1,4430

CERRO COPPER PRODUCTS CO.

INTERNAL MEMORANDUM

Other Addressees

H.L. Schweich

File

To: R.E. Conreaux

Date: October 8, 1993

From: J. M. Grana

Subject: Dead Creek Basement Water Results

You will recall that several residents along Dead Creek have had water in their basements and the local media have picked up on the story. We received the IEPA sampling results at the Village Board meeting today. The results of the water analysis showed the copper concentration to be 141 ug/l or 0.141 mg/l. This is exceptionally low concentration. In the event that a news organization calls to ask about the copper we can make 3 points.

1. The 0.141 mg/l copper in the Dead Creek water is ten (10) less than the Illinois safe drinking water standard of 1.3 mg/l copper concentration.

2. The 0.141 mg/l copper in the Dead Creek water is about five (5) less than the Illinois EPA standard for groundwater which is 0.65 mg/l copper.

3. The 0.141 mg/l copper concentration is likely the result of the natural occurring mineral deposit.

Reminder, a microgram per liter (ug/l) is 1000 times less than a milligram per liter (mg/l).

JMG

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-6760

Refer to: L1630200005 -- St. Clair County
Sauget Sites (Area I) -- Sauget
Superfund/General Correspondence

October 5, 1993

Mayor Michael King
Village of Cahokia
103 Main Street
Cahokia, Illinois 62206

Dear Mr. King:

Attached are the laboratory results from the sampling of Dead Creek carried out on September 24, 1993. The creek was sampled just north of Judith Avenue and was also observed to be flooded at Queeny Avenue in Sauget.

If you have any questions or concerns about the results, do not hesitate to call me at the above number.

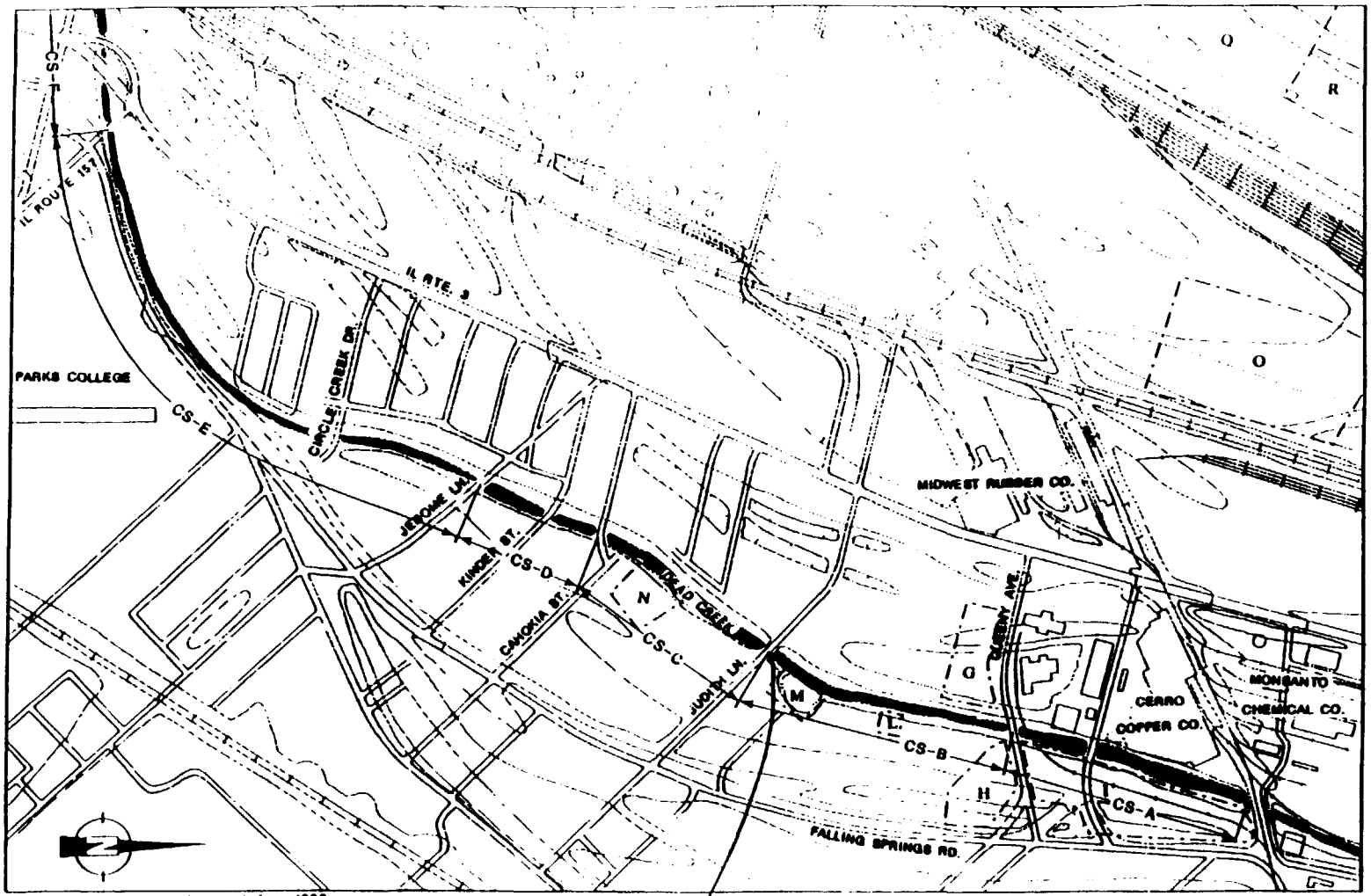
Sincerely,

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

Attachment - Sample Results

cc: Paul Sauget, Village of Sauget
Stan Black
Division File

Printed on Recycled Paper



SOURCE: Ecology and Environment, Inc., 1988.

SCALE

0 1000 2000 3000 4000 5000 FEET

FIGURE 2-11 SITE FEATURES MAP, DEAD CREEK

SAMPLE POINT

S77

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET

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

Matrix: (soil/water) WATER Lab Sample ID: 2265-1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >J5522

Level: (low/med) LOW Date Received: 9/24/93

% Moisture: not dec. --- Date Analyzed: 9/25/93

GC column: 1%SP-1000 ID: 2.0 (mm) Dilution Factor: 1.00000

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

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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	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
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	3.	J
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

FORM I VOA 3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET

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

Matrix: (soil/water) WATER Lab Sample ID: 2265-1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >J5522

Level: (low/med) LOW Date Received: 9/24/93

% Moisture: not dec. --- Date Analyzed: 9/25/93

GC Column: 1%SP-1000 ID: 2.0 (mm) Dilution Factor: 1.00000

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. 76131	ETHANE, 1,1,2-TRICHLORO-1,2,	13.73	30.	JNB
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET

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

Matrix: (soil/water) WATER Lab Sample ID: 2265-1

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: >M4169

Level: (low/med) LOW Date Received: 9/24/93

% Moisture: --- decanted: (Y/N) N Date Extracted: 9/25/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 9/27/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.00000

GPC Cleanup: (Y/N) N pH: --- Conversion Factor: 1.0000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25.	U
100-02-7	4-Nitrophenol	25.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	25.	U
534-52-1	4,6-Dinitro-2-methylphenol	25.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	25.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
86-74-8	Carbazole	10.	U
84-74-2	Di-n-butylphthalate	20.	B
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	10.	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-octylphthalate	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	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 3/90

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET

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

Matrix: (soil/water) WATER Lab Sample ID: 2265-1

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: >M4169

Level: (low/med) LOW Date Received: 9/24/93

% Moisture: --- decanted: (Y/N) N Date Extracted: 9/25/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 9/27/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.00000

GPC Cleanup: (Y/N) N pH: --- Conversion Factor: 1.0000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)Ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	2.	J
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U
106-44-5	4-Methylphenol	10.	J
621-64-7	N-Nitroso-Di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	2.	J
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	2.	J
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	25.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	25.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U
99-09-2	3-Nitroaniline	25.	U
83-32-9	Acenaphthene	10.	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract: SAUGET

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

Matrix: (soil/water) WATER Lab Sample ID: 2265-1

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: >M4169

Level: (low/med) LOW Date Received: 9/24/93

% Moisture: not dec. --- decanted:(Y/N) N Date Extracted: 9/25/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 9/27/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.00000

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. 106489	PHENOL, 4-CHLORO-	13.27	80.	JN
2. 118901	BENZOIC ACID, 2-METHYL-	14.17	40.	JN
3.	UNKNOWN	15.15	200.	J
4.	BENZENAMINE, DICHLORO-	15.29	10.	J
5. 612204	BENZOIC ACID, 2-(HYDROXYMETH	15.59	40.	JN
6. 124174	ETHANOL, 2-(2-BUTOXYETHOXY)-	15.70	20.	JNB
7.	UNKNOWN	18.82	20.	J B
8.	UNKNOWN	19.37	80.	J
9.	UNKNOWN	19.76	20.	J
10. 2169871	2,3-NAPHTHALENEDICARBOXYLIC	21.79	20.	JN
11.	UNKNOWN	23.92	10.	J
12. 84651	9,10-ANTHRACENEDIONE	25.81	90.	JN
13.	UNKNOWN	26.40	30.	J
14.	UNKNOWN	26.73	20.	J
15.	UNKNOWN	28.18	30.	J
16.	UNKNOWN	28.54	10.	J
17.	UNKNOWN	31.42	20.	J
18.	UNKNOWN	32.70	20.	J
19.	UNKNOWN	33.25	20.	J
20.	UNKNOWN	34.60	20.	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S501

Lab Name: ARDL, INC. Contract No.: 2265

Lab Code: _____ SAS No.: _____ SDG No.: S501

Matrix (soil/water) WATER Lab Sample ID: 2265-1

Level (low/med): LOW Date Received: 09/24/93

% 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	952			P
7440-36-0	Antimony	25.0	U		P
7440-38-2	Arsenic				
7440-39-3	Barium	273			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium	83800			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	141			P
7439-89-6	Iron	2450			P
7439-92-1	Lead				
7439-95-4	Magnesium	7530			P
7439-96-5	Manganese	519			P
7439-97-6	Mercury				
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	6560			P
7782-49-2	Selenium				
7440-22-4	Silver	5.0	U		P
7440-23-5	Sodium	14900			P
7440-28-0	Thallium				
7440-62-2	Vanadium	6.6	B		P
7440-66-6	Zinc	412			P
	Cyanide	8.3	U		C

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN ILM02.0