164252

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
2200 Churchill Road, Springfield, IL 62794-9276

217/785-3912

Refer to: L1630200005 -- St. Clair County
Sauget Sites (Area 1) -- Sauget
Superfund/Technical Reports

March 29, 1993

Mr. Alan Altur
Site Assessment Unit
USEPA-Region V, HSM-5J
77 West Jackson Boulevard
Chicago, Illinois 60604

Dear Alan:

This is in reference to what we had spoken about yesterday and last Wednesday. The RDT briefing memo that I wrote last January contains a summary of background information and the more recent work that has been done at Sauget Area 1 Sites. This work relates mainly to sampling efforts in Dead Creek associated with flooding last fall and recent complaints.

Since the last letter I sent you on November 2, 1993, Dead Creek has been sampled twice. On November 17, 1993, the City of Cahokia made a unilateral decision to pump backed up creek water in CS-B to CS-C (and beyond) so that the flooding in the neighborhoods along Walnut Street and Judith Lane could be alleviated. Sampling of surface water pumped into CS-C revealed similar compounds noted in previous sampling events, but at higher concentrations. A recent sample (March 11, 1994) at Site M was taken in response to a citizen complaint of an "orange discharge in Dead Creek". These results revealed again similar compounds at higher concentrations.

If you need additional information, please call.

Sincerely,

Paul E. Takács

Paul E. Takács, Project Manager
Federal Sites Management Unit
Division of Remediation Management
Bureau of Land

11/18

Attachment - Dead Creek Sample Results (March 11, 1994)

cc: Division File

Printed on Recycled Paper

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract No.: 2287

Lab Code: ARDL Case No.: ____ SAS No.: ____ SDG No.: S501

Matrix (soil/water) WATER Lab Sample ID: 2287-1

Level (low/med): LOW Date Received: 03/11/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	25.0	U		P
7440-38-2	Arsenic	3.7	B	W	F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	224			P
7439-89-6	Iron				NR
7439-92-1	Lead	24.4		S	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U	W	F
7440-22-4	Silver	5.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	W	F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	193			P
	Cyanide	8.3	U		C

Color Before: YELLOW Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

ab Name: ARDL, INC. Contract: SAUGET AREA 1

ab Code: --- Case No.: --- SAS No.: --- SDG No.: S501

atrix: (soil/water) WATER Lab Sample ID: 2287-1

ample wt/vol: 5.0 (g/ml) ML Lab File ID: >C8552

evel: (low/med) LOW Date Received: 3/11/94

Moisture: not dec. --- Date Analyzed: 3/16/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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
107-02-8	2-Propenal	10	U
107-13-1	Acrylonitrile	10	U
75-69-4	Trichlorofluoromethane	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	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
110-75-8	Chloroethylvinylether	10	U
71-43-2	Benzene	2	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	19	
108-90-7	Chlorobenzene	33	
100-41-4	Ethylbenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET AREA 1

Lab Code: --- Case No.: --- SAS No.: --- SDG No.: S501

Matrix: (soil/water) WATER Lab Sample ID: 2287-1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C8552

Level: (low/med) LOW Date Received: 3/11/94

% Moisture: not dec. --- Date Analyzed: 3/16/94

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

Soil extract Volume: --- (uL) Soil Aliquot Volume: --- (uL)

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	30.32	90.	J
2.					
3.					
4.					
5.					
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30.					

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET AREA 1

Lab Code: --- Case No.: --- SAS No.: --- SDG No.: S501

Matrix: (soil/water) WATER Lab Sample ID: 2287-1

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: >W1904

Level: (low/med) LOW Date Received: 3/11/94

% Moisture: not dec. --- dec. --- Date Extracted: 3/14/94

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 3/22/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	120	
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-N-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

S501

Lab Name: ARDL, INC. Contract: SAUGET AREA 1

Lab Code: --- Case No.: --- SAS No.: --- SDG No.: S501

Matrix: (soil/water) WATER Lab Sample ID: 2287-1

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: >W1904

Level: (low/med) LOW Date Received: 3/11/94

% Moisture: not dec. --- dec. --- Date Extracted: 3/14/94

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ---

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	4.13	30.	J
2.		UNKNOWN	12.31	300.	J
3.	106489	PHENOL, 4-CHLORO-	13.44	300.	JN
4.		UNKNOWN	13.57	400.	J
5.		UNKNOWN	14.45	200.	J
6.	85449	PHTHALIC ANHYDRIDE	15.37	100.	JN
7.		BENENAMINE, DICHLORO-	15.51	100.	J
8.		BENENAMINE, DICHLORO-	16.92	70.	J
9.		UNKNOWN	19.15	60.	J
10.		UNKNOWN	19.56	30.	J
11.		UNKNOWN	19.69	100.	J
12.		UNKNOWN	20.24	500.	J
13.		UNKNOWN	20.59	30.	J
14.	94757	ACETIC ACID, (2,4-DICHLOROPH	20.81	70.	JN
15.		UNKNOWN	24.98	40.	J
16.		UNKNOWN	25.35	100.	J
17.		UNKNOWN	25.97	30.	J
18.	7386212	1H-ISOINDOLE-1,3(2H)-DIONE,	26.07	40.	JN
19.		UNKNOWN	27.36	40.	J
20.		UNKNOWN	27.46	40.	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1D
PESTICIDE ORGANIC ANALYSIS

Customer Sample No.

S501

Lab Name: ARDL, Inc.
Lab Code: _____ Case No.: 2287

Contract: SAUGET AREA 1
SAS No.: _____ SDG No.:

Matrix(soil/water) : WATER
Sample(wt/vol) : 1000 (g/mL) mL
Level(low/med) : LOW
% Moisture(not dec): ---
Extraction(Sepf/Conc/Sonc) SEPF
GPC Cleanup (Y/N): N pH: ---

Lab Sample ID : 2287-1
Lab File ID :
Date Received : 03/11/94
Date Extracted : 03/14/94
Date Analyzed : 03/18/94
Dilution Factor: 1.0

Cas No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	.03	U
319-85-7	beta-BHC	.06	U
319-86-8	delta-BHC	.09	U
58-89-9	gamma-BHC(Lindane)	.04	U
76-44-8	Heptachlor	.03	U
309-00-2	Aldrin	.04	U
1024-57-3	Heptachlor Epoxide	.83	U
959-98-8	Endosulfan I	.14	U
60-57-1	Dieldrin	.18	
72-55-9	4,4'-DDE	.04	U
72-20-8	Endrin	.06	U
33213-65-9	Endosulfan II	.06	
72-54-8	4,4'-DDD	.11	U
1013-07-8	Endosulfan sulfate	.66	U
50-29-3	4,4'-DDT	.24	
72-43-5	Methoxychlor	1.8	U
53494-70-5	Endrin Ketone	.10	U
57-74-9	Chlordane	.14	U
8001-35-2	Toxaphene	2.4	U
7421-93-4	Endrin Aldehyde	.23	U
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	2.0	U

11104-28-2	Aroclor 1221		Extended Page
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

HERBICIDE ANALYSIS

Customer Sample No.

S501

Lab Name: ARDL, Inc. Contract: SAUGET AREA 1
Lab Code: _____ Case No.: 2287 SAS No.: _____ SDG No.: ____

Matrix(soil/water) : WATER Lab Sample ID : 2287-1
Sample(wt/vol) : 500 (g/mL) mL Lab File ID : ---
Level(low/med) : LOW Date Received : 03/11/94
% Moisture(not dec): --- Date Extracted : 03/14/94
Extraction(Sepf/Conc/Sonc) SEPF Date Analyzed : 03/17/94
GPC Cleanup (Y/N): N pH: --- Dilution Factor: 1.0

Cas No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
94-75-7	2,4-D	26	E
93-72-1	Silvex	3.4	

HERBICIDE ANALYSIS

Customer Sample No.

S501DL

Lab Name: ARDL, Inc. Contract: SAUGET AREA 1
Lab Code: _____ Case No.: 2287 SAS No.: _____ SDG No.: ____

Matrix(soil/water) : WATER Lab Sample ID : 2287-1DL
Sample(wt/vol) : 500 (g/mL) mL Lab File ID : ---
Level(low/med) : LOW Date Received : 03/11/94
% Moisture(not dec): --- Date Extracted : 03/14/94
Extraction(Sepf/Conc/Sonc) SEPF Date Analyzed : 03/17/94
GPC Cleanup (Y/N): N pH: --- Dilution Factor: 10

Cas No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
94-75-7	2,4-D	47	
93-72-1	Silvex	8.0	U