil
MEFE40	6/19/89	1430		✓	Soil 54	1	1						5-188214	soil
MEFE41	6/19/89	1440		✓	Soil 55	1	1						5-188218	soil
MEFE42	6/19/89	1510		✓	Soil 56	1	1						5-188222	soil
MEFE43	6/19/89	1520		✓	Soil 57	1	1						5-188226	soil

Lot # 802 S1-F8204C34, S2-F9072C44, S3-F9072124, S4-F9072054, S5 F9C41044, S6-F9041C44, S7-F9072044

ITR in cooler 69

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/19/89 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

Remarks: Shipped FedEx to Columb
Airbill# 9071156765
custody seals 93903, 93904

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-00967

file - Winnebago 201 Rockton/United Recovery

cc: Rkfd LPC
Sherry Otto
DPWS - Rkfd - Hickey

BELOIT CORPORATION

BELOIT, WISCONSIN U.S.A., 53511
AREA CODE 608/365-3311
INTERNATIONAL TELEX 025-7458
CABLE ADDRESS: PAPERCHINE

February 7, 1984

RECEIVED
REGION 1 D.W.P.C.
FEB - 7 1984
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

Mr. Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, IL 62706

Dear Mr. McSwiggin:

Enclosed please find the first monitoring well test report as required by Permit # 1983-SA-2751 date November 15, 1983.

To avoid delay in the intra company mail, please direct your correspondence to my attention.

Sincerely yours,

Doug McLeish

D. R. McLeish
Energy/Envir. Eng.

DRM/bjd
enclosure

CC: Charles Corely
Illinois Environmental Protection
4302 North Main Street
Rockford, Illinois 61105

Robert D. Olson
Assistant Hydrologist
State Water Survey Division
Water Resource Bldg.
P. O. Box 5050, Station A
Champaign, IL 61820-9050

RECEIVED
FEB 27 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Febuary 4, 1984

Laboratory results for:

Beloit Corporation
Paper Machinery Division
1 St. Lawrence Avenue
Beloit, Wisconsin 53511

RECEIVED
REGION 1 D.W.P.C.
FEB - 7 1984
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

Sampling information on wells.

Well #1
Up-Gradient
North end of property near Prairie Hill Rd.

Volume of water in well.
Well depth 37 feet.
Water level in well from top of well 21 feet.
(37' - 21') = 16' of water in well.
Radius of well 2.5 inches.

Using supplied graph from EPA sampling proceedures, thereis 4 gallons of water in #1.

8 gallons removed before sampling.

Well #2
East Prop. line
SE quadrant of property...

Volume of water in well.
Well depth 37 feet.
Water level in well from top of well 29 feet.
(37' - 29') = 8' of water in well.
Radius of well 2.5 inches.

Using supplied graph from EPA sampling proceedures, there is 2 gallons of water in #2.

4 gallons removed, well bailed dry.

Well #3
West Prop. line
SW quadrant
near Rockton water tower...

Volume of water in well.
Well depth 37 feet.
Water level in well from top of well 23 feet.
(37' - 23') = 14' of water in well.
Radius of well 2.5 inches.

Using supplied graph from EPA sampling proceedures, there is 3.5 gallons of water in #3.

7 gallons removed before sampling.

RECEIVED
FEB 27 1984
E.P.A. — D.L.P.C

Sincerely,
Thomas J. Dal Santo
Thomas J. Dal Santo

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Febuary 4, 1984

Laboratory results for:

Beloit Corporation
Paper Machinery Division
1 St. Lawrence Avenue
Beloit, Wisconsin 53511

UPGRADIENT WELL

Water analysis of well #1,

pH	8.04	
BOD_5	2	mg/L
COD	30	mg/L
Nitrogen, ammonia	0.09	mg/L
Oil & Grease	<1	mg/L
Phenol	<0.001	mg/L
Phosphorus	0.03	mg/L
Sulfite	<2	mg/L
Solids, susp.	39	mg/L
Solids, total diss.	553	mg/L
Arsenic	<0.001	mg/L
Barium	0.04	mg/L
Cadmium	0.003	mg/L
Chromium	<0.001	mg/L
Copper	0.009	mg/L
Lead	<0.01	mg/L
Manganese	0.056	mg/L
Nickel	<0.01	mg/L
Mercury	<0.0001	mg/L
Selenium	0.002	mg/L
Silver	0.003	mg/L
Total Organic Carbon	2.2	mg/L
Color	10	APHA
Nitrogen, Kjel	<0.001	mg/L
Zinc	0.014	mg/L

Respectfuly Submitted,

Thomas J Dal Santo

Thomas J. Dal Santo

RECEIVED
FEB 27 1984
E.P.A. — D.L.P.C.

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Sample Description: Beloit Corporation #1

VOLATILE COMPOUNDS

	ug/L
1V. Acrolein	<100
2V. Acrylonitrile	<100
3V. Benzene	<5
4V. Bis (Chloromethyl) Ether	*
5V. Bromoform	<10
6V. Carbon Tetrachloride	<5
7V. Chlorobenzene	<5
8V. Chlorodibromomethane	<10
9V. Chloroethane	<20
10V. 2-Chloroethylvinyl Ether	<50
11V. Chloroform	<5
12V. Dichlorobromomethane	<5
13V. Dichlorodifluoromethane	**
14V. 1,1-Dichloroethane	18.
15V. 1,2-Dichloroethane	<5
16V. 1,1-Dichloroethylene	<5
17V. 1,2-Dichloropropane	<5
18V. 1,2-Dichloropropylene	<5
19V. Ethylbenzene	<5

	ug/L
20V. Methyl Bromide	<20
21V. Methyl Chloride	<40
22V. Methylene Chloride	371.
23V. 1,1,2,2-Tetrachloroethane	<10
24V. Tetrachloroethylene	15.
25V. Toluene	<5
26V. 1,2-Trans-Dichloroethylene	<5
27V. 1,1,1-Trichloroethane	19.
28V. 1,1,2-Trichloroethane	<10
29V. Trichloroethylene	<5
30V. Trichlorofluoromethane	**
31V. Vinyl Chloride	<40

PESTICIDES

1P. Aldrin	
2P. α-BHC	
3P. β-BHC	
4P. γ-BHC	
5P. δ-BHC	
6P. Chlordane	
7P. 4,4'-DDT	
8P. 4,4'-DDE	
9P. 4,4'-DDD	
10P. Dieldrin	
11P. α-Endosulfan	
12P. β-Endosulfan	
13P. Endosulfan Sulfate	
14P. Endrin	
15P. Endrin Aldehyde	
16P. Heptachlor	
17P. Heptachlor Epoxide	
18P. PCB-1242	
19P. PCB-1254	
20P. PCB-1221	
21P. PCB-1232	
22P. PCB-1248	
23P. PCB-1260	
24P. PCB-1016	
25P. Toxaphene	

DIOXIN

2,3,7,8-Tetrachlorodibenzo-P Dioxin	

METALS, CYANIDE, AND PHENOLS

1M. Antimony	
2M. Arsenic	
3M. Beryllium	
4M. Cadmium	
5M. Chromium	
6M. Copper	
7M. Lead	
8M. Mercury	
9M. Nickel	
10M. Selenium	
11M. Silver	
12M. Thallium	
13M. Zinc	
14M. Cyanide	
15M. Phenols	

BLANK–not analyzed

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*Deleted per 46 FR 23
**Deleted per 46 FR 5

Larry McAnarney
Division Manager

Larry McAnarney

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Sample Description: Beloit Corporation #1

BASE/NEUTRAL COMPOUNDS

1B. Acenaphthene	
2B. Acenaphtylene	
3B. Anthracene	
4B. Benzidine	
5B. Benzo *(a)* Anthracene	
6B. Benzo *(a)* Pyrene	
7B. 3,4-Benzo-fluoranthene	
8B. Benzo *(ghi)* Perylene	
9B. Benzo *(k)* Fluoranthene	
10B. Bis *(2-Chloro-ethoxy)* Methane	
11B. Bis *(2-Chloro-ethyl)* Ether	
12B. Bis *(2-Chloro-isopropyl)* Ether	
13B. Bis *(2-Ethyl-hexyl)* Phthalate	
14B. 4-Bromo-phenyl Phenyl Ether	

15B. Butyl Benzyl Phthalate	
16B. 2-Chloro-naphthalene	
17B. 4-Chloro-phenyl Phenyl Ether	
18B. Chrysene	
19B. Dibenzo *(a, h)* Anthracene	
20B. 1,2-Dichloro-benzene	
21B. 1,3-Dichloro-benzene	
22B. 1,4-Dichloro-benzene	
23B. 3,3'-Dichloro-benzidine	
24B. Diethyl Phthalate	
25B. Dimethyl Phthalate	
26B. Di-N-Butyl Phthalate	
27B. 2,4-Dinitro-toluene	
28B. 2,6-Dinitro-toluene	
29B. Di-N-Octyl Phthalate	
30B. 1,2-Diphenyl-hydrazine *(as Azo-benzene)*	

31B. Fluoranthene	
32B. Fluorene	
33B. Hexa-chlorobenzene	
34B. Hexa-chlorobutadiene	
35B. Hexachloro-cyclopentadiene	
36B. Hexachloro-ethane	
37B. Indeno *(1, 2, 3-cd)* Pyrene	
38B. Isophorone	
39B. Naphthalene	
40B. Nitrobenzene	
41B. N-Nitro-sodimethylamine	*
42B. N-Nitrosodi-N-Propylamine	
43B. N-Nitro-sodiphenylamine	
44B. Phenanthrene	
45B. Pyrene	
46B. 1,2,4-Tri-chlorobenzene	

ACID COMPOUNDS

	ug/L
1A. 2-Chlorophenol	<10
2A. 2,4-Dichloro-phenol	<10
3A. 2,4-Dimethyl-phenol	<10
4A. 4,6-Dinitro-O-Cresol	<25
5A. 2,4-Dinitro-phenol	<25
6A. 2-Nitrophenol	<10
7A. 4-Nitrophenol	<25
8A. P-Chloro-M-Cresol	<10
9A. Pentachloro-phenol	<01
10A. Phenol	<10
11A. 2,4,6-Tri-chlorophenol	<10

BLANK-not analyzed

*Not detected using USEPA Method 625

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Larry McAnarney
Division Manager

Larry McAnarney

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Febuary 4, 1984

Laboratory results for:

Beloit Corporation
Paper Machinery Division
1 St. Lawrence Avenue
Beloit, Wisconsin 53511

Water analysis of well #2.

pH	8.06	
BOD5	29	mg/L
COD	59	mg/L
Nitrogen, ammonia	0.024	mg/L
Oil & Grease	<1	mg/L
Phenol	<0.001	mg/L
Phosphorus	<0.01	mg/L
Sulfite	<2	mg/L
Solids susp.	705	mg/L
Solids, total diss.	363	mg/L
Arsenic	<0.001	mg/L
Barium	0.07	mg/L
Cadmium	0.006	mg/L
Chromium	<0.001	mg/L
Copper	0.038	mg/L
Lead	0.11	mg/L
Manganese	0.896	mg/L
Nickel	0.02	mg/L
Mercury	<0.001	mg/L
Selenium	0.002	mg/L
Silver	0.002	mg/L
Total Organic Carbon	24.3	mg/L
olor	20	APHA
Nitrgen, Kjel	0.32	mg/L
Zinc	0.026	mg/L

Respectfuly Submitted,
Thomas J Dal Santo
Thomas J. Dal Santo

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Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Sample Description: Beloit Corporation #2

VOLATILE COMPOUNDS

	ug/L
1V. Acrolein	<100
2V. Acrylonitrile	<100
3V. Benzene	<5
4V. Bis (Chloromethyl) Ether	*
5V. Bromoform	<10
6V. Carbon Tetrachloride	<5
7V. Chlorobenzene	<5
8V. Chlorodibromomethane	<10
9V. Chloroethane	<20
10V. 2-Chloroethylvinyl Ether	<50
11V. Chloroform	<5
12V. Dichlorobromomethane	<5
13V. Dichlorodifluoromethane	**
14V. 1,1-Dichloroethane	<5
15V. 1,2-Dichloroethane	<5
16V. 1,1-Dichloroethylene	<5
17V. 1,2-Dichloropropane	<5
18V. 1,2-Dichloropropylene	<5
19V. Ethylbenzene	<5

	ug/L
20V. Methyl Bromide	<20
21V. Methyl Chloride	<40
22V. Methylene Chloride	142.
23V. 1,1,2,2-Tetrachloroethane	<10
24V. Tetrachloroethylene	<5
25V. Toluene	<5
26V. 1,2-Trans-Dichloroethylene	<5
27V. 1,1,1-Trichloroethane	<5
28V. 1,1,2-Trichloroethane	<10
29V. Trichloroethylene	<5
30V. Trichlorofluoromethane	**
31V. Vinyl Chloride	<40

PESTICIDES

1P. Aldrin	
2P. α-BHC	
3P. β-BHC	
4P. γ-BHC	
5P. δ-BHC	
6P. Chlordane	
7P. 4,4'-DDT	
8P. 4,4'-DDE	
9P. 4,4'-DDD	
10P. Dieldrin	
11P. α-Endosulfan	
12P. β-Endosulfan	
13P. Endosulfan Sulfate	
14P. Endrin	
15P. Endrin Aldehyde	
16P. Heptachlor	
17P. Heptachlor Epoxide	
18P. PCB-1242	
19P. PCB-1254	
20P. PCB-1221	
21P. PCB-1232	
22P. PCB-1248	
23P. PCB-1260	
24P. PCB-1016	
25P. Toxaphene	

DIOXIN

2,3,7,8-Tetrachlorodibenzo-P Dioxin	

METALS, CYANIDE, AND PHENOLS

1M. Antimony	
2M. Arsenic	
3M. Beryllium	
4M. Cadmium	
5M. Chromium	
6M. Copper	
7M. Lead	
8M. Mercury	
M. Nickel	
10M. Selenium	
11M. Silver	
12M. Thallium	
13M. Zinc	
14M. Cyanide	
15M. Phenols	

BLANK-not analyzed

*Deleted per 46 FR 23
**Deleted per 46 FR 5

Larry McAnarney
Division Manager

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STATE OF ILLINOIS

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Beloit Corporation #2

BASE/NEUTRAL COMPOUNDS

1B. Acenaphthene	
2B. Acenaphtylene	
3B. Anthracene	
4B. Benzidine	
5B. Benzo *(a)* Anthracene	
6B. Benzo *(a)* Pyrene	
7B. 3,4-Benzo-fluoranthene	
8B. Benzo *(ghi)* Perylene	
9B. Benzo *(k)* Fluoranthene	
10B. Bis *(2-Chloro-ethoxy)* Methane	
11B. Bis *(2-Chloro-ethyl)* Ether	
12B. Bis *(2-Chloro-isopropyl)* Ether	
13B. Bis *(2-Ethyl-hexyl)* Phthalate	
14B. 4-Bromo-phenyl Phenyl Ether	

15B. Butyl Benzyl Phthalate	
16B. 2-Chloro-naphthalene	
17B. 4-Chloro-phenyl Phenyl Ether	
18B. Chrysene	
19B. Dibenzo *(a, h)* Anthracene	
20B. 1,2-Dichloro-benzene	
21B. 1,3-Dichloro-benzene	
22B. 1,4-Dichloro-benzene	
23B. 3,3'-Dichloro-benzidine	
24B. Diethyl Phthalate	
25B. Dimethyl Phthalate	
26B. Di-N-Butyl Phthalate	
27B. 2,4-Dinitro-toluene	
28B. 2,6-Dinitro-toluene	
29B. Di-N-Octyl Phthalate	
30B. 1,2-Diphenyl-hydrazine *(as Azo-benzene)*	

31B. Fluoranthene	
32B. Fluorene	
33B. Hexa-chlorobenzene	
34B. Hexa-chlorobutadiene	
35B. Hexachloro-cyclopentadiene	
36B. Hexachloro-ethane	
37B. Indeno *(1, 2, 3-cd)* Pyrene	
38B. Isophorone	
39B. Naphthalene	
40B. Nitrobenzene	
41B. N-Nitro-sodimethylamine	*
42B. N-Nitrosodi-N-Propylamine	
43B. N-Nitro-sodiphenylamine	
44B. Phenanthrene	
45B. Pyrene	
46B. 1,2,4-Tri-chlorobenzene	

ACID COMPOUNDS

	ug/L
1A. 2-Chlorophenol	<10
2A. 2,4-Dichloro-phenol	<10
3A. 2,4-Dimethyl-phenol	<10
4A. 4,6-Dinitro-O-Cresol	<25
5A. 2,4-Dinitro-phenol	<25
6A. 2-Nitrophenol	<10
7A. 4-Nitrophenol	<25
8A. P-Chloro-M-Cresol	<10
9A. Pentachloro-phenol	<10
10A. Phenol	<10
11A. 2,4,6-Tri-chlorophenol	<10

BLANK-not analyzed

*Not detected using USEPA Method 625

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Larry McAnarney
Division Manager

Larry McA

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Sample Description: Beloit Corporation #3

VOLATILE COMPOUNDS

	ug/L
1V. Acrolein	<100
2V. Acrylonitrile	<100
3V. Benzene	<5
4V. Bis (Chloromethyl) Ether	*
5V. Bromoform	<10
6V. Carbon Tetrachloride	<5
7V. Chlorobenzene	<5
8V. Chlorodibromomethane	<10
9V. Chloroethane	<20
10V. 2-Chloroethylvinyl Ether	<50
11V. Chloroform	<5
12V. Dichlorobromomethane	<5
13V. Dichlorodifluoromethane	**
14V. 1,1-Dichloroethane	6/8
15V. 1,2-Dichloroethane	<5
16V. 1,1-Dichloroethylene	<5
17V. 1,2-Dichloropropane	<5
18V. 1,2-Dichloropropylene	<5
19V. Ethylbenzene	<5

	ug/L
20V. Methyl Bromide	<20
21V. Methyl Chloride	<40
22V. Methylene Chloride	58. 0.9 ppm
23V. 1,1,2,2-Tetrachloroethane	<10
24V. Tetrachloroethylene	18.
25V. Toluene	<5
26V. 1,2-Trans-Dichloroethylene	<5
27V. 1,1,1-Trichloroethane	435.
28V. 1,1,2-Trichloroethane	<10
29V. Trichloroethylene	142
30V. Trichlorofluoromethane	**
31V. Vinyl Chloride	<40

PESTICIDES

1P. Aldrin	
2P. α-BHC	
3P. β-BHC	
4P. γ-BHC	
5P. δ-BHC	
6P. Chlordane	
7P. 4,4'-DDT	
8P. 4,4'-DDE	
9P. 4,4'-DDD	
10P. Dieldrin	
11P. α-Endosulfan	
12P. β-Endosulfan	
13P. Endosulfan Sulfate	
14P. Endrin	
15P. Endrin Aldehyde	
16P. Heptachlor	
17P. Heptachlor Epoxide	
18P. PCB-1242	
19P. PCB-1254	
20P. PCB-1221	
21P. PCB-1232	
22P. PCB-1248	
23P. PCB-1260	
24P. PCB-1016	
25P. Toxaphene	

DIOXIN

2,3,7,8-Tetrachlorodibenzo-P Dioxin	

METALS, CYANIDE, AND PHENOLS

1M. Antimony	
2M. Arsenic	
3M. Beryllium	
4M. Cadmium	
5M. Chromium	
6M. Copper	
7M. Lead	
8M. Mercury	
9M Nickel	
10M. Selenium	
11M. Silver	
12M. Thallium	
13M. Zinc	
14M. Cyanide	
15M. Phenols	

BLANK-not analyzed

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*Deleted per 46 FR 23
**Deleted per 46 FR 5

Larry McAnarney
Division Manager
Larry McAnarney

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Sample Description: Beloit Corporation #3

BASE/NEUTRAL COMPOUNDS

1B. Acenaphthene	
2B. Acenaphtylene	
3B. Anthracene	
4B. Benzidine	
5B. Benzo *(a)* Anthracene	
6B. Benzo *(a)* Pyrene	
7B. 3,4-Benzo-fluoranthene	
8B. Benzo *(ghi)* Perylene	
9B. Benzo *(k)* Fluoranthene	
10B. Bis *(2-Chloro-ethoxy)* Methane	
11B. Bis *(2-Chloro-ethyl)* Ether	
12B. Bis *(2-Chloro-isopropyl)* Ether	
13B. Bis *(2-Ethyl-hexyl)* Phthalate	
14B. 4-Bromo-phenyl Phenyl Ether	

15B. Butyl Benzyl Phthalate	
16B. 2-Chloro-naphthalene	
17B. 4-Chloro-phenyl Phenyl Ether	
18B. Chrysene	
19B. Dibenzo *(a, h)* Anthracene	
20B. 1,2-Dichloro-benzene	
21B. 1,3-Dichloro-benzene	
22B. 1,4-Dichloro-benzene	
23B. 3,3'-Dichloro-benzidine	
24B. Diethyl Phthalate	
25B. Dimethyl Phthalate	
26B. Di-N-Butyl Phthalate	
27B. 2,4-Dinitro-toluene	
28B. 2,6-Dinitro-toluene	
29B. Di-N-Octyl Phthalate	
30B. 1,2-Diphenyl-hydrazine *(as Azo-benzene)*	

31B. Fluoranthene	
32B. Fluorene	
33B. Hexa-chlorobenzene	
34B. Hexa-chlorobutadiene	
35B. Hexachloro-cyclopentadiene	
36B. Hexachloro-ethane	
37B. Indeno *(1, 2, 3-cd)* Pyrene	
38B. Isophorone	
39B. Naphthalene	
40B. Nitrobenzene	
41B. N-Nitro-sodimethylamine	*
42B. N-Nitrosodi-N-Propylamine	
43B. N-Nitro-sodiphenylamine	
44B. Phenanthrene	
45B. Pyrene	
46B. 1,2,4-Tri-chlorobenzene	

ACID COMPOUNDS

	ug/L
1A. 2-Chlorophenol	<10
2A. 2,4-Dichloro-phenol	<10
3A. 2,4-Dimethyl-phenol	<10
4A. 4,6-Dinitro-O-Cresol	<25
5A. 2,4-Dinitro-phenol	<25
6A. 2-Nitrophenol	<10
7A. 4-Nitrophenol	<25
8A. P-Chloro-M-Cresol	<10
9A. Pentachloro-phenol	<10
10A. Phenol	<10
11A. 2,4,6-Tri-chlorophenol	<10

BLANK-not analyzed

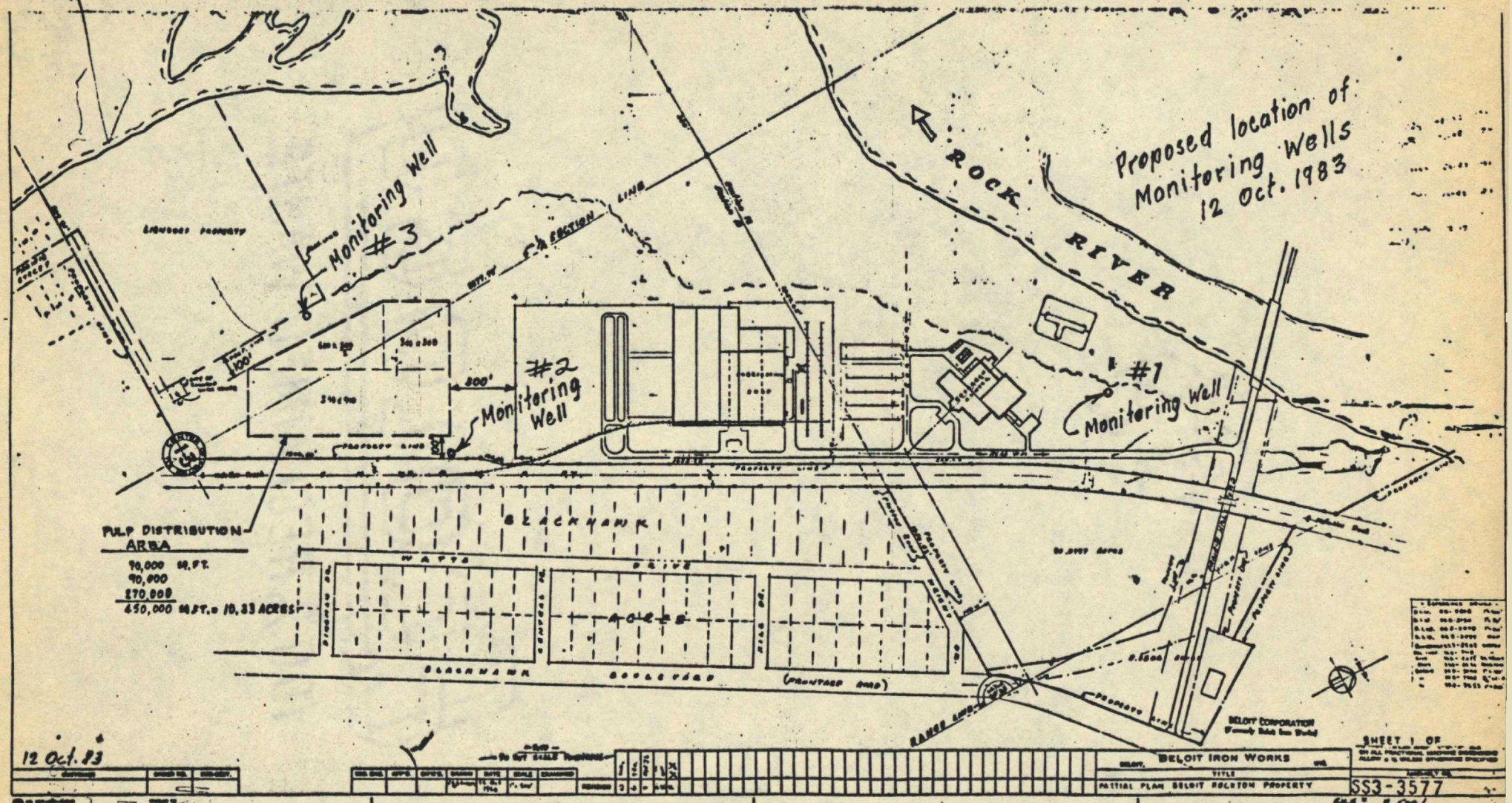
*Not detected using USEPA Method 625

RECEIVED

FEB 27 1984

Larry McAnarney
Division Manager

Larry McAnarney



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STATE OF ILLINOIS

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D.L.P.C.
STATE OF ILLINOIS

Northland Environmental Laboratory
P.O. Box 14
South Beloit, IL 61080
815/389-4102

Febuary 4, 1984

Laboratory results for:

Beloit Corporation
Paper Machinery Division
1 St. Lawrence Avenue
Beloit Wisconsin 53511

Water analysis of well #3.

pH	8.01	
BOD_5	3	mg/L
COD	47	mg/L
Nitrogen, ammonia	0.06	mg/L
Oils & Grease	<1	mg/L
Phenol	<0.001	mg/L
Phosphorus	<0.01	mg/L
Sulfite	<2	mg/L
Solids, susp.	22	mg/L
Solids, total diss.	394	mg/L
Arsenic	<0.001	mg/L
Barium	<0.01	mg/L
Cadmium	0.002	mg/L
Chromium	<0.001	mg/L
Copper	0.008	mg/L
Lead	<0.01	mg/L
Manganese	0.104	mg/L
Nickel	<0.01	mg/L
Mercury	<0.0001	mg/L
Selenium	0.001	mg/L
Silver	<0.001	mg/L
Total Organic Carbon	3.7	mg/L
Color	7	APHA
Nitrogen, Kjel	<0.001	mg/L
Zinc	0.030	mg/L

Respectfuly Submitted,
Thomas J Dal Santo
Thomas J. Dal Santo

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FEB 27 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

2 vials labeled G201-Soterion-6 22 82-KSB

mr

Time Collected: 12:10PM

Lab # D025342

SPECIAL ANALYSIS FORM

Date Collected: 6/22/82

Date Received JUN 24 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G 201.

Cold tap from sink in main bldg. by east entrance within processing room. Water supply well in bedrock.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

Ran 10 minutes before sampling.

TESTS REQUESTED: Volatile Chlororganics Scan!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

LABORATORY

RECEIVED BY: SB

DATE COMPLETED:

DATE FORWARDED: 11/1/82 J Hurley

Volatile halogenated organic compounds were not detected in this sample. (< 1. ugle ppb)

RECEIVED

NOV -8 1982

E.P.A. — D.L.P.C.
STATE OF ILLINOIS

IL 532-0314
LPC 8A 4/77

(NOT FOR DATA PROCESSING)

H.W.

D025342

— 2 vials labeled G202a - Soterion - 6/22/82 - KSB —

Time Collected: 12:55PM

Date Collected: 6/22/82

Lab # DC25343

SPECIAL ANALYSIS FORM

Date Received JUN 24 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G202a. Abandoned well in pit by PM cinder block bldg. near "wheel". Current water supply well also in same pit. [SURFACE SAMPLE]

PHYSICAL OBSERVATIONS, REMARKS: Rust brown, iron particles, no odor. 8" casing, did not purge, > 80' deep. Cleaned bailer once in well before sampling. Well has a pail for cap.

TESTS REQUESTED: Volatile Chlororganics Scan!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

LABORATORY

RECEIVED BY: SB

DATE COMPLETED:

DATE FORWARDED: 11/1/82

J. Henley

Volatile organics (halogenated) were not detected in this sample (< 1. ug/l) ppb

RECEIVED
NOV -8 1982
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

IL 532-0314
LPC 8A 4/77

(NOT FOR DATA PROCESSING)

H.W. DC25343

— 2 vials labeled G202b - Soterion - 6/22/82 - KSB —

Time Collected: 1:00pm

Lab # D025344

SPECIAL ANALYSIS FORM

Date Collected: 6/22/82

Date Received JUN 24 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G202b. [SAMPLE 60' Deep In WATER]. Abandoned well in pit by PM cinder block bldg. near "wheel." Current water supply well also in same pit

PHYSICAL OBSERVATIONS, REMARKS: Rust brown, iron particles, no odor. 8" casing, did not purge, >80' deep. Cleaned bailer once in well before sampling

TESTS REQUESTED: Volatile Chlororganics Scan!

COLLECTED BY: K. Barda

TRANSPORTED BY: K. Barda

LABORATORY

RECEIVED BY: SS

DATE COMPLETED:

DATE FORWARDED: 11/1/82 J Hurley

Volatile halogenated organic compounds were not detected in this sample. (<1. ug/l) ppb

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NOV 8 1982
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

LPC-8A 4/77

(NOT FOR DATA PROCESSING)

H. W.

D025344

D029463

REC'D CHICAGO LAB
BY: 6.9.83
JUN 14 1983

Time Collected: 1:00pm

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G201. Marx residence.
905 Watts.
Backyard tap by rear door - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 55°F.

TESTS REQUESTED: Volatiles! N.D. previously.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	3		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	4		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1	RECEIVED	
bromoform	<1		
tetrachloroethylene	<1	AUG 10 1983	
		EPA - DLPC STATE OF ILLINOIS	
		D029463	
		8/4/83 J. Hurley	
		H.W.	

D029464

REC BY: DATE: 6.9.83

Time Collected: 4:15PM

Lab #

SPECIAL ANALYSIS FORM

JUN 14 1983

Date Collected: 6/8/83

Date Received

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G202. Johnson residence. 909 Watts. Backyard tap. - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor, 55°F.

TESTS REQUESTED: Volatiles! N.D. previously.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1	RECEIVED	
dichlorobromomethane	<1		
trichloroethylene	<1	AUG 10 1983	
dibromochloromethane	<1	E.P.A. — D.L.P.C. STATE OF ILLINOIS	
bromoform	<1		
tetrachloroethylene	<1		
		D029464	
		J Hurley 8/4/83	
		H.W.	

D029465

REC'D CHICAGO LAB
BY: N. [illegible]

Time Collected: 1:45PM

Lab #DATE: 6-9-83

SPECIAL ANALYSIS FORM

JUN 14 1983

Date Collected: 6/8/83

Date Received _____ Rmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) Hayter. Residence. 910 Watts.
G203

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 54°F.

Tap by trailer front door. Ran 10 minutes before sampling.

TESTS REQUESTED: Volatiles! Previously contained 1,1-dichloroethane and 1,1,1-trichloroethane.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Molysz

methylene chloride	1		
1,1-dichloroethane	6		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	220		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	2		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
AUG 10 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

D029465

J. Hurley 8/4/83

D029466

REC'D CHICAGO LAB
BY: [illegible]
DATE: JUN 14 1983

Time Collected: 2:15 PM

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received _____ Pmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G204. Altenberg residence. 914 Watts.
Backyard tap by rear door - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 55°F.

TESTS REQUESTED: Volatiles! Previously contained 1,1,1-trichloroethane.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	32		
carbon tetrachloride	<1	RECEIVED	
dichlorobromomethane	<1		
trichloroethylene	<1	AUG 10 1983	
dibromochloromethane	<1	E.P.A. — D.L.P.C.	
bromoform	<1	STATE OF ILLINOIS	
tetrachloroethylene	<1		
		D029466	
		J. Hurley 8/4/83	

D029467

REC'D CHICAGO LAB
BY: [illegible]
JUN 14 1983

Time Collected: 3:00pm

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G205. McHone residence.
918 Watts.
Backyard tap - ran 30 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 54°F.

TESTS REQUESTED: Volatiles! Previously contained 1,1,1-trichloroethane.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	4		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	370		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
AUG 10 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

D029467

J. Hurley 8/4/83

H.W.

D029468

REC'D CHICAGO LAB
R. M. [illegible]
D. T. 6 9 83

Time Collected: 3:30pm

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received JUN 14 1983 Rmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G207. Lowery residence.
1004 Watts.
Frontyard tap by door - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 53°F.

TESTS REQUESTED: Volatiles! Previously contained a trace of 1,1,1-trichloroethane.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	2		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
AUG 10 1983
D.L.P.C.
ILLINOIS

D029468

J. Hurley 8/4/83

H. W.

D029469

REC'D CHICAGO LAB
BY: N. [illegible]
DATE: 6.9.83

Time Collected: 3:15 PM

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received JUN 14 1983 Rmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G 210. Jones residence.
913 Watts.
Backyard tap - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 55°F.

TESTS REQUESTED: Volatiles! Previously contained 1,1,1-trichloroethan

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
AUG 10 1983
E.P.A. - D.L.P.C.
STATE OF ILLINOIS

D029469

J Hurley 8/4/83

H.W.

D029471

REC'D CHICAGO LAB
BY: [illegible]
DATE: 6.1.83
JUN 14 1983

Time Collected: 1:30pm

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received _____ Rmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G 212. J. Dunham residence.
403 Dingman Drive.
Frontyard tap by front door - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 54°F.

TESTS REQUESTED: Volatiles! First time sampled.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
AUG 10 1983
L.P.A. - D.L.P.C.
STATE OF ILLINOIS

D029471

J. Hurley 8/4/83

H.W.

REC'D CHICAGO LAB
BY: [illegible]
DATE: 6.9.83

Time Collected: 3:30pm

D029470 Lab #

SPECIAL ANALYSIS FORM

Date Collected: 6/8/83

Date Received JUN 14 1983

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G211. Dunaway residence.
1012 Watts.
Backyard tap by rear door - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 54°F.

TESTS REQUESTED: Volatiles! First time sampled.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		
		D029470	
		J. Hurley 8/4/83	
		H.W.	

RECEIVED
AUG 10 1983
I.E.P.A. – D.L.P.C.
STATE OF ILLINOIS

Time Collected: 3:45pm

Date Collected: 6/8/83

D029472 Lab #

SPECIAL ANALYSIS FORM

Date Received

REC'D CHICAGO LAB
BY:
DATE: 6 9 83
JUN 14 1983

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	2010 3502

SOURCE OF SAMPLE: (Exact Location) G213. Andersen residence. 1070 Watts.

Backward tap by rear door - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor. 60°F.

TESTS REQUESTED: Volatiles! First time sampled.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → D. Malysz

methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1	RECEIVED	
trichloroethylene	<1	AUG 17 1983	
dibromochloromethane	<1	EPA — DLPC STATE OF ILLINOIS	
bromoform	<1		
tetrachloroethylene	<1		
		D029472	
		J Hurley 8/4/83	
		H.W.	

Purpose: 04 Code: LP41 2 THM via

Time Collected: 10:45 Am

Date Collected: 8/9/83

SPECIAL ANALYSIS FORM

Lab #

Date Received

REC'D CHICAGO
BY: [illegible]
DATE: 8-12-83
AUG 16 1983

RMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

D030130

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G 214. Ezra Trull residence. 900 N. Prairie, Rockton.

From outside tap - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, slight sulfur odor.

TESTS REQUESTED: Volatile chlororganic scan. May contain di- & tri- chloroethane.

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo → O. Malysz

	ug/l
methylene chloride	<1.
1,1-dichloroethane	<1
t-1,2-dichloroethylene	<1
chloroform	<1
1,2-dichloroethane	<1
1,1,1,-trichloroethane	<1
carbon tetrachloride	<1
dichlorobromomethane	<1
trichloroethylene	<1
dibromochloromethane	<1
bromoform	<1
tetrachloroethylene	<1

RECEIVED
OCT 03 1983
E.P.A. - D.L.P.C.
STATE OF ILLINOIS

D030130

Purpose: 04 Code: LP41 2 THM vials

REC'D CHICAGO LAB
BY: N. Jacobs
DATE: 2.12.83

Time Collected: 2:40pm Lab #

SPECIAL ANALYSIS FORM

Date Collected: 8/9/83 Date Received AUG 16 1983 RMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

D030131

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) S501.

Large catch basin at NWc of Dingman & Watts Ave.
2' of water over sediments - much oil.

PHYSICAL OBSERVATIONS, REMARKS: Light grey water, with black particulates and some oil.
Used bailer to skim water above sediments.

TESTS REQUESTED: Volatile chlororganic scan!

COLLECTED BY: K. Bardo TRANSPORTED BY: K. Bardo → D. Malysz

	ug/l		
methylene chloride	<1		
1,1-dichloroethane	<1		
t-1,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
OCT 03 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

D030131

Purpose: 04 Code: LP41 1-1qt. bottle

RPCD CHICAGO LAB
BY: n. Jacobs
DATE: 8.12.83

Time Collected: 2:45pm

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 8/9/83

Date Received AUG 16 1983

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

D030117

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton/Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) S502.

Large catch basin at NWc of Dingman + Watts Ave.
2' of water over sediments - much oil.

PHYSICAL OBSERVATIONS, REMARKS: Dk. grey water, black particulates, oil globules.
Used bailer to disturb water and scoop sediments also. Same as S501 but more sediments.

TESTS REQUESTED: Volatile chlororganic and general solvent scan!

COLLECTED BY: K. Bardo TRANSPORTED BY: K. Bardo + D. Molysz

methylene chloride			
1,1-dichloroethane			
t-1,2-dichloroethylene			
chloroform			
1,2-dichloroethane			
1,1,-trichloroethane			
carbon tetrachloride			
dichlorobromomethane			
trichloroethylene			
dibromochloromethane			
bromoform			
tetrachloroethylene			

RECEIVED
JAN 31 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

Aliphatic hydrocarbons = 1900 µg/l
Chlorinated organic solvents not found, however the purge + trap procedure for volatile organics was not performed. This sample was not amenable to this analysis and no volatile bottle was supplied

D030117

S. Hurley

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF LABORATORIES

ENVIRONMENTAL MISCELLANEOUS SAMPLE FORM

028-84

1. NAME OF SOURCE: GARNER TRUCK

2. ADDRESS:
STREET OR RR: 903 Prairie
CITY, TOWN, STATE: Rockton
ZIP CODE:
COUNTY: 201

3. DATE COLLECTED: MO 01 DAY 24 YR 84
4. TIME COLLECTED: AM 1000 PM

5. TYPE OF SAMPLE: Water
6. COLLECTED BY: S. Johnson

7. SOURCE OF SAMPLE: well

OFFICIAL USE ONLY

8. MAIL REPORT TO:
NAME: Region
STREET:
CITY/STATE:
ZIP CODE:
TELEPHONE NUMBER: - -

OFFICIAL USE

9. MICROFILM NBR:
10. TRAN. CODE: 55
11. REGION OR LHD:
12. LABORATORY ID:
13. COLLECTOR ID:
14. SAMPLE NUMBER: 903-A

ANALYSIS REQUESTED: VOC

COMMENTS:

15. LABORATORY RESULTS:

PARAMETER	ID	RESULT	*UNIT	PARAMETER	ID	RESULT	*UNIT
trans-1,2-Dichloro-							
ethylene		TR	-				

*CODE UNIT AS FOLLOWS:

% = PERCENT	C = DEGC	I = MICROGRAM./L.	M = /ML.	U = MICROGM./ML.
A = GRAMS	F = DEGF	J = /100 GM.	O = COLOR	X = PPM
B = /GM.	H = /100ML.	L = MG./L	T = TU	Y = PPB

16. DATE RECEIVED AT LABORATORY: MO 01 DAY 25 YR 84

17. DATE REPORTED FROM LABORATORY: MO 01 DAY 30 YR 84

ANALYST:

REMARKS:

RECEIVED
FEB 27 1984
E.P.A. ~~D.L.P.C.~~
STATE OF ILLINOIS

LHD STAMP

DEPARTMENT OF PUBLIC HEALTH
LABORATORIES

ENVIRONMENTAL MISCELLANEOUS SAMPLE FORM

1. NAME OF SOURCE: Mary

2. ADDRESS:
STREET OR RR: 905 Watts
CITY, TOWN, STATE: Rockton ZIP CODE: COUNTY: 201

3. DATE COLLECTED: MO 01 DAY 24 YR 84 4. TIME COLLECTED: AM 1030 PM

5. TYPE OF SAMPLE: water

6. COLLECTED BY: S. Johnson

7. SOURCE OF SAMPLE: well

OFFICIAL USE ONLY

8. MAIL REPORT TO:
NAME: Regional
STREET:
CITY/STATE: ZIP CODE:
TELEPHONE NUMBER: - -

OFFICIAL USE

9. MICROFILM NBR:
10. TRAN. CODE: 55
11. REGION OR LHD:
12. LABORATORY ID:
13. COLLECTOR ID:
14. SAMPLE NUMBER: 905-W

ANALYSIS REQUESTED: VOC

COMMENTS:

15. LABORATORY RESULTS:

PARAMETER	ID	RESULT	*UNIT	PARAMETER	ID	RESULT	*UNIT
Chloroform		TR	-				
1,1,1-Trichloroethane		2	ppb				
Tetrachloroethylene		3	ppb				

*CODE UNIT AS FOLLOWS:

% = PERCENT	C = DEGC	I = MICROGRAM./L.	M = /ML.	U = MICROGM./ML.
A = GRAMS	F = DEGF	J = /100 GM.	O = COLOR	X = PPM
B = /GM.	H = /100ML.	L = MG./L	T = TU	Y = PPB

ppb = ug/L

16. DATE RECEIVED AT LABORATORY: MO DAY YR

17. DATE REPORTED FROM LABORATORY: MO DAY YR

ANALYST:

REMARKS:

RECEIVED
FEB 27 1984
E.P.A. D.L.P.C.
STATE OF ILLINOIS

LHD STAMP

602. Soils Jar Labeled X201 - Soterion -
WZ 29-28-81

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
CHEMICAL ANALYSIS FORM

01971 SEP 30

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded	(5) Public W S		

Name (Private Well, Stream, Spring, Impounded Water only)

L P C S M 0 1 0 (1) (8) SITE INVENTORY NUMBER General (9) (16)

MONITOR POINT NUMBER X201 (17) (20) DATE COLLECTED 092881 (21) (26)

Winnebago Co. - LPC REGION R (27)

Rockton (Location) / Soterion (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28) Board Order (X) (29)

Time Collected 1:30 ~~a.m.~~ p.m. Unable to collect sample (X) (30)

Stick-up ___ . ___ ft. (31) (33) Depth to water ___ . ___ ft. (from T.O.C.) (34) (36)

Sample temp. ___ ° (37) (39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) (41)

Sample Appearance: Gray, soil-like waste after processing. Supposedly remove metals.

Collector comments: Also testing for organics.

J. Holzer — Collected by — DLPC — Div. or Company

J. Holzer → K. Bardo — Transported by — DLPC — Div. or Company

LAB USE ONLY

Lab No. C001971

Date Rec'd 9-30-81

Rec'd by [signature] Time 10:30 a.m. p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date forwarded 11/30/81

[signature]
Supervisor Signature

Name Environmental Protection Agency
Address of Lab ~~Division of Laboratory Services~~
~~2121 W. Taylor Street~~
~~Chicago, Illinois 60612~~

LPCSM020

Lab Comments: mg/Kg (ppm)

FE 405000 (27) (36)

T.CR. 20625 (37) (46)

Cd < 2.5 (47) (56)

(57) (66)

(67) (76)

Private Lab (X) (77)

IEPA Lab (X) X (78)

LPCSM030 mg/kg (ppm)

		PARAMETERS	
27		Alkalinity[1]	
31		Ammonia as N	
37	X	Arsenic As	47.5 x x
44	X	Barium Ba	117.5
49		BOD -5	
53		Boron B	
58	X	Cadmium Cd	x.xx
64		Calcium Ca	
69		COD	
73		Chloride Cl	

LPCSM040

27	X	Chromium Cr (tot)	x.xx
33	X	Chromium Cr+6	NO Bottle
39	X	Copper Cu	417.5*
45	X	~~Cyanide CN~~	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65	X	Iron Fe	x.x
70	X	Lead Pb	11.0*

LPCSM050

27		Magnesium Mg	
32	X	Manganese Mn	1795.**
38	X	Mercury Hg	0.02
46	X	Nickel Ni	500.*
51		Nitrate-nitrite N	
56		Oil and Grease	
60	X	~~pH (units)~~	
63	X	~~Phenolics~~	
70		Phosphorus P	
76		Potassium K	

LPCSM060

27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	54.*
63			

+Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

"mg/Kg" H.W.

SPECIAL

32 oz. Organics Jar Labeled X202 - Soterion - 9-20-81 VLZ

01972 SEP30

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
CHEMICAL ANALYSIS FORM

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded	(5) Public W S		

Name (Private Well, Stream, Spring, Impounded Water only)

L P C S M 0 1 0 (1)–(8) SITE INVENTORY NUMBER General (9)–(16)

MONITOR POINT NUMBER X202 (17)–(20) DATE COLLECTED 092881 (21)–(26)

Winnebago Co. - LPC REGION R (27)

Rockton (Location) / Soterion (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28) Board Order (X) (29)

Time Collected 1:35 ~~a.m.~~ p.m. Unable to collect sample (X) (30)

Stick-up ___.___ ft. (31)–(33) Depth to water ___.___ ft. (from T.O.C.) (34)–(36)

Sample temp. ___ ° (37)–(39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) _____ (41)

Sample Appearance: Oil! After processing. Has metal fines, silica, and soil removed.

Collector comments: Also testing for organics. ONLY THE SEDIMENT WAS ANALYZED AFTER CLEANING OF ANY OIL PRESENT

J. Holzer — DLPC
Collected by — Div. or Company

J. Holzer → K. Bardo — DLPC
Transported by — Div. or Company

LAB USE ONLY

Lab No. C001972

Date Rec'd 9-30-81

Rec'd by [illegible] Time 10:30 a.m. p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date forwarded 11/20/81

Supervisor Signature

Name Environmental Protection Agency Division of Laboratory Services

Address of Lab 2121 W. Taylor Street Chicago, Illinois 60612

LPCSM020

Lab Comments: mg/Kg

Pb < 10.7 mg/Kg (27)–(36)

ZN 21 (37)–(46)

Ni < 25 (47)–(56)

TCR 1033.6 (57)–(66)

Cd < 2.5 (67)–(76)

Private Lab (X)

IEPA Lab (X) X (77)–(78)

		PARAMETERS*	mg/kg ~~ppm~~
		LPCSM030	
27		Alkalinity[1]	
31		Ammonia as N	
37	X	Arsenic As	5.3
44	X	Barium Ba	303 *
49		BOD -5	
53		Boron B	
58	X	Cadmium Cd	X.XX
64		Calcium Ca	
69		COD	
73		Chloride Cl	
		LPCSM040	
27	X	Chromium Cr (tot)	X.XX
33	X	Chromium Cr^{+6}	No Bottle
39	X	Copper Cu	49.9 *
~~45~~	~~X~~	~~Cyanide CN~~	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65	X	Iron Fe	6113 *
70	X	Lead Pb	X.XX
		LPCSM050	
27		Magnesium Mg	
32	X	Manganese Mn	33 **
38	X	Mercury Hg	0.224
46	X	Nickel Ni	**
51		Nitrate-nitrite N	
56		Oil and Grease	
~~60~~	~~X~~	~~pH (units)~~	
~~65~~	~~X~~	~~Phenolics~~	
70		Phosphorus P	
75		Potassium K	
		LPCSM060	
27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	***
63			

*Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

ACID DIGEST H.W. CONFIDENTIAL

3202. Organics Jar labeled X203-
Soterion - 9-28-81.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
CHEMICAL ANALYSIS FORM

01973 SEP30

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded	(5) Public W S		

Name (Private Well, Stream, Spring, Impounded Water only)

L P C S M 0 1 0 (1)–(8) SITE INVENTORY NUMBER General (9)–(16)

MONITOR POINT NUMBER X203 (17)–(20) DATE COLLECTED 092881 (21)–(26)

Winnebago Co. - LPC REGION R (27)

Rockton (Location) / Soterion (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28) Board Order (X) (29)

Time Collected 1:50 ~~a.m.~~ p.m. Unable to collect sample (X) (30)

Stick-up ___.___ ft. (31)–(33) Depth to water ___.___ ft. (from T.O.C.) (34)–(36)

Sample temp. ___ ° (37)–(39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) _____ (41)

Sample Appearance: Black oil. Contains metal fines, silica, and diatomaceous earth.

Collector comments: From barrel before processing. ONLY THE SEDIMENT WAS ANALYZED AFTER CLEANING OF ANY OIL PRESENT.

J. Holzer — Collected by — DLPC Div. or Company

J. Holzer → K. Bardo — Transported by — DLPC Div. or Company

LAB USE ONLY

Lab No. C001973

Date Rec'd 9-29-81

Rec'd by [illegible] Time 10:30 ~~a.m.~~ p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date forwarded 11/30/81

Supervisor Signature

Name Environmental Protection Agency

Address of Lab ~~Division of Laboratory Services 2121 W. Taylor Street Chicago, Illinois 60612~~

LPCSM020 Lab Comments:

FE 18073 (27)–(36)

Cd < 2.5 (37)–(46)

RECEIVED (47)–(56)

DEC 07 1981 (57)–(66)

(67)–(76)

Private Lab (X)

IEPA Lab (X) X (77) (78)

		PARAMETERS*	mg/kg. PPM
		LPCSM030	
27		Alkalinity[1]	
31		Ammonia as N	
37	X	Arsenic As	3.3
44	X	Barium Ba	55.2
49		BOD -5	
53		Boron B	
58	X	Cadmium Cd	* * *
64		Calcium Ca	
69		COD	
73		Chloride Cl	
		LPCSM040	
27	X	Chromium Cr (tot)	1452 * *
33	X	Chromium Cr^{+6}	No Bottle
39	X	Copper Cu	31.6 *
45	X	~~Cyanide CN~~	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65	X	Iron Fe	* *
70	X	Lead Pb	4.7 *
		LPCSM050	
27		Magnesium Mg	
32	X	Manganese Mn	120 * *
38	X	Mercury Hg	0.024
45	X	Nickel Ni	56.8
51		Nitrate-nitrite N	
56		Oil and Grease	
60	X	~~pH (Units)~~	
63	X	~~Phenolics~~	
70		Phosphorus P	
75		Potassium K	
		LPCSM060	
27		R.O.E. (180°C)	
31		Selenium Se	
36		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	36 *
63			

*Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

ACID DIGEST H.W. SPECIAL

602 Soils Jar Labeled X204 - Soterion - 9-28-81

01974 SEP30

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
CHEMICAL ANALYSIS FORM

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded	(5) Public W S		

Name (Private Well, Stream, Spring, Impounded Water only)

(1) L P C S M 0 1 0 (8) SITE INVENTORY NUMBER (9) General (16)

MONITOR POINT NUMBER (17) X204 (20) DATE COLLECTED (21) 092881 (26)

Winnebago Co. - LPC REGION (27) R

Rockton (Location) / Soterion (Responsible Party)

Legal (1); Illegal (2); Indicate One: (28) 2 Board Order (X) (29)

Time Collected 1:55 ~~a.m.~~ p.m. Unable to collect sample (X) (30)

Stick-up (31) . (33) ft. Depth to water (from T.O.C.) (34) . (36) ft.

Sample temp. (37) ° (39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) (41)

Sample Appearance: Raw waste. Metal fines, silica and diatomaceous earth. Also oil.

Collector comments: From barrel before processing. metals still intact.

J. Holzer — Collected by — DLPC — Div. or Company

J. Holzer → K. Bardo — Transported by — DLPC — Div. or Company

LAB USE ONLY

Lab No. C001974

Date Rec'd 9-29-81

Rec'd by [illegible] Time 10:30 ~~a.m.~~ p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date forwarded 11/30/81

Supervisor Signature

Name Environmental Protection Agency

Address of Lab ~~Division of Laboratory Services~~ ~~121 W. Taylor Street~~ ~~Chicago, Illinois 60612~~

LPCSM020 Lab Comments:

(27) Pb < 1.5 mg/Kg (36)

(37) FE 422500 (46)

(47) TCR 22125.0 (56)

(57) Cd < 2.5 (66)

(67) (76)

Private Lab (X)

IEPA Lab (X) X (77) (78)

LPCSM030 mg/Kg

		PARAMETERS*	
27		Alkalinity[1]	
31		Ammonia as N	
37	X	Arsenic As	52.5
44	X	Barium Ba	162.5*
49		BOD -5	
53		Boron B	
58	X	Cadmium Cd	αα X
64		Calcium Ca	
69		COD	
73		Chloride Cl	

LPCSM040

27	X	Chromium Cr (tot)	x x X
33	X	Chromium Cr^{+6}	No Bottle
39	X	Copper Cu	512.5*
~~45~~	~~X~~	~~Cyanide CN~~	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65	X	Iron Fe	**
70	X	Lead Pb	x x X

LPCSM050

27		Magnesium Mg	
32	X	Manganese Mn	1745.xx
38	X	Mercury Hg	0.02
46	X	Nickel Ni	1000.*
51		Nitrate-nitrite N	
56		Oil and Grease	
~~68~~	~~X~~	~~pH (Units)~~	
~~69~~	~~X~~	~~Phenolics~~	
70		Phosphorus P	
73		Potassium K	

LPCSM060

27		R.O.E. (180°C)	
31		Selenium Se	1.5
36		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	41.*
63			

*Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

mg/Kg H.W. ORIGINAL

Champaign LAB ATTN: ROYT. HZ R one 16 oz plastic bottle * RUSH COBALT

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
CHEMICAL ANALYSIS FORM

RECEIVED MAY 17 1982 STATE OF ILLINOIS

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded	(5) Public W S		

Name Storage Tank (Private Well, Stream, Spring, Impounded Water only)

L P C S M 0 1 0 (1) (8) SITE INVENTORY NUMBER 2 0 1 0 3 5 0 2 (9) (16)

MONITOR POINT NUMBER X 2 0 1 (17) (20) DATE COLLECTED 0 4 0 7 8 2 (21) (26)

Winnebago Co. - LPC REGION R (27)

Rockton / Soterion
(Location) (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28) Board Order (X) (29)

Time Collected 5:00 a.m. p.m. Unable to collect sample (X) (30)

Stick-up ___ . ___ ft. (31) (33) Depth to water ___ . ___ ft. (from T.O.C.) (34) (36)

Sample temp. ___ ° (37) (39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) Bottles (41)

Sample Appearance: brown-black oily

Collector comments: Sample taken from bottle of oil operator had previously collected from Tank. Oil after processing (acid treated)

Collected by [illegible] Div. or Company LPC

Va. Mattavish Transported by WPC Div. or Company

LAB USE ONLY
Lab No. BU41189
Date Rec'd APR. 13. 1982
Rec'd by [illegible] Time 9 a.m. p.m.
Sample temp. acceptable YES NO
Sample properly preserved YES NO
Date completed
Date forwarded MAY 14 1982
CHAMPAIGN
Supervisor Signature
Name
Address of Lab

LPCSM020
Lab Comments:
(27) (36)
(37) RESULTS ON (46)
(47) BACK (56)
(57) (66)
(67) (76)
Private Lab (X) (77)
IEPA Lab (X) X (78)

+ Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be expl[redacted] comments section.

SPECIAL HANDLING

not for computer H.W.

LPCSM030 MR

		PARAMETERS+	PPM*
27		Alkalinity[1]	
31		Ammonia as N	
37		Arsenic As	
44		Barium Ba	
49		BOD -5	
53		Boron B	
58		Cadmium Cd	
64		Calcium Ca	
69		COD	
73		Chloride Cl	

EPTOXICITY LPCSM040

27		Chromium Cr (tot)	
33	X	Chromium Cr^{+6}	
39	X	Copper Cu	
45	X	Cyanide CN	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65		Iron Fe	
70		Lead Pb	

LPCSM050

27		Magnesium Mg	
32	X	Manganese Mn	
38		Mercury Hg	
46	X	Nickel Ni	
51		Nitrate-nitrite N	
56		Oil and Grease	
60		pH (Units)	
63		Phenolics	
70		Phosphorus P	
76		Potassium K	

LPCSM060

27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	
6*	X	Cobalt	

[1] Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

X Moly

X Tungsten

DATA IN UNITS OF MICROGRAMS PER GRAM OF SAMPLE (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON DRY WEIGHT, 103° C, 48 HOURS.

DATA IN UNITS OF [redacted] (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON EP TOXILITY LEACH TEST

Cu	<1.	<0.01
Mn	<5.	0.06
Ni	<5.	<0.05
Zn	12.	0.06
Co	<20.	~~<0.02~~ <0.2
Mo	<100.	~~<0.2~~ <1.
V	<100.	<1.

Champaign Lab ATTN: ZOY FRAZIER ½ Hg * RUSH COBALT

me

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
CHEMICAL ANALYSIS FORM

RECEIVED
MAY 17 1982

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1)
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded	(5) Public W S		

Name 55g. drum (Private Well, Stream, Spring, Impounded Water only)

(1) L P C S M 0 1 0 (8) SITE INVENTORY NUMBER (9) 2 0 1 0 3 5 0 2 (16)

MONITOR POINT NUMBER (17) X 2 0 2 (20) DATE COLLECTED (21) 0 4 0 7 8 2 (26)

Winnebago Co. - LPC REGION (27) R

Rockton (Location) / Sokerion (Responsible Party)

Legal (1); Illegal (2); Indicate One: (28) 2 Board Order (X) (29)

Time Collected 5^10 a.m. p.m. Unable to collect sample (X) (30)

Stick-up (31) . (33) ft. Depth to water (from T.O.C.) (34) . (36) ft.

Sample temp. (37) ° (39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) bottles (41)

Sample Appearance: brown-black oil

Collector comments: Incoming oil (before processing)

P.D. Foberts — Collected by — LPC — Div. or Company

Va. Mattivisi — Transported by — WPC — Div. or Company

LAB USE ONLY

Lab No. BU41190

Date Rec'd APR. 13. 1982

Rec'd by [illegible] Time 9 a.m. p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed MAY 1 1 1982

Date forwarded ~~MAY 14 1982~~

CHAMPAIGN

Supervisor Signature

Name

Address of Lab

LPCSM020 Lab Comments:

(27) (36)

RESULTS

(37) (46)

ON BACK

(47) (56)

(57) (66)

(67) (76)

Private Lab (X)

IEPA Lab (X) X (77) (78)

		PARAMETERS*	PPM*
		LPCSM030	
27		Alkalinity[1]	
31		Ammonia as N	
37		Arsenic As	
41		Barium Ba	
49		BOD -5	
53		Boron B	
58		Cadmium Cd	
64		Calcium Ca	
69		COD	
73		Chloride Cl	
		EP TOXICITY LPCSM040	
27		Chromium Cr (tot)	
33	X	Chromium Cr^{+6}	
39	X	Copper Cu	
45	X	Cyanide CN	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65		Iron Fe	
70		Lead Pb	
		LPCSM050	
27		Magnesium Mg	
32	X	Manganese Mn	
38		Mercury Hg	
46	X	Nickel Ni	
51		Nitrate-nitrite N	
56		Oil and Grease	
60		pH (Units)	
63		Phenolics	
70		Phosphorus P	
76		Potassium K	
		LPCSM060	
27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	
*	X	Cobalt	

[1] Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

X Moly.

* T...

* Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be exp... the lab comments section.

SPECIAL HANDLING

H.W. Not for ...

DATA IN UNITS OF MICROGRAMS PER GRAM OF SAMPLE (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON DRY WEIGHT, 103° C, 48 HOURS.

DATA IN UNITS OF [redacted] (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON EP Toxicity Leach Test

Cu	<1.	<0.01
Mn	<5.	<0.05
Ni	<5.	<0.05
Zn	<5.	<0.05
Co	<20.	<0.2
Mo	<100.	<1.
V	<100.	<1.

Champaign Lab ATTN: ROY FRA[illegible]2 Ohm 16.[illegible]2 Plastic [illegible]le * RUSH COBALT

RECEIVED MAY 17 1982

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

DIVISION OF LAND/NOISE POLLUTION CONTROL ANALYSIS FORM

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded			

Name 55 gallon drum (Private Well, Stream, Spring, Impounded Water only)

L P C S M 0 1 0 (1) (8) SITE INVENTORY NUMBER 2 0 1 0 3 5 0 2 (9) (16)

MONITOR POINT NUMBER X 2 03 (17) (20) DATE COLLECTED 0 4 0 7 8 2 (21) (26)

Winnebago Co. - LPC REGION R (27)

Rockton / Soterion
(Location) (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28) Board Order (X) (29)

Time Collected 5:15 a.m. p.m. Unable to collect sample (X) (30)

Stick-up (31) . (33) ft. Depth to water (from T.O.C.) (34) . (36) ft.

Sample temp. (37) ° (39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) bottle (41)

Sample Appearance: grey damp powder

Collector comments: Incoming solid (≈17% oil) also metals + diatomaceous earth

R.D. [illegible] — Collected by — LPC — Div. or Company

Va. Mattenzi — Transported by — WPC — Div. or Company

LAB USE ONLY

Lab No. B041186

Date Rec'd APR 13 1982

Rec'd by [illegible] Time 9 a.m. p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date forwarded CHAMPAIGN MAY 14 1982

Supervisor Signature

Name

Address of Lab

LPCSM020 Lab Comments:

RESULTS ON (27) (36)

BACK (37) (46)

(47) (56)

(57) (66)

(67) (76)

Private Lab (X) (77)

IEPA Lab (X) X (78)

LPCSM030

		PARAMETERS+	PPM*
27		Alkalinity[1]	
31		Ammonia as N	
37		Arsenic As	
44		Barium Ba	
49		BOD -5	
53		Boron B	
58		Cadmium Cd	
64		Calcium Ca	
69		COD	
73		Chloride Cl	

EPTOXICITY

LPCSM040

27		Chromium Cr (tot)	
33	X	~~Chromium Cr+6~~	
39	X	Copper Cu	*SEE BACK
45	X	Cyanide[2] CN	*SEE BACK
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65		Iron Fe	
70		Lead Pb	

LPCSM050

27		Magnesium Mg	
32	X	Manganese Mn	SEE BACK
38		Mercury Hg	
46	X	Nickel Ni	SEE BACK
51		Nitrate-nitrite N	
56		Oil and Grease	
60		pH (Units)	
63		Phenolics	
70		Phosphorus P	
76		Potassium K	

LPCSM060

27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	SEE BACK
*	X	Cobalt	SEE BACK

+Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

[2]Cyanide is to be reported as free cyanide.

X Moly

X Tungsten

X Vanadium

SPECIAL HANDLING

LPC-8 REV. 3/77

H.W. Not for Computer

	DATA IN UNITS OF MICROGRAMS PER GRAM OF SAMPLE (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON DRY WEIGHT, 103° C, 48 HOURS.	DATA IN UNITS OF [redacted] (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON EP Toxicity Leach Test
Cu	510.	<0.01
Mn	1600.	2.7
Ni	1100	0.60
Zn	40.	0.40
Co	1700.	1.1
Mo	39000.	<1.
V.	4700.	<1.

Champaign Lab ATTN: Roy Frazier ? One 16 oz. plastic bottle * RUSH COBALT

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

DIVISION OF LAND/NOISE POLLUTION CONTROL ANALYSIS FORM

RECEIVED MAY 17 1982 STATE OF ILLINOIS

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded			

Name (Private Well, Stream, Spring, Impounded Water only): WASTE PILE - INDOOR

LPCSM010 (1)–(8)

SITE INVENTORY NUMBER 20103502 (9)–(16)

MONITOR POINT NUMBER X204 (17)–(20)

DATE COLLECTED 040782 (21)–(26)

Winnebago Co. - LPC REGION R (27)

Rockton (Location) / Soterion (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28)

Board Order (X) (29)

Time Collected 520 a.m. p.m.

Unable to collect sample (X) (30)

Stick-up ___.___ ft. (31) (33)

Depth to water (from T.O.C.) ___.___ ft. (34) (36)

Sample temp. ___ ° (37) (39)

Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) bottles (41)

Sample Appearance: light grey powder

Collector comments: Saleable product after drying

P.D. Lobenta — Collected by — LPC — Div. or Company

Va. Motternak — Transported by — WPC — Div. or Company

LAB USE ONLY

Lab No. B041187

Date Rec'd APR. 13. 1982

Rec'd by ___ Time 9 a.m. p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date for CHAMPAIGN MAY 14 1982

Supervisor Signature

Name

Address of Lab

LPCSM020 Lab Comments:

(27)–(36) RESULTS

(37)–(46) ON BACK

(47)–(56)

(57)–(66)

(67)–(76)

Private Lab (X)

IEPA Lab (X) X (77) (78)

		PARAMETERS+	PPM*
		LPCSM030	
		Alkalinity[1]	
31		Ammonia as N	
37		Arsenic As	
44		Barium Ba	
49		BOD -5	
53		Boron B	
58		Cadmium Cd	
64		Calcium Ca	
69		COD	
73		Chloride Cl	
		EP TOXICITY LPCSM040	
27		Chromium Cr (tot)	
33	X	Chromium Cr^{+6}	
39	X	Copper Cu	
45	X	Cyanide[2] CN	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65		Iron Fe	
70		Lead Pb	
		LPCSM050	
27		Magnesium Mg	
32	X	Manganese Mn	
38		Mercury Hg	
46	X	Nickel Ni	
51		Nitrate-nitrite N	
56		Oil and Grease	
60		pH (Units)	
63		Phenolics	
70		Phosphorus P	
76		Potassium K	
		LPCSM060	
27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	
63*	X	Cobalt	

+Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

[2]Cyanide is to be reported as free cyanide.

X Moly

X Tungsten

X Vanadium

SPECIAL HANDLING

LPC-8 REV. 3/77

H.W.

NOT FOR COMPUTER

DATA IN UNITS OF MICROGRAMS PER GRAM OF SAMPLE (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON DRY WEIGHT, 103° C, 48 HOURS.

DATA IN UNITS OF [redacted] (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON EP Toxicity Leach Test

Cu	<1.	~~<0.~~ 6.2
Mn	2300.	11.
Ni	1200.	2.7
Zn	68.	0.15
Co	2400	9.5
Mo	50000	<1.
V	6900	<1.

Champaign Lab ATTN: ROY [illegible]ZIER Ore, 16 oz plastic bottle * RUSH COBALT

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

DIVISION OF LAND/NOISE POLLUTION CONTROL ANALYSIS FORM

RECEIVED MAY 17 1982 STATE OF ILLINOIS

Key for Determining Type of Monitoring Point

(S) Surface Water	(G) Ground Water	(L) Leachate	(X) Special
(1) Upstream	(1) Monitor Well	(1) Flow or seep	(1) Soil
(2) Mid-site	(2) Private well	(2) Pond	(2) Waste
(3) Downstream	(3) Spring	(3) Collection System	(3) Other
(4) Run-off	(4) Lysimeter		
(5) Impounded			

Name WASTE PILE - OUTDOOR (Private Well, Stream, Spring, Impounded Water only)

L P C S M 0 1 0 (1) (8) SITE INVENTORY NUMBER 2 0 1 0 3 5 0 2 (9) (16)

MONITOR POINT NUMBER X 2 0 5 (17) (20) DATE COLLECTED 0 4 0 7 8 2 (21) (26)

Winnebago Co. - LPC REGION R (27)

Rockton (Location) / Soterion (Responsible Party)

Legal (1); Illegal (2); Indicate One: 2 (28) Board Order (X) (29)

Time Collected 525 a.m. p.m. Unable to collect sample (X) (30)

Stick-up ___ . ___ ft. (31) (33) Depth to water ___ . ___ ft. (from T.O.C.) (34) (36)

Sample temp. ___ ° (37) (39) Background (X). . . . (40)

Ground water sampled by (Indicate one): (1) Bailing; (2) Pumping; (3) Other (Specify) bottles (41)

Sample Appearance: dark grey fibrous damp material

Collector comments: "wheel" dark grey - diatomaceous earth, oil, metals

[signature] Collected by — LPC Div. or Company

Va. Matthews Transported by — WPC Div. or Company

LAB USE ONLY

Lab No. B041188

Date Rec'd APR 13. 1982

Rec'd by [signature] Time 9 a.m. p.m.

Sample temp. acceptable YES NO

Sample properly preserved YES NO

Date completed

Date forwarded MAY 14 1982

CHAMPAIGN [signature]

Supervisor Signature

Name

Address of Lab

LPCSM020 Lab Comments:

(27) (36) RESULTS ON (37) (46) BACK (47) (56) (57) (66) (67) (76)

Private Lab (X) (77)

IEPA Lab (X) X (78)

+Analyses are to be performed on unfiltered samples. *Values exceeding no. of places shown are reported in the lab comments section; tests requested but not run should also be explained in the lab comments section.

SPECIAL HANDLING

LPC-8 REV. 3/77 H.W.

Not for computer

LPCSM030

		PARAMETERS+	PPM*
27		Alkalinity[1]	
31		Ammonia as N	
37		Arsenic As	
44		Barium Ba	
49		BOD -5	
53		Boron B	
58		Cadmium Cd	
64		Calcium Ca	
69		COD	
73		Chloride Cl	

EPTOXICITY

LPCSM040

27	X	Chromium Cr (tot)	
33	X	Chromium Cr^{+6}	
39	X	Copper Cu	
45	X	Cyanide[2] CN	
52		Fecal Coli (#/100 ml)	
56		Fluoride F	
61		Hardness $CaCO_3$	
65		Iron Fe	
70		Lead Pb	

LPCSM050

27		Magnesium Mg	
32	X	Manganese Mn	
38		Mercury Hg	
46	X	Nickel Ni	
51		Nitrate-nitrite N	
56		Oil and Grease	
60		pH (Units)	
63		Phenolics	
70		Phosphorus P	
76		Potassium K	

LPCSM060

27		R.O.E. (180°C)	
31		Selenium Se	
38		Silver Ag	
44		Sodium Na	
49		SC (umhos/cm)	
53		Sulfate SO_4	
58	X	Zinc Zn	
6*	X	Cobalt	

[1]Alkalinity is to be determined as ppm of $CaCO_3$ at pH 4.5.

[2]Cyanide is to be reported as free cyanide.

X Moly

X Tungsten

X [illegible]

DATA IN UNITS OF MICROGRAMS PER GRAM OF SAMPLE (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON DRY WEIGHT, 103° C, 48 HOURS.

DATA IN UNITS OF [redacted] (P.P.M.) UNLESS OTHERWISE INDICATED. BASED ON EP Toxicity Leach Test

Cu	<1.	5.1
Mn	1900	18.
Ni	1000.	6.6
Zn	120.	0.50
Co	1100.	9.0
Mo	38000.	<1.
V	5500.	<1.

– 2 vials labeled: G201, Marx, 12/8/82, KSB – (RAW, RAW A)

CP

Time Collected: 12:00pm

Date Collected: 12/8/82

SPECIAL ANALYSIS FORM

Lab # D027126

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G201. Marx Residence. 905 Watts.
Outside tap - ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~t-1,2~~-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

RECEIVED
JAN 13 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

J Hurley
1/12/83

H.W.

– 2 vials labeled: G202, Johnson 12/8/82, KSB – (1, 1A)

GP

Time Collected: 12:15 PM

Lab # 027127

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G202. Johnson Residence. 909 Watts

Kitchen Tap – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~t-1,2-~~ dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

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E.P.A. — D.L.P.C.
STATE OF ILLINOIS

J Hurley
1/12/83

H.W.

– 2 vials labeled: G203, Hayter, 12/8/82, KSB – (2, 2A)

CP

Time Collected: 2:00pm

Lab # D027128

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G203. Hayter Residence. 910 Watts.
Kitchen tap – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)	
1,1-dichloroethane	5.	
t-1,2-dichloroethylene	<1	
chloroform	<1	
1,2-dichloroethane	<1	
1,1,1,-trichloroethane	120.	
carbon tetrachloride	<1	
dichlorobromomethane	<1	
trichloroethylene	<1	
dibromochloromethane	<1	
bromoform	<1	
tetrachloroethylene	<1	

noted two unidentified compounds corresponding to 9 and 16 ppb if calculated as dichloroethane

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JAN 13 1983
E.P.A. – D.L.P.C.
STATE OF ILLINOIS

H.W.

J Hurley 1/12/83

– 2 vials labeled: G204, Altenberg, 12/8/82, KSB – (3,3A)

CP

Time Collected: 2:20 PM

Lab # 027129

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G 204. Altenberg Residence. 914 Watts.
Kitchen tap – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~1-1,2-~~dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	31.		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

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JAN 13 1983
E.P.A. – D.L.P.C.
STATE OF ILLINOIS

H.W.

J Hurley
1/12/83

— 2 vials labeled: G205, McHone, 12/8/82, KSB —
(4,4A)

CP

Time Collected: 2:55 PM

Lab # D027130

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G205. McHone Residence. 918 Watts.
Hard water kitchen tap - ran 5 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1 "		
~~t-1,2~~-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	197.		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		

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JAN 13 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

noted two unidentified peaks corresponding to 2 and 14 ppb if calculated as dichloroethane

H.W.

J. Hurley 1/12/83

– 2 vials labeled: G206, Fiese, 12/8/82, KSB –
(RAW, RAW A)

Time Collected: 3:30pm

Lab # 027131

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G206. Fiese Residence.
1007 Watts.
Backyard well tap – purged for a few hours.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~t-1,2~~-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		
		H.W.	J Kuney 1/12/83

RECEIVED
JAN 13 1983
E.P.A. – D.L.P.C.
STATE OF ILLINOIS

– 2 vials labeled: G207, Lowery, 12/8/82, KSB –

(1, 1A)

CP

Time Collected: 3:50PM

Lab # 027132

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G207. Lowery Residence. 1004 Watts. Kitchen tap – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~t-1,2~~-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1 (trace)		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		
		H.W.	J. Hurley 1/12/83

RECEIVED
JAN 13 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

– 2 vials labeled: G208, Dunham, 12/8/82, KSB – (2, 2A)

CP

Time Collected: 4:10PM

Lab # 0 7133

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G208. Dunham Residence. Between Fiese and O'Brien. Kitchen tap – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, slight sulfide odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~t-1~~,2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		
		H.W.	

RECEIVED
JAN 13 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

J. Hurley 1/12/83

– 2 vials labeled: G209, O'Brien, 12/8/82, KSB – (3,3A)

CP

Time Collected: 4:30pm

Lab # 027134

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82

Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G 209. O'Brien Residence. 917 Watts.
Kitchen tap – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo

TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb (µg/l)		
1,1-dichloroethane	<1		
~~t-1,~~2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	<1		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		
		H.W.	Hurley 1/12/83

RECEIVED
JAN 18 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

– 2 vials labeled: G210, Jones, 12/8/82, KSB – (4,4A) CP

Time Collected: 4:45PM Lab # 027135

SPECIAL ANALYSIS FORM

Date Collected: 12/8/82 Date Received DEC 13 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) G210. Jones Residence. 913 Watts. Kitchen tap (hard water) – ran 10 minutes before sampling.

PHYSICAL OBSERVATIONS, REMARKS: Clear, no odor.

TESTS REQUESTED: Scan for volatile organic chemicals!

COLLECTED BY: K. Bardo TRANSPORTED BY: K. Bardo

methylene chloride	<1 ppb	(µg/l)	
1,1-dichloroethane	<1		
~~t-1,~~2-dichloroethylene	<1		
chloroform	<1		
1,2-dichloroethane	<1		
1,1,1,-trichloroethane	2.		
carbon tetrachloride	<1		
dichlorobromomethane	<1		
trichloroethylene	<1		
dibromochloromethane	<1		
bromoform	<1		
tetrachloroethylene	<1		
		H.W.	

RECEIVED
JAN 13 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

J Hurley 1/12/83

1 qt. labeled - X202, Soterion, 3/2/83, KSB.

D027916 REC'D CHICAGO LAB
BY: N. Jacobs
DATE: 3.3.83

Time Collected: 4:50PM

Lab #

SPECIAL ANALYSIS FORM

Date Collected: 3/2/83

Date Received MAR 4 1983

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

COUNTY:	FILE HEADING:	FILE NUMBER:
Winnebago	Rockton / Soterion	20103502

SOURCE OF SAMPLE: (Exact Location) X202. Northwest corner of northeast lagoon near sluice gate. Dragged bailer along lagoon bottom.

PHYSICAL OBSERVATIONS, REMARKS: Milky white with some dk gray putrid sludgy material and paper particles. Slight nondescript odor.

TESTS REQUESTED: Scan for solvents including volatiles, especially 1,1-dichloroethane & 1,1,1-trichloroethane.

COLLECTED BY: K. Bardo TRANSPORTED BY: K. Bardo

LABORATORY

RECEIVED BY: JC DATE COMPLETED: 5/20/83 DATE FORWARDED: 5/20/83 J Hurley

Dichloroethane = 30. ug/l (ppb)
Dichloroethylene = 5. ug/l
Trichloroethane = 10. ug/l
Trichloroethylene = 5. ug/l
Tetrachloroethylene = 5. ug/l
Ethylbenzene = 5 ug/l
Aliphatic hydrocarbons = 270. ug/l

RECEIVED
MAY 24 1983
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

LPC-8A 4/77 D027916 (NOT FOR DATA PROCESSING) H.W.

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery FOS-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 6/19/89 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER EER 76

INORGANIC TRAFFIC NUMBER MEFE 37

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188202	F8204034
1 8oz.	Extractable	5-188201	"
1 4oz.	VOA	5-188203	D8231044
1 4oz	VOA	5-188204	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black to Brown mottled silty clay

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S2

SAMPLING DATE 6/19/89 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER EER 77

INORGANIC TRAFFIC NUMBER MEFE 38

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188206	F9072044
1 8oz.	Extractable	5-188205	"
1 4oz.	VOA	5-188207	D8231044
1 4oz	VOA	5-188208	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black to Brown mottled silty clay

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S3

SAMPLING DATE 6/19/89 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER EER 78

INORGANIC TRAFFIC NUMBER MEFE 39

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-1882 10	F907 2124
1 8 oz.	Extractable	5-1882 09	"
1 4oz.	VOA	5-1882 11	D8231044
1 4oz	VOA	5-1882 12	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Light brown sand and Gravel mixed with sawdust type material

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S4

SAMPLING DATE 6/19/89 SAMPLING TIME 1430

ORGANIC TRAFFIC NUMBER EER 79

INORGANIC TRAFFIC NUMBER MEFE 40

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188214	F90720 94
1 8 oz.	Extractable	5-188213	"
1 4oz.	VOA	5-188215	D8231044
1 4oz	VOA	5-188216	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black silty clay

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION SS

SAMPLING DATE 6/19/89 SAMPLING TIME 1440

ORGANIC TRAFFIC NUMBER EER 80

INORGANIC TRAFFIC NUMBER MEFE 41

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-1882 18	F9041044
1 8oz.	Extractable	5-1882 17	"
1 4oz.	VOA	5-1882 19	D8231044
1 4oz	VOA	5-1882 20	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black clay + silt

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery FOS-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION 56

SAMPLING DATE 6/19/89 SAMPLING TIME 1510

ORGANIC TRAFFIC NUMBER EER81

INORGANIC TRAFFIC NUMBER MEFE42

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-1882 22	F9041044
1 8oz.	Extractable	5-1882 21	"
1 4oz.	VOA	5-1882 23	D8231044
1 4oz	VOA	5-1882 24	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Dark brown silty loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION S7

SAMPLING DATE 6/19/89 SAMPLING TIME 1520

ORGANIC TRAFFIC NUMBER EER 82

INORGANIC TRAFFIC NUMBER MEFE 43

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 8oz	metals/CN	5-188226	F9072044
1 8oz.	Extractable	5-188225	F9041044
1 4oz.	VOA	5-188227	D8231044
1 4oz	VOA	5-188228	D8231044

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Black, well aerated loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS NA

pH NA

CONDUCTIVITY NA

TEMPERATURE NA

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW 1

SAMPLING DATE 6/20/89 SAMPLING TIME 10:00

ORGANIC TRAFFIC NUMBER EER 83

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22501

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest / PCB	5-188229	H9060054
3, 40 ml vial	VOA	5-188230-32	all B9109594
2, 1 litre amber	Extractables	5-188233-34	both H9060054
1, 1 litre plastic	metals	5-188235	C9065084
1, 1 litre plastic	CN	5-188236	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.64

CONDUCTIVITY 240 ppm

TEMPERATURE 7°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION Dup

SAMPLING DATE 6/20/89 SAMPLING TIME 1000

ORGANIC TRAFFIC NUMBER EER 84

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22D01

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188237	H 9060054
3, 40 ml vial	VOA	5-188238-40	all B9109594
2, 1 litre amber	Extractables	5-188241-42	both H9060054
1, 1 litre plastic	metals	5-188243	C9065084
1, 1 litre plastic	CN	5-188244	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.94

CONDUCTIVITY 240 ppm

TEMPERATURE 7°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW2

SAMPLING DATE 6/20/89 SAMPLING TIME 1045

ORGANIC TRAFFIC NUMBER EER 85

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22302

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188245	H9060054
3, 40 ml vial	VOA	5-188246-48	all B9109594
2, 1 litre amber	Extractables	5-188249-50	both H9060054
1, 1 litre plastic	metals	5-188251	C9065084
1, 1 litre plastic	CN	5-188252	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 7.22

CONDUCTIVITY 375 ppm

TEMPERATURE 7°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION MSD / RW2

SAMPLING DATE 6/20/89 SAMPLING TIME 10:45

ORGANIC TRAFFIC NUMBER EER 85

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL traffic number 89FM22502

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
2, 1 litre amber	pest/PCB	5-188253-54	both H9060054
5, 40 ml vial	VOA	5-188255-59	all B9109594
3 1 litre amber	Extractables	5-188260-62	all H9136014

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no oder

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 7.22

CONDUCTIVITY 375 ppm

TEMPERATURE 7 °C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW3

SAMPLING DATE 6/20/89 SAMPLING TIME 1115

ORGANIC TRAFFIC NUMBER EER 86

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22503

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188263	H9136014
3, 40 ml vial	VOA	5-188264-66	all B9109594
2, 1 litre amber	Extractables	5-188267-68	both H9136014
1, 1 litre plastic	metals	5-188269	C9065084
1, 1 litre plastic	CN	5-188270	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, no odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 7.32

CONDUCTIVITY 280 ppm

TEMPERATURE 9°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW4

SAMPLING DATE 6/20/89 SAMPLING TIME 1200

ORGANIC TRAFFIC NUMBER EER 87

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22504

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188271	H 9136014
3, 40 ml vial	VOA	5-188272-74	all B9109594
2, 1 litre amber	Extractables	5-188275-76	both H9136014
1, 1 litre plastic	metals	5-188277	C9065084
1, 1 litre plastic	CN	5-188278	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear, slight odor

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.73

CONDUCTIVITY 395 ppm

TEMPERATURE 9°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION RW5

SAMPLING DATE 6/20/89 SAMPLING TIME 1335

ORGANIC TRAFFIC NUMBER EER 88

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM22505

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188279	H9061044
3, 40 ml vial	VOA	5-188280-82	all B9109594
2, 1 litre amber	Extractables	5-188283-84	both H9061044
1, 1 litre plastic	metals	5-188285	C9065084
1, 1 litre plastic	CN	5-188286	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Clear

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 7.57

CONDUCTIVITY 240 ppm

TEMPERATURE 9°C

SAMPLE DESCRIPTION

SITE NAME/TDD# United Recovery F05-8811-004

CASE NUMBER 12190

SAMPLE #/STATION LOCATION B1K

SAMPLING DATE 6/20/89 SAMPLING TIME 1030

ORGANIC TRAFFIC NUMBER EER 89

~~INORGANIC TRAFFIC NUMBER~~ ~~ME~~

CRL Traffic number 89FM11R15

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1, 1 litre amber	Pest/PCB	5-188287	H9061044
3, 40 ml vial	VOA	5-188288-90	all B9109594
2, 1 litre amber	Extractables	5-188291-92	both H9061044
1, 1 litre plastic	metals	5-188293	C9065084
1, 1 litre plastic	CN	5-188294	C9065084

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Clear

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 6.91

CONDUCTIVITY 2 ppm

TEMPERATURE 10°C

Post Site Inspection

Site Name: United Recovery I.D. Number ILD981098411

Date of Inspection: June 19, 1989 (soil sampling) June 20, 1989 (RW sampling)

Was Work Plan Followed Y (N)
If no, explain briefly: work plan stated that 2 on-site wells were to be collected. Site only had one (1). Additionally, work plan called for 5 additional residential wells to be collected. FIT only collected the 1 on-site well plus 4 residential wells. Proximity, availability, and professional judgement dictated this decision.

Were Samples Collected? (Y) N
Residential Wells Sampled? (Y) N

Anticipated Analysis Report From:

CRL July 19, 1989

CLP Sept. 19, 1989

Anticipated SI Completion: December, 1989

Removal Investigation Recommended Y (N)
If yes, explain briefly:

Unanticipated Problems Encountered Y (N)
If yes, explain briefly:

Follow-up site work necessary Y (N)
If yes, explain briefly:

PW

SAMPLE PROPOSAL
FIT REGION V

1. Date Form Completed May 12, 1989

2. Account # FIL044SSA TDD # F05-8811-004

EPA I.D. # ILD981098411

3. Site Name, City, State United Recovery, Rockton, Illinois

4. Team Leader ~~Ted Nehrkorn~~ Tim Mayers Sampler Jeff Dickson

5. Number and Type of Samples:

Soil/Sediment 6 Surface Water ____ Ground Water ____

Residential/Municipal Wells 7 Other ____

Number of Blanks 1 Number of Duplicates 1

6. RAS Parameters Requested:

A/B/N X Pest/PCB X Volatiles X Metals X Cyanide X

SAS Parameters Requested: Drinking Waters

7. Expected Sampling Date(s): June 19 + 20, 1989

Expected Shipping Date(s): June 19 + 20, 1989

8. Lab Used For Analysis: Organic EMSI (soil)/GULF (RW-BNA)/CRL (RW-VOA, SA)

Inorganic COLUMB (soil) / CRL (RW)

SAS —

9. Case Number 12190 CLP SAS Number 4476-E

10. Airbill Numbers:

Organic Lab ____ # Coolers ____ # Samples ____

Inorganic Lab ____ # Coolers ____ # Samples ____

CRL/SAS Lab ____ # Coolers ____ # Samples ____

Sue Ozdemir

ecology and environment

recycled paper

ENV. Monitoring + Services
EMSI
4765 Calle Quetzal
Comarillo, Ca 93010
805/388-5700

Columbia analytical svcs. (Columb)
1152 Third ave.
Longview, Wa 93632
206/577-7222 Fran Atair

file 1 Numbers W. Rockton/United Recovery

20103502

ROCKTON TOWNSHIP

Jack R. Cook, Jr., Supervisor
1315 N. Blackhawk Phone: 624-7788 Rockton, Illinois 61072

February 1, 1984

Bob Wengrow
E.P.A. Land Division
4302 N. Main
P.O. Box 915
Rockford, Il. 61105

Dear Mr. Wengrow:

This is to confirm your telephone call of January 26, 1984, advising that your office will begin drilling monitoring wells to measure ground water pollution in the Watts Ave. area of our township. I would like to express the gratitude of our Township Board of Trustees and of the residents in the area for your attention and concern to this matter.

Sincerely,

Jack R. Cook, Jr., Sup.
Rockton Township

JRC/pd

RECEIVED
FEB 2 1984
ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS

OCT 07 1985

cc: ~~[illegible]~~
S. Otto - FYI

RECEIVED
MAY 14 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

Five families stuck with 'poison' water

Pollution makes life a nightmare

By Michele Meyer
The Register Star

ROCKTON — Some nights, Pat Marx says, she dreams she looks out her living room window to see an endless field of grass.

But when she awakes, the nightmare begins. Three corrugated-metal buildings, with boarded-up windows — and occasionally an irridescent orange pond or two — are still across the street.

And now, she can't drink her water.

Marx, 905 Watts Ave., was not surprised to receive the Friday, April 13th, letter from the Winnebago County Health Department telling her it might be best to avoid using her tap water. She said she has been cooking with water with a white scum on the surface that cracks upon cooling.

Her neighbors, Mr. and Mrs. William Altenberg and Etta Hader, were told two years ago they should look beyond their private wells for water. Last year, the Clifford McHones were told the same. The Kenneth Lowerys received their letter when the Marxes did.

All of the families live on Watts Avenue.

Marx and several of her neighbors blame United Recovery, the industrial-waste processing plant across the street. The Winnebago County Health Department and the Illinois Environmental Protection Agency say the firm may very well be innocent of blame.

The contaminated wells contain some of the following cancer-causing chemicals — 1,1,1-trichloroethane, 1,1-dichloroethane, trichloroethylene, chlorofoam and tetrachloroethylene. Quantities have differed from a trace to 1,000 parts per billion. Marx received the warning when contaminants totaled 5 parts per billion in her well.

The chemicals — mostly industrial solvents — are confirmed to cause cancer in animals, "and as such are considered to be potential carcinogens in man," the letter said.

The lives of Marx and her neighbors have been transformed since the first letter two years ago.

If they forget to pick up water at a friend's home, they go without. Surprise guests or an elaborate dinner may mean no coffee the next morning.

"It seems so strange now when I go to someone's faucet," said Shirley

See ✓Water/Page 5A

Water

Continued from Page 1A

Altenberg, who last drank from her tap two years ago.

Marx gets the four to five gallons her family uses every two days from the veterinarian on Prairie Hill. The Altenbergs travel two miles to her mother's home across the river. "You've got to do that in January, when it's 20 below," said Bill Altenberg, a machinist at Warner Electric Brake and Clutch.

The thought of contamination never wanders far from their minds, Marx said. "Now when I hear 1,1,1-trichloroethane, I turn around, just like if I heard by name. That's all you think about."

Marx will read from 8 a.m. until 10 p.m. about the solvent's effects and area fights against groundwater pollution. "You want to put it down, but you can't," she said of the materials she reads. "We're living it."

She attends every meeting she can when she isn't reading or phoning government agencies, she added. "You look around, and the laundry's not done and dinner's three hours late."

She no longer waterproofs her children's shoes since she read the product's label. It contained 1,1,1-trichloroethane.

Escape is impossible. No one will buy their homes, Bill Altenberg said. "You put your life savings in here, and all of the sudden your house is not worth anything. It might as well be a hole in the ground."

Each illness fuels fears of the solvent's effects, Marx said. Influenza may be more than a virus; it could be aggravated by the chemicals.

Lifelong exposure at the level found in the Marx's well could add a one-in-a-million chance to the risk of developing cancer — which already reaches one person in four, said J. Maichle Bacon, environmental health director at the Winnebago County Health Department. "Any level, no matter how small, is going to carry some increase in risk."

Higher levels produce liver, kidney, heart and central nervous system problems and skin rashes, he added.

Marx and the Altenbergs said they are perhaps most bitter toward United Recovery, formerly Soterion Inc. The firm was closed temporarily last October at the order of the IEPA, which cited the plant for three permit violations. The plant's former owner, Gilbert Semans, never applied for required pollution-control permits needed to process, store and transport special wastes in the 2½ years he owned it. Current owner Ernest Brown's home and business phone numbers are unlisted, Marx said.

The EPA and the Health Department are also to blame for their inaction, Altenberg said.

Hononegah Country Estate's water pollution was revealed only a year ago, but a water system is being installed for residents by nearby Warner Electric Brake and Clutch. "Here, we're just working people. No one cares," Altenberg said. "There are not enough of us."

Hononegah Country Estates and Moore Haven subdivisions were ideal for health studies because of the greater number of homes — as many as 162 — affected, Bacon said. The U.S. Department of Energy and Natural Resources decided to fund their tests. The Rockford School of Medicine conducted biological tests and the Water Survey Department conducted environmental ones.

ROCKFORD
Register Star
76,709 D
OCT 18 1983

EPA temporarily closes Rockton plant

By Michele Meyer
The Register Star

ROCKTON — United Recovery Inc., a Rockton industrial-waste processing plant, has closed down temporarily at the order of the Illinois Environmental Protection Agency, IEPA's Bob Godare said Monday.

The EPA ordered United Recovery owner Earnest Brown to complete required permits and have emissions tested. The plant will be closed at least a month — until test results meet EPA standards — Godare said.

The EPA cited the plant with three minor permit violations, he said.

The plant will probably be required to make several changes in its operation before reopening, said J. Maichle Bacon, Winnebago County director of environmental health. "Certainly that dryer operation is going to have to change drastically," he said.

Brown complained about the EPA.

"I have a permit — an air pollution permit — I've had it for years," he said. "They make the rules as they go along."

Brown closed the plant Friday and will do as his attorney advises, he said.

"It (the closing) will cost Rockton and myself quite a lot," he said.

The village and IEPA are preventing him from doing them a favor, he said. "I'm cleaning up a mess and I didn't make it."

Brown bought the former Soterion Inc. plant of which he was formerly vice president about two years ago.

Neighbors say the plant emits a thick and smelly smoke, which they say causes the rashes, headaches, lightheadedness and sinus troubles they suffer when the plant is burning oil waste.

"When it's not smoking, we feel good," said neighbor Pat Marx.

Shirley Altenberg says her son, Jim, has suffered severe sinus problems since the plant began processing. His headaches stopped suddenly in August — when he left Rockton for college, she said.

"If the problem is coming from the stacks, which we believe it was, (closing the plant) stops any potential bad effects in the area," Godare said.

Watts Avenue residents can only remember the luxury of opening their windows on a breezy day — they must close windows to keep out the smoke, Marx said.

Most of the neighbors must buy drinking and cooking water or cart it from friends' homes, they said.

Five of 10 neighbors' wells have traces of cancer-linked industrial solvents dichloroethane and trichloroethane, according to IEPA test results.

The chemicals may come from other factories in the area, said Ken Bardo, formerly of the IEPA. "All in all it's just as confusing as ever."

Regardless of who is at fault, the neighbors blame United Recovery.

"Obviously they don't care about us or anyone else or they would be trying to do what they could to help," Altenberg said.

Pat Marx feels little bitterness as of late. Monday, for the first day in months, she said she could look out at a clear sky without the sinking feeling that it will be hidden in smudgy clouds today.

" 'Ceased operation' — I would like to see added the word 'permanently,' " she said.

Illinois Press Association
(Press Services Inc.)
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Springfield, IL 62704
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KEWANEE
Star Courier
8,002
OCT 18 1983

Task Force Urges More Money For Hazardous Waste Checks

SPRINGFIELD, Ill. (AP) — Politicians should back up rhetoric on cleaning up toxic waste by putting more money into inspection of dumps and hazardous waste research, a state panel has been told.

"The time of making political hay of environmental problems should be over. It's time for solutions," said Charles Bartholomew, chairman of the Department of Civil Engineering at Bradley University.

Bartholomew was one of three witnesses who testified Monday before the Land Disposal Committee of the Illinois Hazardous Waste Task Force.

He told the panel that regulations governing disposal of toxic waste are based on "too little knowledge," in part because hazardous waste disposal is "an inexact science."

The task force is holding a series of hearings around the state and plans to issue a final report in December on a comprehensive approach to Illinois' hazardous waste problem.

That problem has been highlighted in the past week by two government reports.

The U.S. General Accounting Office reported last week that 33 of 38 Illinois hazardous waste dumps checked last spring were not abiding by federal regulations requiring monitoring of nearby groundwater.

The Illinois Environmental Protection Agency subsequently updated the numbers to 28 of 37 dumps not obeying the rules.

In its response to the report, the IEPA said it does not have the money to hire enough people to inspect dumps and to carry out the federal rules.

"The public expectation is great . . . but the government funding is not commensurate," IEPA Director Richard Carlson said in an interview.

A report by the U.S. EPA said Illinois and the five other Great Lakes states produce more toxic wastes and contain more hazardous waste disposal sites than any other region of the United States.

The EPA report said 38 percent of the toxic waste disposed of in 1981 went into lagoons or pits located adjacent to plants generating the toxic material.

Thomas Johnson of the State Geological Survey Division testified that those "surface impoundments" may be "the sleeping giants in terms of potential for contamination."

Johnson said most lagoons are located without regard to geological conditions and potential for groundwater pollution, and many are built primarily with convenience and cost in mind.

"Consequently, the majority of impoundments containing liquid waste probably constitute a serious source of pollution for valuable groundwater resources," Johnson said in written testimony.

Johnson called preservation of groundwater essential. He said a 1977 IEPA study showed that 82 percent of rural Illinoisans, and 38 percent of the state's population, depended on groundwater as a drinking source.

Testimony also was given by John Rademacher of the Velsicol Chemical Corp. of Chicago, who discussed injection of hazardous waste into wells dug deep into the ground.

Rademacher described the operations of such a well at Velsicol's pesticide plant in Marshall. He said deep-well injection was the only safe and practical alternative for disposing of the salt produced in the firm's pesticide-making process.

The salt is contained in 100 million gallons of water each year that is pumped up to 3,000 feet underground, well below water tables, he said. Such wells cost about $1 million, said Rademacher, vice president for environmental, health and regulatory affairs at Velsicol.

Illinois Press Association
(Press Services Inc.)
929 South Second Street
Springfield, IL 62704
217/523-5095

LaSALLE
Daily News-Tribune
21,018 D
OCT 20 1983

Let stand nuisance suit against Pioneer Processing

A nuisance suit filed against Pioneer Processing Company's proposed toxic waste dump will be allowed to continue in Circuit Court, Ottawa, according to a decision handed down Tuesday.

Circuit Judge Thomas Flood ruled against Pioneer's request to dismiss the suit filed in 1982 by the Illinois Attorney General's office and La Salle County State's Attorney's office.

The suit contends the proposed dump will pose a threat to public health and safety if it is opened on 177 acres of strip-mined land west of Naplate.

Judge Flood's decision Tuesday refused to overturn his own July 26 ruling that the suit should continue. Flood ordered Pioneer to plead or answer the suit in 28 days.

The case is similar to a Wilsonville, Ill., lawsuit involving a toxic waste landfill. That downstate community fought five years before winning its legal battle forcing a waste handling firm to remove 83,000 barrels of chemical waste at a cost of $24.5 million.

Eleven persons are named as defendants in the La Salle County case, alleging they should be stopped from opening the landfill before it develops into a Wilsonville-situation with leaking wastes.

RS-8601-01

CC: Savage IL-0445-08
Ayers

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

TO: Terry Ayers

DATE: 3-11-85

FROM: R. C. Munger, Rockford FOS

☐ Information only

SUBJECT: ~~Rockton~~ 2010350003 - Winnebago Co.
Rockton / Groundwater Contamination Incident

☐ Response requested

Please have a preliminary assessment done of the incident described in the attached material.

Related files:

Land: 2010350002 - Winnebago Co.
Rockton / United Recovery

We originally thought this was the source, but we haven't found evidence they used VOC's and they are down gradient of the contaminated wells. However, there will be useful information in their file.

Water: Beloit Corp. in Rockton

Another suspected source down gradient of contamination.

Please keep Ruth Dawson of the Director's Office informed of any changes.

cc: Rockford Region
Ruth Dawson, Directors' Office

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OCT 07 1985
IEPA-DLPC

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07 1985

Five families stuck with 'poison' water

Pollution makes life a nightmare

By Michele Meyer
The Register Star

ROCKTON — Some nights, Pat Marx says, she dreams she looks out her living room window to see an endless field of grass.

But when she awakes, the nightmare begins. Three corrugated-metal buildings, with boarded-up windows — and occasionally an iridescent orange pond or two — are still across the street.

And now, she can't drink her water.

Marx, 905 Watts Ave., was not surprised to receive the Friday, April 13th, letter from the Winnebago County Health Department telling her it might be best to avoid using her tap water. She said she has been cooking with water with a white scum on the surface that cracks upon cooling.

Her neighbors, Mr. and Mrs. William Altenberg and Etta Hader, were told two years ago they should look beyond their private wells for water. Last year, the Clifford McHones were told the same. The Kenneth Lowerys received their letter when the Marxes did.

All of the families live on Watts Avenue.

Marx and several of her neighbors blame United Recovery, the industrial-waste processing plant across the street. The Winnebago County Health Department and the Illinois Environmental Protection Agency say the firm may very well be innocent of blame.

The contaminated wells contain some of the following cancer-causing chemicals — 1,1,1-trichloroethane, 1,1-dichloroethane, trichloroethylene, chlorofoam and tetrachloroethylene. Quantities have differed from a trace to 1,000 parts per billion. Marx received the warning when contaminants totaled 5 parts per billion in her well.

The chemicals — mostly industrial solvents — are confirmed to cause cancer in animals, "and as such are considered to be potential carcinogens in man," the letter said.

The lives of Marx and her neighbors have been transformed since the first letter two years ago.

If they forget to pick up water at a friend's home, they go without. Surprise guests or an elaborate dinner may mean no coffee the next morning.

"It seems so strange now when I go to someone's faucet," said Shirley

See ✓Water/Page 5A

cc: M. Nierkerk, G. Mickard
S. Otto
B. Cowles

✓Water

20103502 Winnebago
Rockton / United Recovery

Continued from Page 1A

Altenberg, who last drank from her tap two years ago.

Marx gets the four to five gallons her family uses every two days from the veterinarian on Prairie Hill. The Altenbergs travel two miles to her mother's home across the river. "You've got to do that in January, when it's 20 below," said Bill Altenberg, a machinist at Warner Electric Brake and Clutch.

The thought of contamination never wanders far from their minds, Marx said. "Now when I hear 1,1,1-trichloroethane, I turn around, just like if I heard by name. That's all you think about."

Marx will read from 8 a.m. until 10 p.m. about the solvent's effects and area fights against groundwater pollution. "You want to put it down, but you can't," she said of the materials she reads. "We're living it."

She attends every meeting she can when she isn't reading or phoning government agencies, she added. "You look around, and the laundry's not done and dinner's three hours late."

She no longer waterproofs her children's shoes since she read the product's label. It contained 1,1,1-trichloroethane.

Escape is impossible. No one will buy their homes, Bill Altenberg said. "You put your life savings in here, and all of the sudden your house is not worth anything. It might as well be a hole in the ground."

Each illness fuels fears of the solvent's effects, Marx said. Influenza may be more than a virus; it could be aggravated by the chemicals.

Lifelong exposure at the level found in the Marx's well could add a one-in-a-million chance to the risk of developing cancer — which already reaches one person in four, said J. Maichle Bacon, environmental health director at the Winnebago County Health Department. "Any level, no matter how small, is going to carry some increase in risk."

Higher levels produce liver, kidney, heart and central nervous system problems and skin rashes, he added.

Marx and the Altenbergs said they are perhaps most bitter toward United Recovery, formerly Soterion Inc. The firm was closed temporarily last October at the order of the IEPA, which cited the plant for three permit violations. The plant's former owner, Gilbert Semans, never applied for required pollution-control permits needed to process, store and transport special wastes in the 2½ years he owned it. Current owner Ernest Brown's home and business phone numbers are unlisted, Marx said.

The EPA and the Health Department are also to blame for their inaction, Altenberg said.

Hononegah Country Estate's water pollution was revealed only a year ago, but a water system is being installed for residents by nearby Warner Electric Brake and Clutch. "Here, we're just working people. No one cares," Altenberg said. "There are not enough of us."

Hononegah Country Estates and Moore Haven subdivisions were ideal for health studies because of the greater number of homes — as many as 162 — affected, Bacon said. The U.S. Department of Energy and Natural Resources decided to fund their tests. The Rockford School of Medicine conducted biological tests and the Water Survey Department conducted environmental ones.

2010 3502 - Winnebago Pollution/United Recovery

FREEDOM OF INFORMATION REQUEST

STATE OF ILLINOIS (1)

INSTRUCTIONS:
Requestor should fill out the REQUEST portion (the top half) and sign the Requestor's Signature block. Send copies 1 and 2 to the Agency. Keep the 3rd copy for reference. Send no money at this time. Unless notified otherwise the Agency's response for APPROVED, DENIED or DEFERRED will be sent back within 7 working days after receipt of the form.

Name of Agency	City
IEPA-DLPC	LINCOLN

Address: 4302 N MAIN

Requestor's Name (Or business name if applicable): PAT MARX

Date of Request:

Phone Number:

Street Address: 905 WATTS AVE

CERTIFICATION REQUESTED [ ] YES [ ] NO

City	State	Zip
Rockton	Ill.	61072

Requestor's Signature: Pat Marx

DESCRIPTION OF RECORDS REQUESTED:

517 copies of various documents - No Charge - from above site + Rockton/Groundwater Quality Committee textbook + IWPC's Belvidere Corp file.

[X] REQUESTING COPIES [ ] TO INSPECT RECORDS

AGENCY RESPONSE (REQUESTOR DOES NOT FILL IN BELOW THIS LINE)

APPROVED

[ ] The documents requested are enclosed.

[ ] The documents will be made available upon payment of copying costs ..... $ _____

[ ] You may inspect the records at _____

on the date of _____.

DENIED

[ ] The request creates an undue burden on the public body in accordance with Section 3(f) of the Freedom of Information Act, and we are unable to negotiate a more reasonable request.

[ ] The materials requested are exempt under Section 7 _____ of the Freedom of Information Act for the following reasons:

INDIVIDUAL(S) THAT DETERMINED REQUEST TO BE DENIED

_____

_____

RIGHT TO APPEAL

If desired, submit the attached APPEAL form (No. 2) along with copies of this original REQUEST and DENIAL and reasons for appeal to:

DEFERRED

[ ] Request delayed, for the following reasons (in accordance with 3(d) of the FOIA):

RECEIVED OCT 07 1985

You will be notified by the date of _____ as to action taken on your request.

The information required by this form is MANDATORY in order to comply with P.A. 83-1013. Failure to so provide may result in this form not being processed. This form is approved by the Forms Management Center.

FOIA Officer

Date of Reply

IL 001-0005 (6/84)

LEGEND FOR REQUESTOR: 1st copy (white) - send to Agency; 2nd copy (canary) - send to Agency; 3rd copy (pink) - Requestor's copy

Rockford WC

DEPARTMENT OF PUBLIC HEALTH
WINNEBAGO COUNTY
401 Division Street
ROCKFORD ILLINOIS 61108

RECEIVED
ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS

Joseph Orthoxfer, D.V.M., M.P.H., M.A.P.A.
Public Health Administrator
Phone 962-5092

February 26, 1985

Bob Wengrow
Illinois Environmental Protection Agency
4302 N. Main
Rockford, IL 61103

Dear Bob:

Enclosed please find our interpretation of the Watts Avenue water contamination situation. From the information assembled at this point we may be looking at two plumes of contamination. Probably at least 2-3 monitoring well nests must be placed upgradient from these plumes to attempt to trace back the high concentrations in the middle of the plume.

Another round of water smaples should be taken within the next few weeks to update our information. If you would like to have a meeting regarding the Watts Avenue situation, please let me know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Mary Frances Blaney
Associate Sanitarian

MFB/jb

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LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
Beloit Corp MW #1 May 17, 1984 (Warzyn Engineering, Inc.)										10			10
Sept. 17, 1984 (IDPH Lab)			5		2	9				2			18
Beloit Corp MW #2 Sept. 16, 1984 (IDPH Lab)	tr				tr	2							2
Beloit Corp MW #3 May 16, 1984 (Warzyn Engineering, Inc.)					89	47							136
Sept. 17, 1984 (IDPH Lab)			13	160	16					2		19	210
Beloit Corp MW #4 Sept. 17, 1984 (IDPH Lab)			tr									1	1
Beloit Corp MW #5 May 17, 1984 (Warzyn Engineering, Inc.)			12		35	340							387
Sept. 17, 1984 (IDPH Lab)			1		84	41			5	9		tr	133
Beloit Corp MW #6 Sept. 17, 1984 (IDPH Lab)					tr								—
Beloit Corp MW #7 Sept. 17, 1984 (IDPH Lab)						1							1
Beloit Corp MW #8 Sept. 17, 1984 (IDPH Lab)			1		2	tr				1			3
Beloit Corp MW #9 Sept. 17, 1984 (IDPH Lab)			2		2	2		2					9
Beloit Corp MW #10 Sept. 17, 1984 (IDPH Lab)			tr									5	5
Beloit Corp EPA MW #11 Sept. 17, 1984 (IDPH Lab)												tr	—
Beloit Corp EPA MW #102 Sept. 17, 1984 (IDPH Lab)												1	1
908 N. Blackhawk May 8, 1984 (IDPH Lab)						5		1					6
Beloit Corp EPA MW #101 Sept. 17, 1984 (IDPH Lab)			tr			1							1

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OCT 07 1985

LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
905 Watts Ave. June 8, 1983 (IDPH Lab)						4				3			7
Jan. 24, 1984 (IDPH Lab)			3			2	1						6
May 8, 1984 (IDPH Lab)			1			1							2
Sept. 18, 1984 (IDPH Lab)				1		2							3
909 Watts Ave. May 8, 1984 (IDPH Lab)						5		1					6
Sept. 18, 1984 (IDPH Lab)				2		3		1	tr	17			2[illegible]
910 Watts Ave. May 28, 1982 (San Dist. Lab) Vial 1						954			45				99[illegible]
Vial 2						482							48[illegible]
Dec. 8, 1982 (IEPA Lab)						120				5			12[illegible]
June 8, 1983 (IEPA Lab)					2	220				6		1	22[illegible]
Jan. 24, 1984 (IDPH Lab)					1	105			33	15			15[illegible]
May 8, 1984 (IDPH Lab)			1			142			tr	12			15[illegible]
Sept. 18, 1984 (IDPH Lab)			51		3	105			177	19			3[illegible]
913 Watts Ave. Dec. 8, 1982 (IEPA Lab)					2								2
914 Watts Ave. May 27, 1982 (San Dist. Lab) Vial 1						95							95
Vial 2						100							10[illegible]
Dec. 8, 1982 (IEPA Lab)						31							3[illegible]
June 8, 1983 (IEPA Lab)						32							3[illegible]
Jan. 24, 1984 (IDPH Lab						19			24	2			45
May 8, 1984 (IDPH Lab						22			72	2			96
Sept. 18, 1984 (IDPH Lab)					1	20			48	6			75

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ILLINOIS EPA
Environmental Protection Agency
P.O. Box 915 Rockford, IL. 61105

Telephone 815/987-7755

Refer to: 2010350003 - Winnebago County
Rockton/Groundwater Contamination Incident

March 13, 1985

Mr. J. Maichle Bacon
Director, Environmental Health
Department of Public Health -
Winnebago County
401 Division Street
Rockford, IL 61108

Dear Mr. Bacon:

We have received your letter of February 26, 1985, and the accompanying information.

We have forwarded it to our headquarters in Springfield where a preliminary assessment will be prepared for referral to USEPA.

If you find any additional information or have any questions, please feel free to contact Robert Munger at this office.

Sincerely,

Robert A. Wengrow

Robert A. Wengrow
Manager - Region 1 Field Operations
Division of Land Pollution Control

RAW/RM/mr
cc: Division File
Rockford Office
Ruth Dawson, Director's Office

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FILE FORM

TO: ~~Steve Colantino~~ M. Reeder

FROM: R.L. Munger

DATE: 3-11-85

Y

EPA I.D. Number

Groundwater Incident

* *

ransaction Date
month,day,year)

Initials

23/08/85

RCM

5 20 21 23

☒ Initiate New File On:

Winnebago County

2010350003 Site Inventory Number

Rockton /Groundwater Cont. Incident

FIELD INCIDENT

53

☐ Change File Form:

icly Owned/Publicly Operated
icly Owned/Privately Operated
ately Owned/Privately Operated
ately Owned/Publicly Operated
rship and Operation Unclassified

County

Site Inventory Number

/

r
r
assified

TO

County

assified

Site Inventory Number

/

B = No

B = No

☐ Close File. Pull From Active Files And Place In Closed And Covered Files:

len
Sudden
Applicable

County

Site Inventory Number

/

B = No

B = No

IL 532-0340
LPC 44 (Rev. 4/82)

B = No

B = No

3. Emergency

69

70

A = Yes

B = No

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IL 532-1141
ADM 1162 8/83

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
INVENTORY DATA INPUT FORM

Prepared by: RLM County: Winnebago IEPA I.D. Number

City/Community Rockton Facility Name Grandwater Incident

Inventory I.D. Number	Card Type	Trans Code	Transaction Date (month,day,year)	Initials
2 0 1 0 3 5 0 0 0 3 (1–10)	0 1 0 (11–13)	A (14)	03,08,85 (15–20)	RLM (21–23)

A = Add
C = Change
D = Delete

---------- GENERIC INVENTORY ----------

1. Facility Name GRNDWTR CØNTAMINATIØN INCIDENT (24–53)
2. Number of Employees Employed by Facility ____ (54–59)
3. Type of Ownership and Operation Z (60)
   A = Publicly Owned/Publicly Operated
   B = Publicly Owned/Privately Operated
   C = Privately Owned/Privately Operated
   D = Privately Owned/Publicly Operated
   Z = Ownership and Operation Unclassified
4. Type of Inspection Requirements Z (61)
   A = Minor
   B = Major
   Z = Unclassified
5. Facility Under Regional Pollution Control Regulations Z (62)
   A = Yes
   B = No
   Z = Unclassified
6. Financial Requirements:
   a. Closure B (63) A = Yes B = No
   b. Post Closure B (64) A = Yes B = No
   c. Liability Insurance C (65)
      A = Sudden
      B = Non-Sudden
      C = Non Applicable
7. Federal Superfund:
   a. State Lead:
      1. Remedial ____ (66) A = Yes B = No
      2. Removal ____ (67) A = Yes B = No
   b. Federal Lead:
      1. Remedial ____ (68) A = Yes B = No
      2. Removal ____ (69) A = Yes B = No
      3. Emergency ____ (70) A = Yes B = No

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OCT 07 1985

IL 532-1141
ADM 1162 8/83

Inventory I.D. Number	Card Type	Trans Code	Transaction Date (month,day,year)	Initials
1 — 10	0 1 0 (11 — 13)	14	15 __/__ __/__ 20	21 — 23

A = Add
C = Change
D = Delete

---------- GENERIC INVENTORY (Continued) ----------

8. Illinois State Hazardous Waste Fund:

a. Remedial	71	A = Yes B = No
b. Removal	72	A = Yes B = No
c. Emergency Response	73	A = Planned Removal B = Remedial Action

9. Latitude:

a. Degrees	74	4
	75	2
b. Minutes	76	2
	77	2
c. Seconds	78	0
	79	0

10. Longitude

a. Degrees	80	8
	81	9
b. Minutes	82	0
	83	3
c. Seconds	84	4
	85	5

11. Mean Sea Level

86	7	5 0 (89)

12. Legal Description:

a. Principle Meridian	90	3
b. Range	91	1
	92	2
	93	E
c. Township	94	4
	95	6
	96	N
d. Section	97	1
	98	3
e. Quarter	99	N
	100	E
f. Quarter	101	
	102	
g. Quarter	103	
	104	
h. Quarter	105	
	106	

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
INVENTORY DATA INPUT FORM

Prepared by: RCM County Winnebago IEPA I.D. Number

City/Community Rockton Facility Name Groundwater Contamination

Inventory I.D. Number	Card Type	Trans Code	Transaction Date (month,day,year)	Initials
2 0 1 0 3 5 0 0 0 3 (1–10)	0 2 0 (11–13)	A (14)	0 3 / 0 8 / 8 5 (15–20)	RCM (21–23)

A = Add
C = Change
D = Delete

---------- FACILITY LOCATION ----------

1. Street W A T T S A V E (24–48)
2. P. O. Box (49–54)
3. City/State/Zip
   R O C K T O N (55–74)
   I L (75–76) 6 1 0 7 2 (77–85)
4. Telephone (86–89) (90–92)
5. Contact Person (96–120)
6. Mailing Indicator (121)

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OCT 07 1985

IL 532-1127
ADM 1148 8/83

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
INVENTORY DATA INPUT FORM

Prepared by: RLM County Winnebago IEPA I.D. Number

City/Community Rockford Facility Name Groundwater Contamination

Inventory I.D. Number	Card Type	Trans Code	Transaction Date (month,day,year)	Initials
2 0 1 0 3 5 0 0 0 3 (1–10)	0 4 0 (11–13)	A (14)	03/08/85 (15–20)	RLM (21–23)

A = Add
C = Change
D = Delete

---------- FACILITY OPERATOR ----------

1. Name

UNKNOWN (24–53)

2. Street (54–78)

3. P. O. Box (79–84)

4. City/State/Zip (85–104)

(105–106) (107–115)

5. Telephone Number (116–119) (122)

6. Contact Person

(126–150)

7. Mailing Indicator (151)

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OCT 07 1985

IL 532-1126
ADM 1147 8/83

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
INVENTORY DATA INPUT FORM

Prepared by: RCM County Winnebago IEPA I.D. Number

City/Community Rockford Facility Name Groundwater Cont. Incident

Inventory I.D. Number	Card Type	Trans Code	Transaction Date (month,day,year)	Initials
2010350003 (1–10)	0 3 0 (11–13)	A (14)	03/08/85 (15–20)	RCM (21–23)

A = Add
C = Change
D = Delete

---------- PROPERTY OWNER ----------

1. Name

UNKNOWN (24–53)

2. Street (54–78)

3. P. O. Box (79–84)

4. City/State/Zip (85–104)

(105–106) (107–115)

5. Telephone Number (116) (119) (122)

6. Contact Person

(126–150)

7. Mailing Indicator (151)

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OCT 07 1985

IL 532-1128
ADM 1149 8/83

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
INVENTORY DATA INPUT FORM

Prepared by: RLM County Winnebago IEPA I.D. Number 2010350003

City/Community Rockton Facility Name Groundwater Contamination Incident

Inventory I.D. Number	Card Type	Trans Code	Transaction Date (month,day,year)	Initials
2 0 1 0 3 5 0 0 0 3	B 1 0	A	0 3 / 0 8 / 8 5	R L M
1 – 10	11 – 13	14	15 – 20	21 – 23

A = Add
C = Change
D = Delete

---------- ILLEGAL DUMP SEGMENT ----------
---------- ILLEGAL TRANSPORTER SEGMENT ----------

1. USEPA NUMBER ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (24 – 35)

2. Type of Illegal Activity Z (36)
   A = Random Dump
   B = Open Dump
   C = Abandonment
   D = Non- Permitted Transporter
   Z = Other

3. Type Waste Dumped A (37)
   A = Hazardous
   B = Non-Hazardous
   C = Combination
   Z = Unclassified

4. Waste Type(s):

   USEPA Hazardous Waste Code(s)

   F 0 0 1 , F 0 0 2 , ___ ___ ___ , ___ ___ ___ , ___ ___ ___
   (38 – 42 – 46 – 50 – 54)

5. Estimated Quantity of Waste Dumped ___ ___ ___ ___ ___ ___ ___ (58 – 65)

6. Unit of Measure Waste Was Reported ___ (66)
   A = Gallons
   B = Cubic Yards

7. Date Dump Was Discovered (Date Illegal Transporter was Discovered) 0 4 / 2 7 / 8 2 (67 – 72)

8. Date Dump Was Cleaned (Date Illegal Transportation of Waste Ceased) ___ ___ / ___ ___ / ___ ___ (73 – 78)

9. Facility Where Waste Was Sent ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (79 – 88)

10. Status of Dump Cleaning Z (89)
    A = Partially Cleaned
    B = Completely Cleaned
    Z = Unclassified

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OCT 07 1985

IL 532-1131
ADM 1152 (Rev. 11/83)

LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
918 Watts Ave.													
Dec. 8, 1982 (IEPA Lab)						197							197
June 8, 1983 (IEPA Lab)						370				4			374
Jan. 24, 1984 (IDPH Lab)			tr		tr	175				16			191
May 8, 1984 (IDPH Lab)						47			86	4			137
Sept. 18, 1984 (IDPH Lab)			3			50			52	17			122
1004 Watts Ave.													
June 8, 1983 (IEPA Lab)						2							2
Jan. 24, 1984 (IDPH Lab)					1	4				11			16
May 8, 1984 (IDPH Lab)						3			23				26
Sept. 18, 1984 (IDPH Lab)			tr			2			21				23

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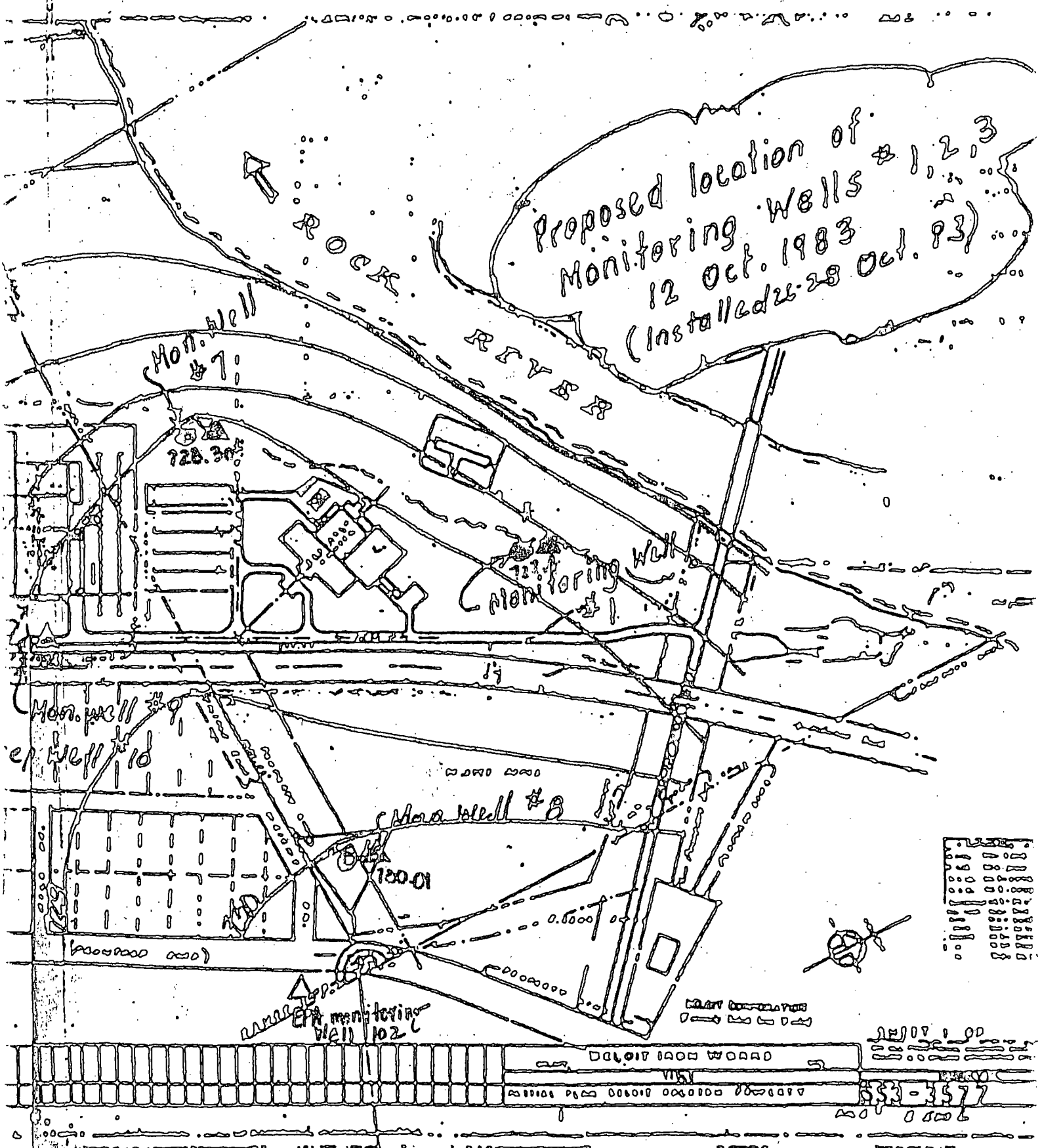
OCT 07 1985

CORP. KOCKTON



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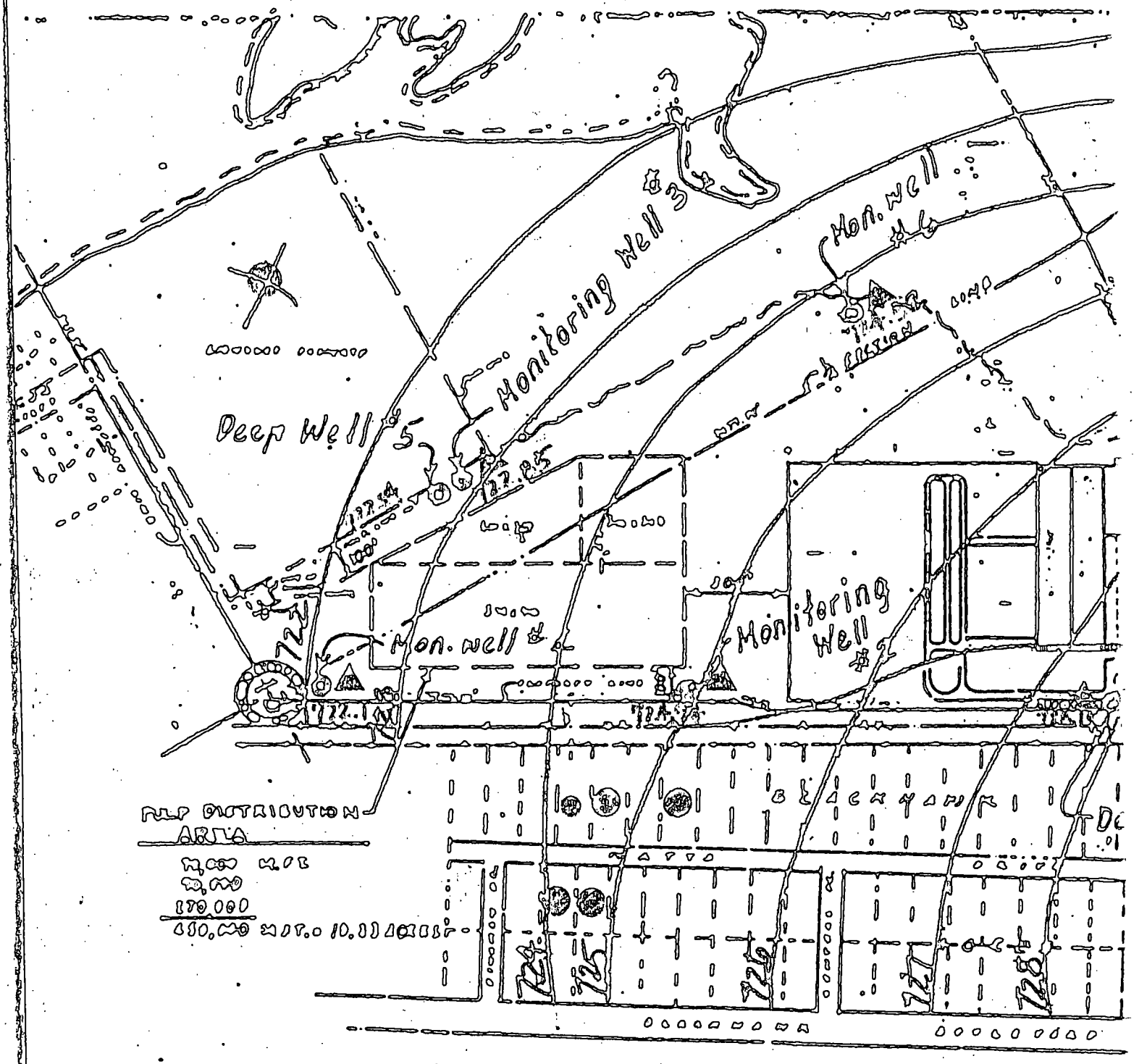
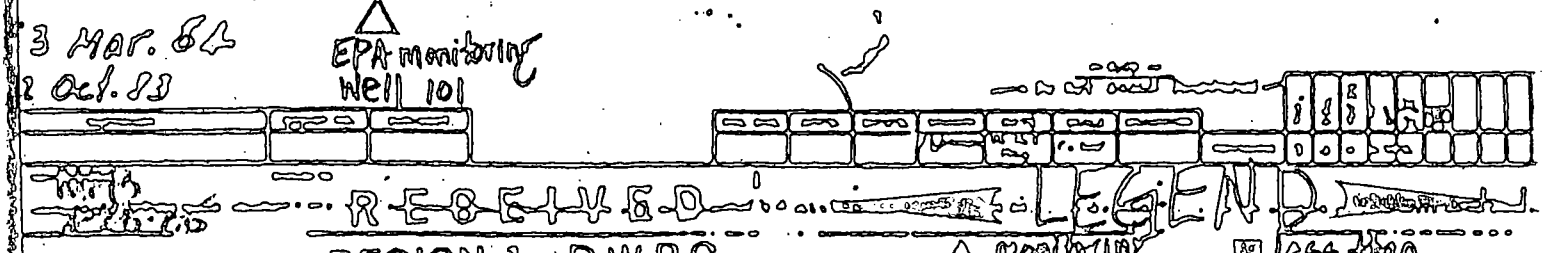
OCT 07 1985

Proposed - 13 March 1984

Add'l. Monitor. Wells: 4, 6, 7, 8, 9





LEGEND

- monitoring well
- private well
- sampled 9-17-84
- sampled 9-18-84
- less than 10 ppb
- 10-100 ppb
- 101-200 ppb
- greater than 200 ppb
- negative results

RECEIVED
REGION 1 D.W.P.C.
APR 3 1984
ENVIRONMENTAL PROTECTION AGENCY

RECEIVED
OCT 07 1985

(Dave) Please keep several residences with solvent contamination on Water Drive (see map).
Bob

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

file - Winnebago Co. Rockton/United Rec

Winnebago
COUNTY

WPC/FOS
DIVISION

Beloit Corporation / RR Rockton I. D. or FILE NO.

Re:

Conversation with: Doug McLeish, Energy & Env. Eng.

( ) I Called Party (X) Party Called Me DATE 4/ 2 /84 TIME 10 :00 AM

( ) Complainant ( ) Violator ( ) Public Inquiry ( ) Partitioner

What I Said: What Other Party Said:

McLeish called to provide an update on their various studies and programs to provide wastewater treatment at the R & D Facility in Rockton.

A. Two men are being trained as operators of the existing equipment and will be taking the industrial wastewater exam soon.

B. Strand Eng. & Associates of Madison, Wisconsin have been hired to study and design the new waste treatment system. They've been instructed to use an effluent TSS limit of 15 mg/1. They will resample waste sources at the plant for design purposes. System selection will be completed in April and construction completion is planned for January, 1985.

C. The monitoring wells were resampled in February, 1984.

D. Warsyn Well Drilling Company has been hired to do a complete ground water study. They will start immediately. An additional 7 to 9 monitoring wells, both deep and shallow, will be installed. This will commence within the next week.

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use reverse side if necessary

Chuck E. Corley
Signature

Title

cc: WPC/FOS/Records Unit

EPA 129 rev. 1/81

Over

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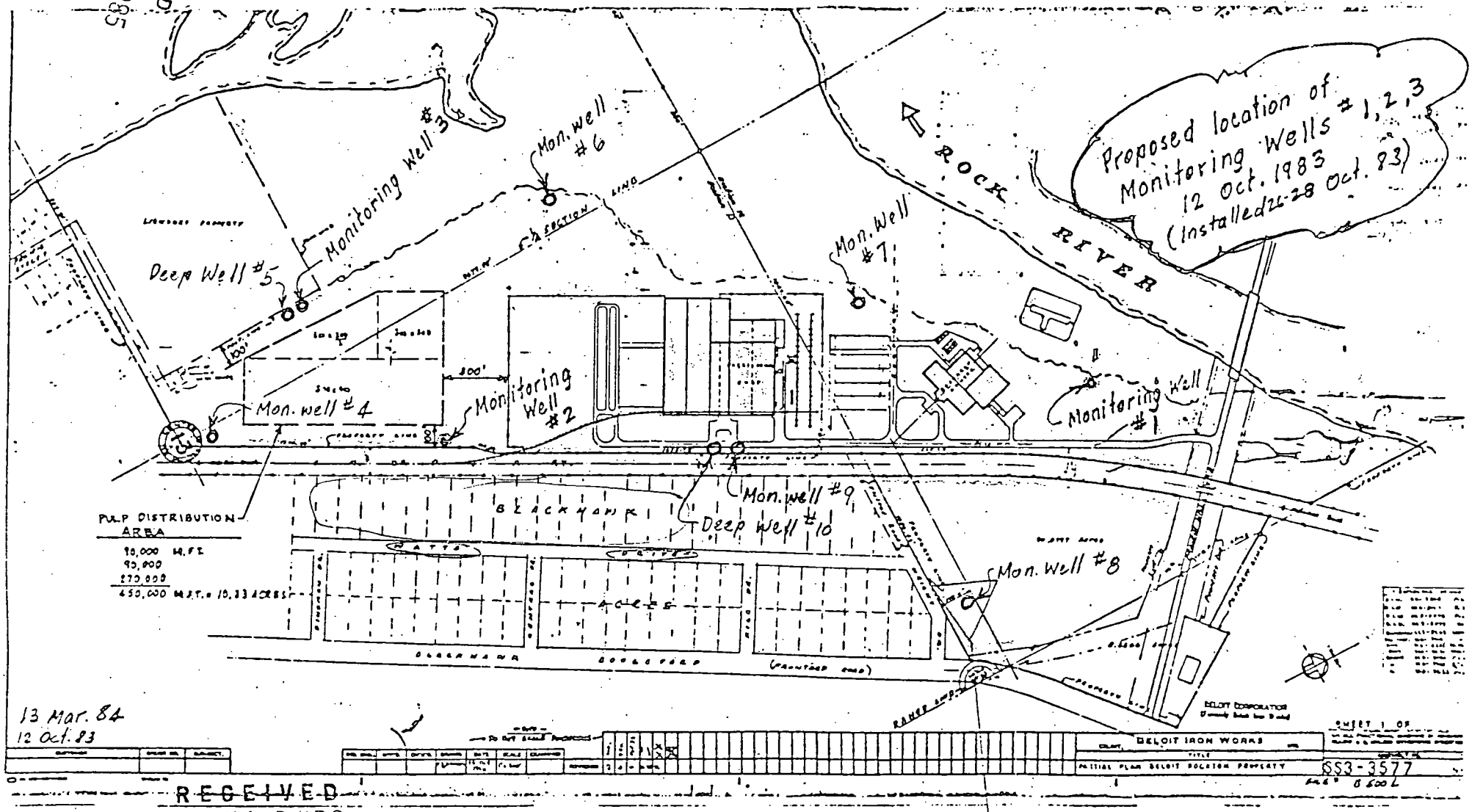
BELOIT CORP. ROCKTON



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REGION 1 D.W.P.C.

APR 3 1984

ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

Proposed - 13 March 1984
Add'l. Monitor. Wells: 4, 6, 7, 8, 9
Deep Wells: 5, 10.
Across Hl. 2

SAMPLE PROPOSAL
FIT REGION V

COPY

1. Date Form Completed May 12, 1989

2. Account # FIL0445SA TDD # F05-8811-004

EPA I.D. # ILD981098411

3. Site Name, City, State United Recovery, Rockton, Illinois

4. Team Leader ~~Ted Nehrkorn~~ Tim Mayers Sampler Jeff Dickson

5. Number and Type of Samples:

Soil/Sediment 6 Surface Water ____ Ground Water ____

Residential/Municipal Wells 7 Other ____

Number of Blanks 1 Number of Duplicates 1

6. RAS Parameters Requested:

A/B/N X Pest/PCB X Volatiles X Metals X Cyanide X

SAS Parameters Requested: Drinking Waters

7. Expected Sampling Date(s): June 19 + 20, 1989

Expected Shipping Date(s): June 19 + 20, 1989

8. Lab Used For Analysis: Organic Emsl (soil) / GULF (RW-BNA) / CRL (RW-VOA,P

Inorganic COLUMB (soil) / CRL (RW)

SAS —

9. Case Number 12190 CLP SAS Number 4476-E

10. Airbill Numbers: Gulf 9071156743
CRL (VOA, P/P) 9071156791

Organic Lab Emsl 9071156754 # Coolers 2 # Samples 7 RW 7 soils 6/20/89

Inorganic Lab CRL same COLUMB 9071156765 # Coolers 2 # Samples 7 RW 7 soils 6/19/89

CRL/SAS Lab ____ # Coolers ____ # Samples ____

complete

DEPARTMENT OF PUBLIC HEALTH
WINNEBAGO COUNTY
401 Division Street
ROCKFORD ILLINOIS 61108

RECEIVED
ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS

Joseph Orthoxfer, D.V.M., M.P.H., M.A.P.A.
Public Health Administrator
Phone 962-5092

February 26, 1985

Bob Wengrow
Illinois Environmental Protection Agency
4302 N. Main
Rockford, IL 61103

Dear Bob:

Enclosed please find our interpretation of the Watts Avenue water contamination situation. From the information assembled at this point we may be looking at two plumes of contamination. Probably at least 2-3 monitoring well nests must be placed upgradient from these plumes to attempt to trace back the high concentrations in the middle of the plume.

Another round of water smaples should be taken within the next few weeks to update our information. If you would like to have a meeting regarding the Watts Avenue situation, please let me know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Mary Frances Blaney
Associate Sanitarian

MFB/jb

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LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
Beloit Corp MW #1 May 17, 1984 (Warzyn Engineering, Inc.)										10			10
Sept. 17, 1984 (IDPH Lab)			5		2	9				2			18
Beloit Corp MW #2 Sept. 16, 1984 (IDPH Lab)	tr				tr	2							2
Beloit Corp MW #3 May 16, 1984 (Warzyn Engineering, Inc.)					89	47							13[illegible]
Sept. 17, 1984 (IDPH Lab)			13	160	16					2		19	21[illegible]
Beloit Corp MW #4 Sept. 17, 1984 (IDPH Lab)			tr									1	1
Beloit Corp MW #5 May 17, 1984 (Warzyn Engineering, Inc.)			12		35	340							38[illegible]
Sept. 17, 1984 (IDPH Lab)			1		84	41			5	9		tr	13[illegible]
Beloit Corp MW #6 Sept. 17, 1984 (IDPH Lab)					tr								—
Beloit Corp MW #7 Sept. 17, 1984 (IDPH Lab)						1							1
Beloit Corp MW #8 Sept. 17, 1984 (IDPH Lab)			1		2	tr				1			3
Beloit Corp MW #9 Sept. 17, 1984 (IDPH Lab)			2		2	2		2					9
Beloit Corp MW #10 Sept. 17, 1984 (IDPH Lab)			tr									5	5
Beloit Corp EPA MW #11 Sept. 17, 1984 (IDPH Lab)												tr	—
Beloit Corp EPA MW #102 Sept. 17, 1984 (IDPH Lab)												1	1
908 N. Blackhawk May 8, 1984 (IDPH Lab)						5		1					6
Beloit Corp EPA MW #101 Sept. 17, 1984 (IDPH Lab)			tr			1							1

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LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
905 Watts Ave. June 8, 1983 (IDPH Lab)						4				3			7
Jan. 24, 1984 (IDPH Lab)			3			2	1						6
May 8, 1984 (IDPH Lab)			1			1							2
Sept. 18, 1984 (IDPH Lab)				1		2							3
909 Watts Ave. May 8, 1984 (IDPH Lab)						5		1					6
Sept. 18, 1984 (IDPH Lab)				2		3		1	tr	17			2
910 Watts Ave. May 28, 1982 (San Dist. Lab) Vial 1						954			45				99
Vial 2						482							48
Dec. 8, 1982 (IEPA Lab)						120				5			12
June 8, 1983 (IEPA Lab)					2	220				6		1	22
Jan. 24, 1984 (IDPH Lab)					1	105			33	15			15
May 8, 1984 (IDPH Lab)			1			142			tr	12			15
Sept. 18, 1984 (IDPH Lab)			51		3	105			177	19			3
913 Watts Ave. Dec. 8, 1982 (IEPA Lab)					2								2
914 Watts Ave. May 27, 1982 (San Dist. Lab) Vial 1						95							9
Vial 2						100							10
Dec. 8, 1982 (IEPA Lab)						31							3
June 8, 1983 (IEPA Lab)						32							3
Jan. 24, 1984 (IDPH Lab						19			24	2			4
May 8, 1984 (IDPH Lab						22			72	2			94
Sept. 18, 1984 (IDPH Lab)					1	20			48	6			7

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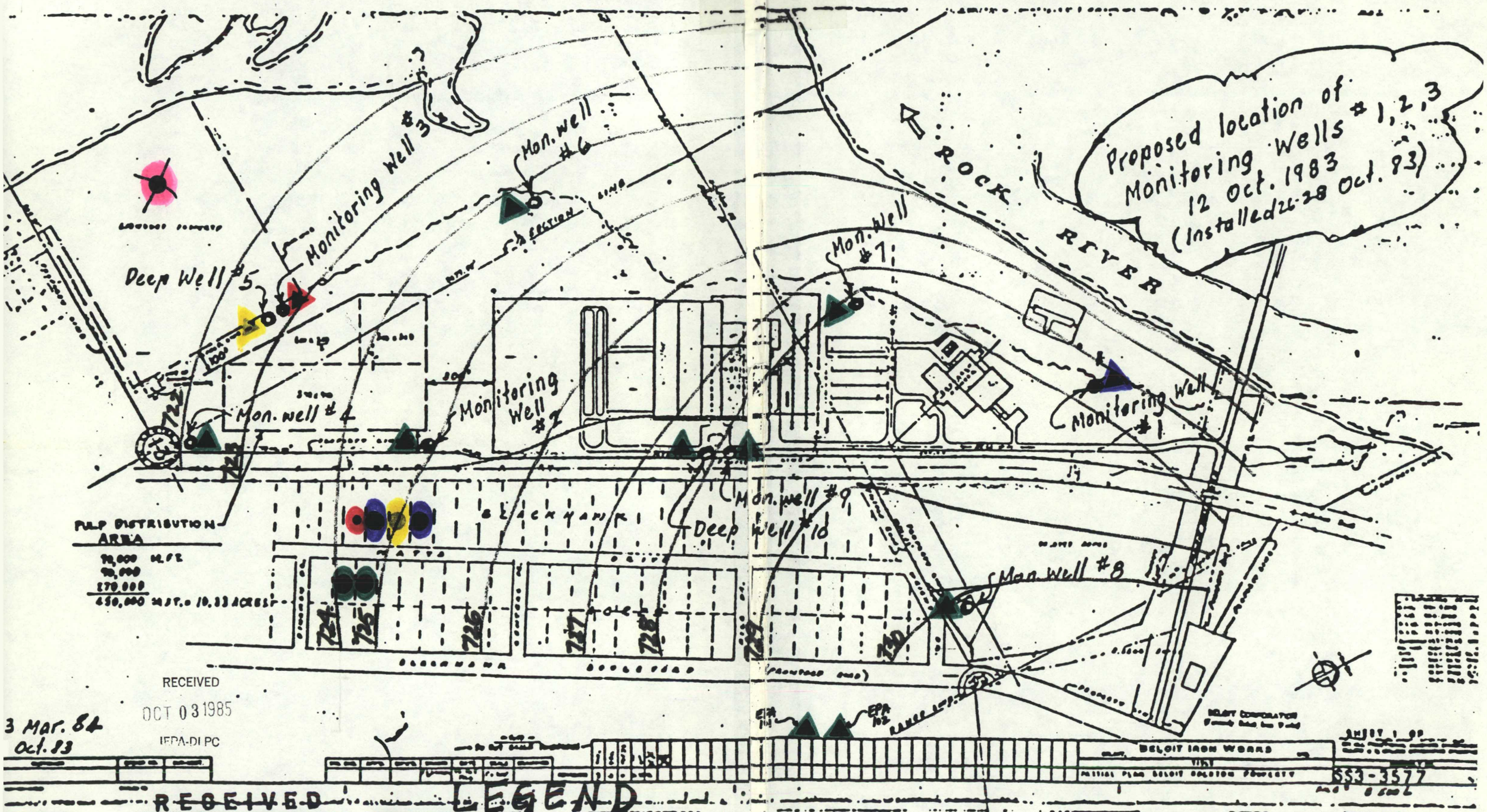

DEPARTMENT OF PUBLIC HEALTH
WINNEBAGO COUNTY
401 Division Street
ROCKFORD ILLINOIS 61108

Bob K,
I feel that upper management decisions need to be made on addressing this problem. This problem is of concern to all Divisions
Monte
10/4

Joseph Orthoefer, D.V.M., M.P.H., M.A.P.A
Public Health Administrator
Phone 962-5092

September 30, 1985

Monte Nienkerk
Groundwater Advisor Control
IEPA
2200 Churchill Rd.
Springfield, IL 62706

9:30 10/16 Rec'd

Re: Groundwater Contamination by VOC's - Rockton, IL

Dear Mr. Nienkerk:

This is to transmit our concern and interpretation of the groundwater data that has accumulated on this groundwater contamination problem since it was identified in May 1982. I have enclosed a summary of the groundwater quality data and a map depicting groundwater contours and VOC contamination findings. The contours were developed from elevations established by consultants for Beloit Corporation. It is evident that groundwater flow in this study area is to the south-southwest.

Comparison of the location of problems on Watts Avenue versus the problem on Beloit Corporation property (monitoring wells 3 and 5) indicates they are on different flow paths, thus the interpretation that there may be two distinct sources. In addition, the monitoring wells on Beloit property (3 and 5) indicate that the predominate contaminants are 1,1,1,-trichloroethane and trichloroethylene. In the case of the residual wells on Watts Avenue (900 block) the predominate contaminants are 1,1,1-trichloroethane, 1,1-dichloroethane, and 1,1-dichloroethylene. This further supports the likelihood of two separate sources (plumes) and the need to document the origin of these pollutants.

As the contaminated groundwater continues to migrate along the flow paths involved in this situation, the wells on Dr. and Mrs. Trull's property (900 N. Praire) will undoubtly be influenced. Thus it is imperative to continue to monitor these wells for levels of volatile organic chemicals (VOC's) and that every effort be made by the Beloit Corporation and/or your agency in conducting an investigation that would establish a source(s) for these contaminates and to undertake a remedial action plan before these contaminants spread further.

It is hoped that the necessary resources can be identified to carry out a successful resolution of this matter. If you have any questions regarding any of this, please let me know.

Respectfully,

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OCT 03 1985

J. Maichie Bacon, M.P.H., R.S.
Director, Environmental Health

JMB/jb
Enc.
cc: Dr. Richard J. Carlson, Director
IEPA

Robert Kuykendall, Mngr.
Land - IEPA

LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
Beloit Corp MW #1 May 17, 1984 (Warzyn Engineering, Inc.)										10			10
Sept. 17, 1984 (IDPH Lab)			5		2	9				2			19
Beloit Corp MW #2 Sept. 16, 1984 (IDPH Lab)	tr				tr	2							2
Beloit Corp MW #3 May 16, 1984 (Warzyn Engineering, Inc.)					89	47							13
Sept. 17, 1984 (IDPH Lab)			13	160	16					2		19	21
Beloit Corp MW #4 Sept. 17, 1984 (IDPH Lab)			tr									1	1
Beloit Corp MW #5 May 17, 1984 (Warzyn Engineering, Inc.)			12		35	340							38
Sept. 17, 1984 (IDPH Lab)			1		84	41			5	9		tr	13
Beloit Corp MW #6 Sept. 17, 1984 (IDPH Lab)					tr								—
Beloit Corp MW #7 Sept. 17, 1984 (IDPH Lab)						1							1
Beloit Corp MW #8 Sept. 17, 1984 (IDPH Lab)			1		2	tr				1			3
Beloit Corp MW #9 Sept. 17, 1984 (IDPH Lab)			2		2	2		2					9
Beloit Corp MW #10 Sept. 17, 1984 (IDPH Lab)			tr									5	5
Beloit Corp EPA MW #11 Sept. 17, 1984 (IDPH Lab)												tr	—
Beloit Corp EPA MW #102 Sept. 17, 1984 (IDPH Lab)												1	1
908 N. Blackhawk May 8, 1984 (IDPH Lab)						5		1					6
Beloit Corp EPA MW #101			tr			1							1

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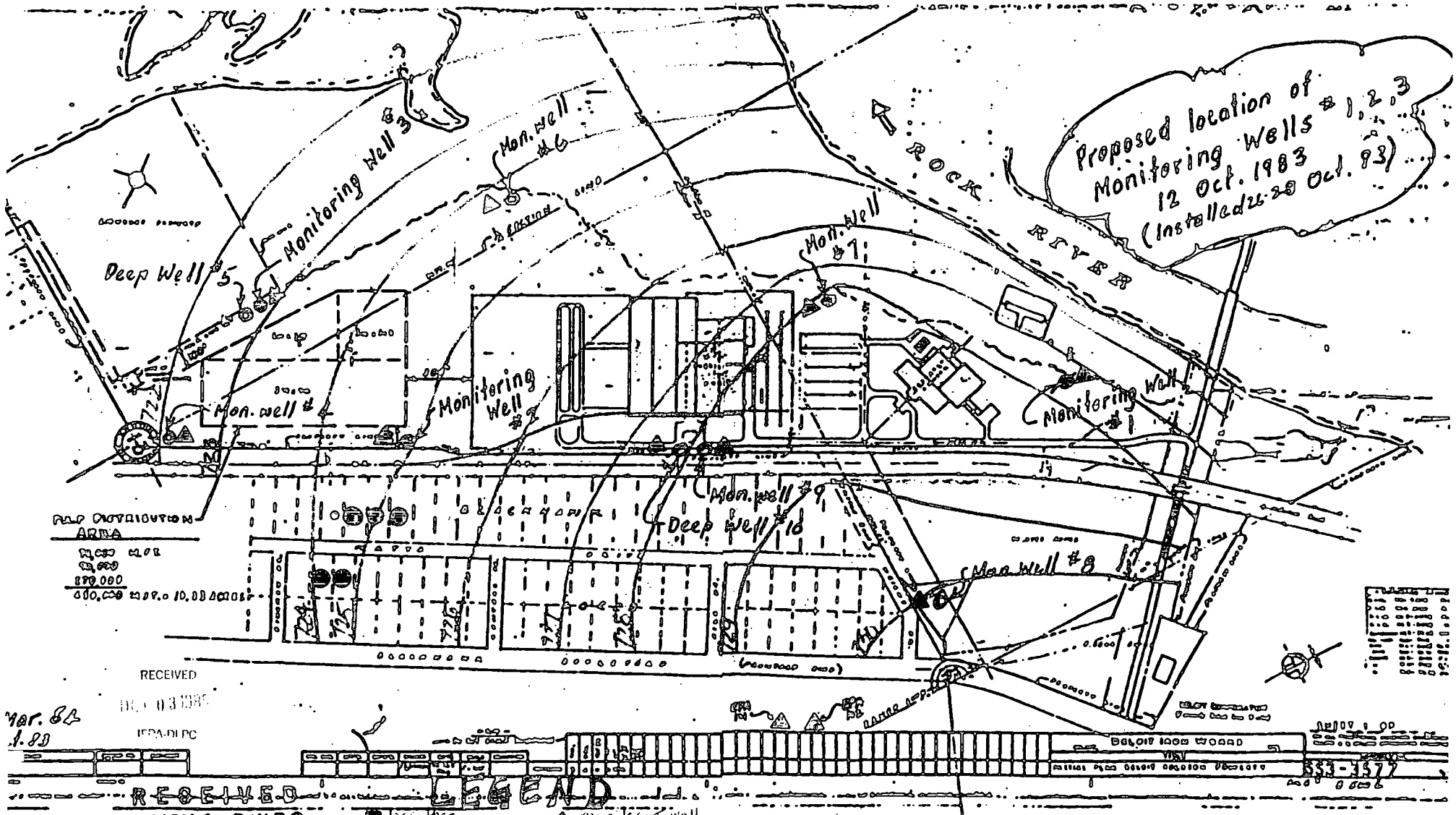
LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
905 Watts Ave.													
June 8, 1983 (IDPH Lab)						4				3			7
Jan. 24, 1984 (IDPH Lab)			3			2	1						6
May 8, 1984 (IDPH Lab)			1			1							2
Sept. 18, 1984 (IDPH Lab)				1		2							3
909 Watts Ave.													
May 8, 1984 (IDPH Lab)						5		1					6
Sept. 18, 1984 (IDPH Lab)				2		3		1	tr	17			2
910 Watts Ave.													
May 28, 1982 Vial 1						954			45				99
(San Dist. Lab) Vial 2						482							48
Dec. 8, 1982 (IEPA Lab)						120				5			12
June 8, 1983 (IEPA Lab)					2	220				6		1	2
Jan. 24, 1984 (IDPH Lab)					1	105			33	15			15
May 8, 1984 (IDPH Lab)			1			142			tr	12			15
Sept. 18, 1984 (IDPH Lab)			51		3	105			177	19			3
913 Watts Ave.													
Dec. 8, 1982 (IEPA Lab)					2								2
914 Watts Ave.													
May 27, 1982 Vial 1						95							9
(San Dist. Lab) Vial 2						100							10
Dec. 8, 1982 (IEPA Lab)						31							3
June 8, 1983 (IEPA Lab)						32							3
Jan. 24, 1984 (IDPH Lab						19			24	2			4
May 8, 1984 (IDPH Lab						22			72	2			9
Sept. 18, 1984 (IDPH Lab)					1	20			48	6			7

RECEIVED
OCT 03 1985
IEPA DLPC

LOCATION (DATE OF SAMPLES) / COMPOUNDS (ppb)	Ethylbenzene	Tetrachloroethane	Tetrachloroethylene	Carbon Tetrachloride	Trichloroethylene	1,1,1 Trichloroethane	Chloroform	Trans 1,2 Dichloroethylene	1,1 Dichloroethylene	1,1 Dichloroethane	1,2 Dichloroethane	Methylene Chloride	TOTAL (ppb)
918 Watts Ave.													
Dec. 8, 1982 (IEPA Lab)						197							19
June 8, 1983 (IEPA Lab)						370				4			37
Jan. 24, 1984 (IDPH Lab)			tr		tr	175				16			191
May 8, 1984 (IDPH Lab)						47			86	4			13
Sept. 18, 1984 (IDPH Lab)			3			50			52	17			12
1004 Watts Ave.													
June 8, 1983 (IEPA Lab)						2							2
Jan. 24, 1984 (IDPH Lab)					1	4				11			16
May 8, 1984 (IDPH Lab)						3			23				26
Sept. 18, 1984 (IDPH Lab)			tr			2			21				22

BELOIT LOKY. KOCKTON



Proposed - 13 March 1984
Add'l. Monitor. Wells: 4, 6, 7, 8, 9
Deep Wells: 5 10

A1

ite Copy –
ll. Dept. of Public Health
ow Copy – Well Contractor
Copy – Well Owner

INSTRUCTIONS TO DRILL

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material _____. Buried Slab: Yes____No____
   b. Driven _____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift _____. In Rock X.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
DRILL Mud	0	~~285~~ 240

2. Distance to Nearest:
   Building 40 Ft. Seepage Tile Field 100
   Cess Pool _____ Sewer (non Cast iron) _____
   Privy _____ Sewer (Cast iron) _____
   Septic Tank 50 Barnyard _____
   Leaching Pit _____ Manure Pile _____
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed 6-23-78
5. Permanent Pump Installed? Yes X Date Aug 30-78 No____
   Manufacturer Red Jacket Type 546 Location well
   Capacity 50 gpm. Depth of Setting 80 Ft.
6. Well Top Sealed? Yes X No____ Type cap
7. Pitless Adapter Installed? Yes X No____
   Manufacturer Whitewater Model Number SU 6 6 2
   How attached to casing? threaded into coupling
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size 400 gal. Type 2 x-Trols
    Location utility Room
11. Water Sample Submitted? Yes X No____

REMARKS:

Winn. Co. permit # 2269

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Rockton Area Community Health Center Well No. _____
    Address Blackhawk Blvd. Rockton, Ill.
    Driller Ed Greenfield License No. 92-582
11. Permit No. 75194 Date June 7-78
12. Water from Sandstone (Formation) 13. County Winn.
    at depth 240 to 280 ft. Sec. 13, 14
    14. Screen: Diam.____in. Twp. 46 N
    Length:____ft. Slot _____ Rge. 1E
    Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6	Blk. P.E. 18.97	0	240

SHOW LOCATION IN SECTION PLAT
100'N 100'E SW/c
SE NE NE (Rockton Area Comm. Health Center)

16. Size Hole below casing: 6 in.
17. Static level 65 ft. below casing top which is 1 ft. above ground level. Pumping level 68 ft. when pumping at 40 gpm for 8 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
soil	2	2
sand & gravel	38	40
clay	40	80
sandy gravel & clay	10	90
clay & gravel	20	110
clay	110	220
clay & gravel	20	240
sandstone	40	280

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Ed Greenfield DATE Nov. 11-79

IDPH 4.065