144875

REFER TO:

WITHHELD LIST/ENVELOPE -- DOCUMENT NO. 1

WITHHELD DOCUMENT

FROM FILE CATEGORY: [illegible]

DATED: [illegible]

J000713

L1631 0008/St. Clair County
Dead Creek Segment A
(CS A)
ILD 984809277
Superfund/HRS
Div File

CERCLA

Preliminary Assessment Report

Illinois Environmental
Protection Agency
P.O. Box 19276,
Springfield, IL 62794-9276

J000714

M0713

CERCLA Preliminary Assessment Report

for

Dead Creek Segment A (CS-A)

ILD 984809277

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SECTION 1

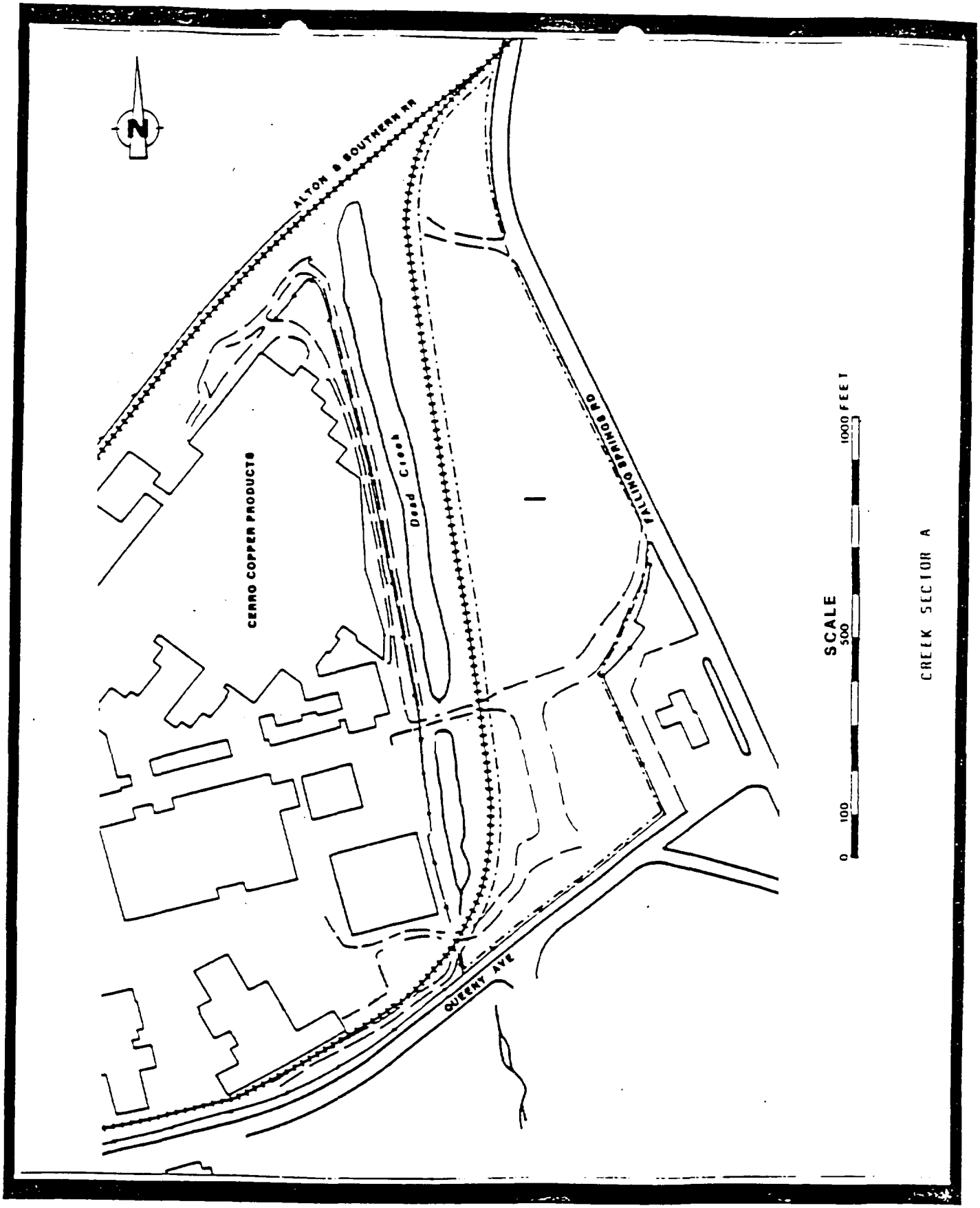
EXECUTIVE SUMMARY

Executive Summary

On October 26, 1990 Dead Creek Segment A was placed on the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS), as a result of a request for discovery action initiated by the Illinois Environmental Protection Agency (IEPA). The request was based on past disposal practices, which have resulted in the contamination of this part of the intermittent creek. The contamination within Dead Creek Segment A, has, in part, contributed to the degradation of environmental quality in the Sauget, Illinois area. CS-A has not been regulated under RCRA.

Dead Creek Segment A (CS-A) includes the length of Dead Creek from its point of origin, on the south side of the Alton and Southern Railroad tracks, to Queeny Avenue. This initial 1700 foot portion of intermittent creek lies entirely on Cerro Copper Products property. From CS-A, the intermittent drainage-way flows south-southwest through the village of Cahokia and through a large wetland prior to discharging into the Old Prairie Dupont Creek (AKA Prairie Dupont Floodway). The Old Prairie Dupont Creek subsequently discharges into the Cahokia Chute of the Mississippi River.

CS-A is depicted on the following page. CS-A flows through Section 35 of Township 2 North, Range 10 West and Sections 3 and 4 of Township 1 North, Range 10 West of the Third


N
ALTON & SOUTHERN RR
CERRO COPPER PRODUCTS
Dead Creek
FALLING SPRINGS RD
QUEENY AVE
SCALE
0
100
500
1000 FEET
CREEK SECTOR A

Principal Meridian in St. Clair County.

Waste disposal into Segment A is documented by historical literature. Local Industries dumped their waste into nearby landfills (103C notices) and into Dead Creek prior to the 1930's development of an interceptor sewer line to the Mississippi River. Old maps, from the Sanitation Water Board, revealed a pair of toxic dumps and two outfalls at Dead Creek. A review of historical aerial photographs shows evidence that creek staining has extended even beyond CS-A. A 1962 aerial photograph is contained in Section 3 of this report.

In a 1942 interview with the village of Monsanto (now Sauget) engineer, industries in Monsanto were sued by complainants living between the villages of Monsanto and Cahokia because of direct discharges into the ditch (Dead Creek). The village engineer admitted that Dead Creek would be routinely used for waste discharge. The complainants were awarded $4000.00 despite arguments from industries that the discharge of wastes would be beneficial since the great volume of water would flush settled solids into the Mississippi River (an indication that contamination was/is prevalent throughout the entire length of Dead Creek). The 1942 interview is included as Reference #1 in this report.

The entire length of CS-A lies along the edge of a filled

hazardous waste landfill. This landfill is known as Site I and was operated by Leo Sauget from approximately 1948 until 1957. Mr. Sauget (for which the village was renamed), would dispose of local industrial waste into this and other nearby landfills. Waste from Site I, would routinely overflow and leach into CS-A. Sometime in the early 1970's, the culvert under Queeny Avenue (connecting CS-A with CS-B) was blocked off to stop the flow of waste. This created the elongated ponds at CS-A.

Within the last two decades, IEPA and the Cahokia Health Department have received numerous complaints about Dead Creek, from residents in the area. These complaints address, for the most part, seepage of odoriferous water into basements and problems associated with well water use.

IEPA installed and sampled several monitor wells in the Dead Creek area as part of a preliminary hydrogeologic study conducted in 1980. Private wells and basement seep samples were also obtained. These results showed concentrations of copper, manganese and phosphorus above the state's water quality standards in one or more wells and in residential basement seepage sample. The IEPA study concluded that the holding ponds in CS-A were a major source of groundwater pollution in the area. Reference #2 contains the results of the monitor well, private well and basement seepage samples from the Dead Creek.

In 1985, IEPA contracted Ecology and Environment, Incorporated (E&E) to investigate 12 suspected uncontrolled hazardous waste sites and the six segments of Dead Creek in Sauget and Cahokia. Most of the Dead Creek samples were collected in upper Segments A and B with relatively few samples collected in the lower segments (CS-C-F). E&E also collected groundwater, surface water, sediment and soil gas samples the sites adjacent Dead Creek as well as nearby groundwater samples from private wells.

Two surface water samples were collected from ponded water in CS-A on November 6, 1986. Analysis of the two samples detected fourteen organic compounds and elevated metal concentrations in the water. The results are tabled below.

Table 1
CS-A Surface Water Results for Volatiles

Compound	# of Detections	Highest Concentration
1,1-dichloroethane	1	3 ug/l
chloroform	2	8 ug/l
1,1,1-trichloroethane	2	41 ug/l
carbon tetrachloride	1	31 ug/l
trichoroethene	2	16 ug/l
benzene	1	1 ug/l J
4-methyl-2-pentanone	1	6 ug/l J
chlorobenzene	1	2 ug/l J
total xylenes	1	2 ug/l J

J-estimated value

J000721

Table 2
CS-A Surface Water Results for Semi-Volatiles

Compound	# of Detections	Highest Concentration
4-chloroanaline	1	3 ug/l J
phenanthrene	1	4 ug/l J
butyl benzyl phthalate	1	12 ug/l J
bis 2-ethylhexyl phthalate	2	7 ug/l J
di-n-octyl phthalate	2	36 ug/l J

J-estimated value

Table 3
CS-A Surface Water Results for Inorganics

Element	# of Detections	Highest Concentration
aluminum	2	354 ug/l
antimony	1	115 ug/l
cadmium	2	75 ug/l
chromium trivalent	2	81 ug/l
copper	2	7030 ug/l
iron	2	2040 ug/l
lead	2	3060 ug/l
manganese	2	252 ug/l
mercury	2	0.59 ug/l
nickel	2	2600 ug/l
silver	1	16 ug/l
tin	1	499 ug/l
zinc	2	1450 ug/l

Five sediment samples were collected the same day from CS-A. For the most part, these samples showed higher concentrations of the above compounds and elements as well as other contaminants. Additional contaminants found in the sediment included 1,2-, 1,3- and 1,4-dichlorbenzene as high as 2900 ug/kg (for the 1,4-), 1,2,4-trichlorobenzene, naphthalene, 2-methylnaphthalene, acenaphthalene, n-nitrosodiphenylamine, hexachlorbenzene, PCP, phenanthrene, fluoranthene, pyrene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, indeno-1,2,3-(cd)pyrene, dibenzo(a,h)anthracene and PCB's as high as 95

mg/kg. Elevated levels of metals were also found in the five sediment samples including barium at 732 mg/kg, chromium at 206 mg/kg, cobalt at 27 mg/kg, lead at 2030 mg/kg, mercury at 5.62 mg/kg and zinc at 3420 mg/kg.

Groundwater monitoring wells were also installed in the area of CS-A and Site I for the investigation. Contaminated groundwater in the Dead Creek area was documented earlier during the 1980 study as well in the more recent sample data. The recent organic data is presented in the following tables. Inorganic elements found in the groundwater compared with the soil/sediment samples.

Table 4
CS-A/Site I Groundwater Results for Volatiles

Compound	# of Detections	Highest Concentration
1,1-dichloroethane	1	0.12 mg/l
trans-1,2-dichloroethene	3	0.64 mg/l
tetrachloroethene	1	0.47 mg/l
toluene	3	0.74 mg/l
trichoroethene	2	0.27 mg/l
benzene	6	1.4 mg/l
ethlybenzene	4	0.19 mg/l
4-methyl-2-pentanone	1	0.23 mg/l J
chlorobenzene	6	3.1 mg/l
vinyl chloride	4	0.79 mg/l

J-estimated value

Table 5
CS-A/Site I Groundwater Results for Semi-Volatiles

Compound	# of Detections	Highest Concentration
4-chloroanaline	6	9.6 mg/l E
bis 2-chloromethoxy methane	2	2.9 mg/l
1,2,4-trichlorobenzene	1	1.7 mg/l
pentachlorophenol	4	2.4 mg/l
phenol	2	1.8 mg/l
2,4-dichorophenol	2	1.0 mg/l
1,4-dichlorobenzene	5	0.91 mg/l
benzyl alcohol	2	0.35 mg/l
2,4,6-trichlorophenol	1	0.29 mg/l
naphthalene	2	0.23 mg/l
1,2-dichlorobenzene	5	0.22 mg/l J
1,3-dichlorobenzene	2	0.11 mg/l

J-estimated value, E-amount in sample exceeds calibration range

A CERCLA Preliminary Assessment site reconnaissance was conducted at Segment A on March 27, 1991. On this day, an IEPA sampling team was conducting a CERCLA Screening Site Inspection for Sauget Sites Area #1. The sample team observed no visible contamination in this segment as the 13 million dollar clean-up of CS-A was completed in November of 1990. Access to CS-A is restricted by Cerro Copper Products, who financed the clean-up.

During the clean-up, additional sources of effluent were found entering CS-A. After the 27,510.1 tons of waste/soil was removed, the pit was lined and clean backfilled. The entire project was completed with IEPA oversight. The following table summarizes the soil/waste classification, amount and disposal for the waste/soil removed from the segment.

Table 6
Totals of Waste/Soils Removed from CS-A in Tons

Classification	Tons	Landfill
RCRA no treat	4,571.7	Lake Charles, MO
RCRA/TSCA no treat	9,923.3	Emelle, AL
RCRA treated	2,927.7	Emelle, AL
TSCA no treat	4,567.7	Emelle, AL
Non-Hazardous	3,039.1	Chicago (CID), IL
RCRA/TSCA treated	2,481.0	Emelle, AL

Creek Segment A is located in an area known as the American Bottoms. Area well logs indicated the upper stratigraphy in this area consists of 70-120 feet of unconsolidated alluvium and glacial outwash overlying Mississippian aged limestone and sandstone formations (Ste. Genevieve and St. Louis Limestones). The valley fill deposits are composed of two formations, the uppermost being the Cahokia Alluvium followed by the Mackinaw Member of the Henry Formation.

The Cahokia Alluvium is composed predominantly of silt, clay and fine sand deposits, generally indicative of a aggrading environment. In the vicinity of Dead Creek, these deposits vary in thickness, with a range of 15 to 30 feet. This formation was laid down via flood events, eolian activity, bank slumping, erosion and/or slugs of material deposited directly by tributary steams. The Mississippi River has frequently reworked this formation in such a way that coarser

material is intermingled with finer-grained deposits.

Underlying the Cahokia Alluvium is the Mackinaw Member of the Henry Formation. This formation is composed of sand and gravel from glacial outwash. At the Dead Creek area, this material rest directly on the bedrock surface and varies between 70 and 100 feet in thickness. Reference #4 contains area well logs which describe the area geology.

Local hydrogeologic information has been obtained through groundwater monitoring in the Dead Creek area. Shallow sand and gravel deposits close to the ground surface, yield significant quantities of water for nearby homes and business. Horizontal groundwater movement in the shallow deposits generally follow the land surface topography, with lateral movement toward local discharge zones (wells and small streams), and some movement into the deeper unconsolidated aquifers. Groundwater is encountered between 10 and 28 feet below the ground surface in the Dead Creek area and consequently, the aquifer of concern (AOC) is at 10 feet. Groundwater in the deeper unconsolidated valley fill deposits generally follows the bedrock surface. Accordingly, groundwater generally flows downstream through the sand and gravel aquifers in much the same direction as the original stream flow, but at a much slower rate.

Most area residents are supplied with drinking water by the

Illinois-American Water Company (IAWC) which operates an intake on the Mississippi River upstream of Sauget. IAWC sells the water to the various water departments and districts within the Sauget/Cahokia area. However, some area residents do obtain drinking water from shallow wells. Illinois Department of Public Health (IDPH) files and Illinois State Water Survey (ISWS) well logs indicate at least 50 area residents have wells which are used for drinking or irrigation. These wells are located in Cahokia (23), East St. Louis (5), East Carondelet (16) and Dupo (6). These do not include the wells at the homes on Judith Lane in Cahokia or an unknown number of residents in the Schmids Lake area (approximately 1 mile southwest) that are not covered by any public water distribution. A 1983 report by the Southwestern Illinois Metropolitan and Regional Planning Commission (SIMRPC) listed 69 residences in Centreville Township (includes Sauget, Cahokia, Alorton and Centreville) which use private water systems. The same report lists 57 residences in East St. Louis and 365 residences in Sugarloaf Township (includes Dupo, North Dupo and East Carondelet). SIMRPC based their report on 1980 census data. Reference #5 contains a map which pin-points some of the ISWS well locations and a printout of area wells.

Surface water drainage that enters the intermittent Dead Creek (AKA Old Cahokia Creek and Rigolet Creek), travels south and southwest through its course. As the creek exits

the village of Cahokia, it enters a large wetland. The wetland and Dead Creek drain underneath the 500-year levee (with flood control gate that protects the villages of Sauget and Cahokia) into the Old Prairie Dupont Creek. From the Old Prairie Dupont Creek, water flows west into the Cahokia Chute which discharges into the Mississippi River at river mile 174.2.

The average discharge of the Mississippi River, as measured over a 128 year period at St. Louis, Missouri, is 179,800 cubic feet per second. The Old Prairie Dupont Creek and the Cahokia Chute are minimal streams that lack stream flow information. The probable point of entry (PPE) is where the Dead Creek wetland area enters Old Prairie DuPont Creek, the end of Creek Segment F. The flow distance from the PPE to the Mississippi River is 8,520 feet or 1.61 miles. A 15-mile surface water map is included in Section 3 of this report. The 15-mile surface water target limit extends to Mississippi River mile 160.8.

Surface water use in the immediate area (from Mississippi River mile 174 to 178) is limited to recreation and freight trafficking. The upstream surface water intake (river mile 181), which supplies most of the Illinois side area residents, was mentioned in a previous paragraph. The city of St. Louis is also supplied by an upstream surface water intake, about 12 miles north at river mile 190. At

downstream river mile 149 (about 28 river miles south), the village of Crystal City, Missouri (population 4000) utilizes a Ranney well, adjacent the Mississippi River, for drinking water. A well of this kind, is assumed to draw in surface water due to its construction and location to the river. On the Illinois side, the nearest downstream surface water intake is located approximately 65 river miles south, at river mile 110. The intake is used by the town of Chester and surrounding communities in Randolf County.

According to the Illinois Department of Conservation (IDOC), the Resource Inventory for the Mississippi River at river miles 178-162 shows fishing areas, sport fishing areas, important wildlife habitat and bald eagle use at selected areas in this reach. Correspondence from IDOC, details the aforementioned sensitive areas in Reference #6.

Through 1990 U.S. Census data, it has been estimated that about 2000 people live within a mile of the site and about 148,000 people live within 4-miles. The following table shows the 4-mile radius population calculation.

Table 7
Target Population Calculation

City	Population Density/ Total Population	Area w/in 4-Mile Radius	Population w/in 4-Mile Radius
St. Louis	7,379/sq mi	11.5 sq mi	84,826
E. St. Louis	4,119/sq mi	8.5 sq mi	34,875
Alorton	2,237	100%	2,237
Cahokia	18,904	100%	18,904
Centreville	9,747	75%	7,310
		Total Target Population =	148,152

A high priority has been assigned to this site. This is due to the fact that clean-up of the contaminated groundwater below CS-A was not attempted. Because of nearby groundwater targets, there is still the potential threat posed by this site to the environment and individuals with wells. The CERCLA Screening Site Inspection conducted at Sauget Sites Area #1 will aid in quantifying these threats. CS-A and the other Dead Creek segments have been aggregated along with similar sites in the immediate area (Sauget Sites Area #1), so as to more accurately assess their cumulative health risks and environmental threats.

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SECTION 2

EPA FORM 2070-12

"Potential Hazardous Waste Site
Preliminary Assessment"

EPA

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

I. IDENTIFICATION
01 STATE: ILD | 02 SITE NUMBER: 984809277

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): Dead Creek Segment A	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER: North of Queeny Avenue
03 CITY: Sauget	04 STATE: IL; 05 ZIP CODE: 62201; 06 COUNTY: St. Clair; 07 COUNTY CODE: 163; 08 CONG DIST: 23
09 COORDINATES LATITUDE: 38 35 35.0; LONGITUDE: 090 10 15.0	Cahokia, IL-MO Quadrangle (225C)

10 DIRECTIONS TO SITE (Starting from nearest public road): See map section of report

III. RESPONSIBLE PARTIES

01 OWNER (If known): Cerro Copper Products Co.	02 STREET (Business, mailing, residential): P.O. Box 66800
03 CITY: St. Louis	04 STATE: MO; 05 ZIP CODE: 63166-6800; 06 TELEPHONE NUMBER: (618) 337-6000
07 OPERATOR (If known and different from owner):	08 STREET (Business, mailing, residential):
09 CITY:	10 STATE: ; 11 ZIP CODE: ; 12 TELEPHONE NUMBER: ( )

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

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

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
■ YES DATE 11/26/80 (MONTH DAY YEAR)
☐ NO

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

CONTRACTOR NAME(S): _____

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

03 YEARS OF OPERATION
early 1900's (BEGINNING YEAR) | unknown (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
See Report tables 1-5

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Groundwater (pop. + env.)

V. PRIORITY ASSESSMENT

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

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Joe Grana	Cerro Copper Products Co.	618 337-6000

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Timothy J. Murphy	IEPA	DLPC/RPMS	(217) 782-6760	08/12/91 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

J000733

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	984809277

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

(A) SOLID
B POWDER FINES
(C) SLUDGE
D OTHER (Specify)
(E) SLURRY
(F) LIQUID
G GAS

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

TONS 27,510.1
CUBIC YARDS
NO OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNK		
OLW	OILY WASTE	UNK		
SOL	SOLVENTS	UNK		See Report
PSD	PESTICIDES	UNK		table
OCC	OTHER ORGANIC CHEMICALS	UNK		6
IOC	INORGANIC CHEMICALS	UNK		
ACD	ACIDS	UNK		
BAS	BASES	UNK		
MES	HEAVY METALS	UNK		

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	See tables				
	1-5 in report				

V. FEEDSTOCKS (See Appendix for CAS numbers)

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

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

IEPA DLPC files L1631210008

EPA FORM 2070-12 (7-81)

J000734

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	984809277

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ● A GROUNDWATER CONTAMINATION — 02 ● OBSERVED (DATE 3-23-87) — POTENTIAL — ALLEGED
03 POPULATION POTENTIALLY AFFECTED ≥50 — 04 NARRATIVE DESCRIPTION
Monitor wells show contamination as do private wells see tables 4 and 5 on pages 1-7 and 1-8 in report

01 ● B SURFACE WATER CONTAMINATION — 02 ● OBSERVED (DATE 11/24/80) — ● POTENTIAL — ALLEGED
03 POPULATION POTENTIALLY AFFECTED UNK — 04 NARRATIVE DESCRIPTION
2 samples collected from ponded water show contamination see tables 2 and 3 on page 1-6 of report

01 ● C CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE ____) — ● POTENTIAL — ALLEGED
03 POPULATION POTENTIALLY AFFECTED UNK — 04 NARRATIVE DESCRIPTION
Soil gas readings have show organic contaminants > 1000 ppm

01 ☐ D FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE ____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED ____ — 04 NARRATIVE DESCRIPTION
None documented

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE ____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED ____ — 04 NARRATIVE DESCRIPTION
Site access is controlled

01 ● F CONTAMINATION OF SOIL — 02 ● OBSERVED (DATE 1-28-81) — POTENTIAL — ALLEGED
03 AREA POTENTIALLY AFFECTED 1700' — 04 NARRATIVE DESCRIPTION
See table 1 on page 1-5 of report

01 ● G DRINKING WATER CONTAMINATION — 02 ● OBSERVED (DATE 3-26-87) — ● POTENTIAL — ALLEGED
03 POPULATION POTENTIALLY AFFECTED ____ — 04 NARRATIVE DESCRIPTION
residents on Walnut St., Jerome Ln. in Cahokia have contaminated wells the wells are used only occaissionally for drinking water as home are hooked into another source

01 ● H WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE ____) — ● POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED 3000 — 04 NARRATIVE DESCRIPTION
Workers at Cerro Copper may be exposed to CS-A and Site I both on the property

01 ● I POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE ____) — ● POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED ____ — 04 NARRATIVE DESCRIPTION
See G. above

EPA FORM 2070-12 (7-81)

J000735

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	984809277

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

Flora absent from site prior to clean-up

01 ☒ K. DAMAGE TO FAUNA — 02 ☒ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No Fauna IN this segment

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

None documented

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED UNK — 04 NARRATIVE DESCRIPTION

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

Creek flows through the village of Cahokia

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

None documented CS-A was the sewer drain earlier

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

Unknown sources of effluent entered Dead Creek Segment A

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: >50

IV. COMMENTS

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

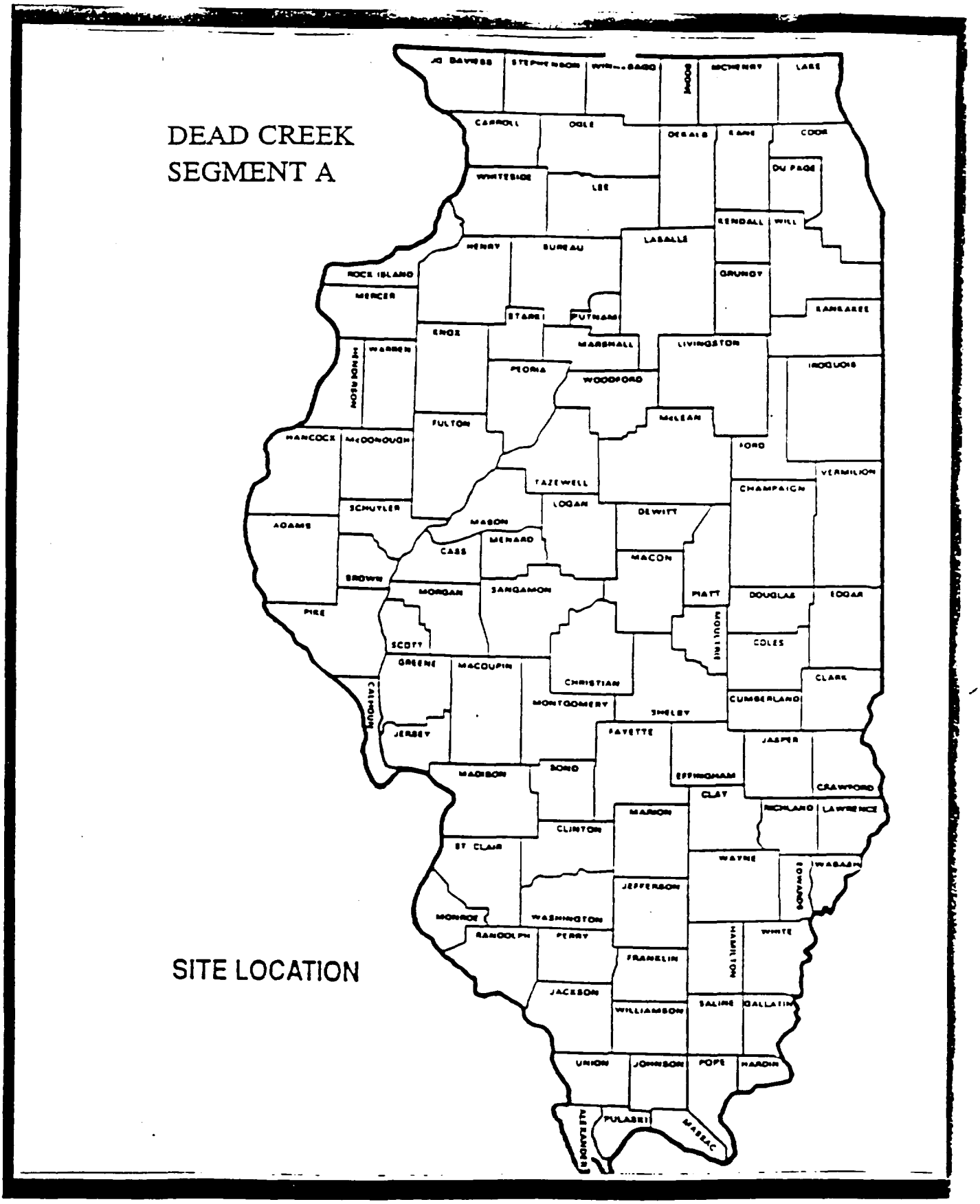
IEPA DLPC files for the Sauget Sites

EPA FORM 2070-12 (7-81)

J000736

SECTION 3

MAPS


DEAD CREEK
SEGMENT A
SITE LOCATION
JO DAVIESS
STEPHENSON
WINNEBAGO
BOONE
MCHENRY
LAKE
CARROLL
OGLE
DEKALB
KANE
COOK
WHITESIDE
LEE
DU PAGE
KENDALL
WILL
HENRY
BUREAU
LASALLE
ROCK ISLAND
GRUNDY
MERCER
STARK
PUTNAM
KANKAKEE
KNOX
MARSHALL
LIVINGSTON
WARREN
HENDERSON
PEORIA
WOODFORD
IROQUOIS
FULTON
McLEAN
HANCOCK
McDONOUGH
FORD
VERMILION
TAZEWELL
CHAMPAIGN
SCHUYLER
LOGAN
DEWITT
ADAMS
MASON
CASS
MENARD
MACON
BROWN
MORGAN
SANGAMON
PIATT
DOUGLAS
EDGAR
PIKE
MOULTRIE
SCOTT
COLES
GREENE
MACOUPIN
CHRISTIAN
CLARK
CALHOUN
MONTGOMERY
SHELBY
CUMBERLAND
JERSEY
FAYETTE
JASPER
MADISON
BOND
EFFINGHAM
CRAWFORD
CLAY
MARION
RICHLAND
LAWRENCE
CLINTON
ST CLAIR
WAYNE
EDWARDS
WABASH
JEFFERSON
MONROE
WASHINGTON
RANDOLPH
PERRY
WHITE
HAMILTON
FRANKLIN
JACKSON
WILLIAMSON
SALINE
GALLATIN
UNION
JOHNSON
POPE
HARDIN
ALEXANDER
PULASKI
MASSAC

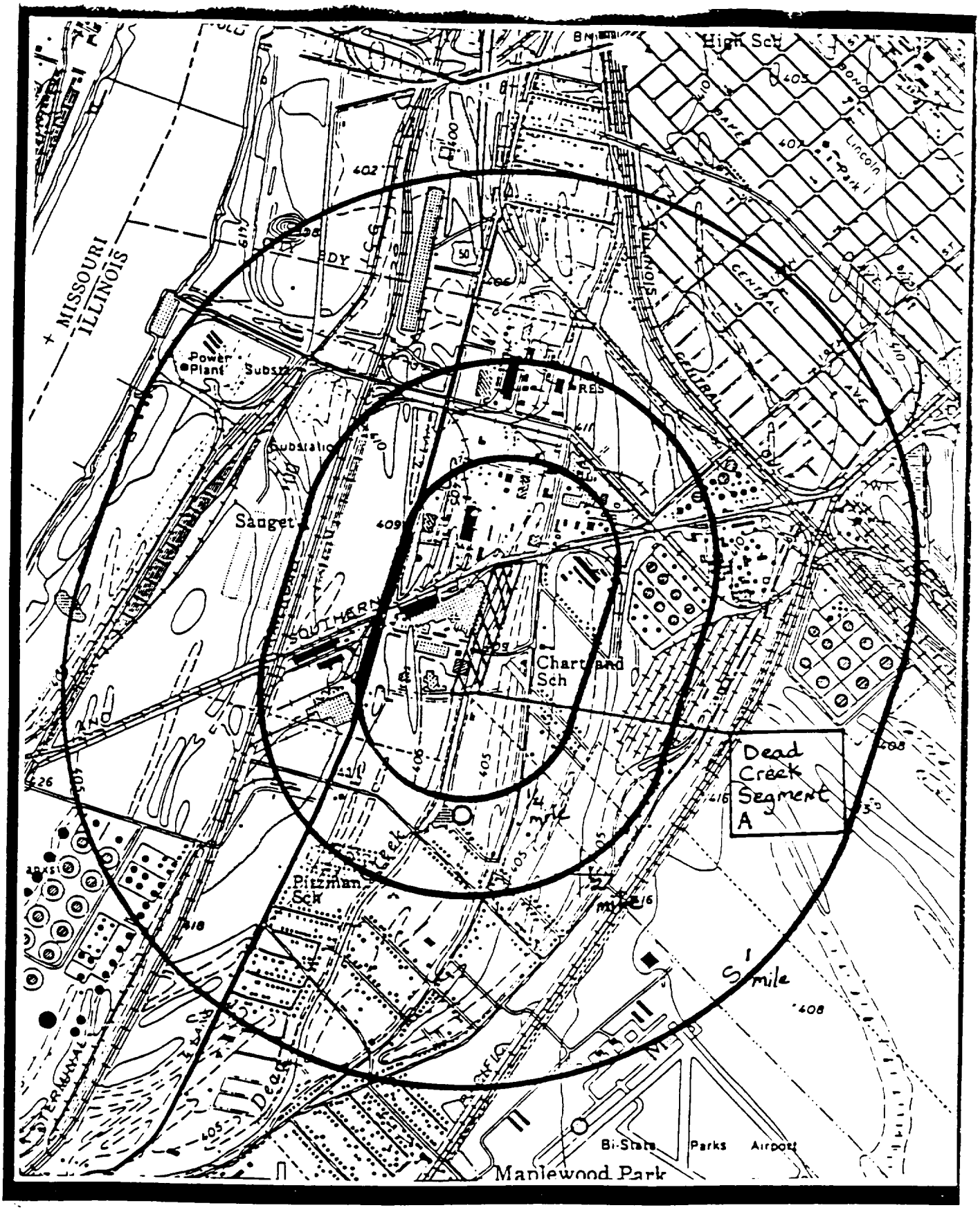
GENERAL HIGHWAY MAP

ST. CLAIR COUNTY

ILLINOIS

PA: Dead Creek Segment A (CS-A) ILD 984809277

J000739

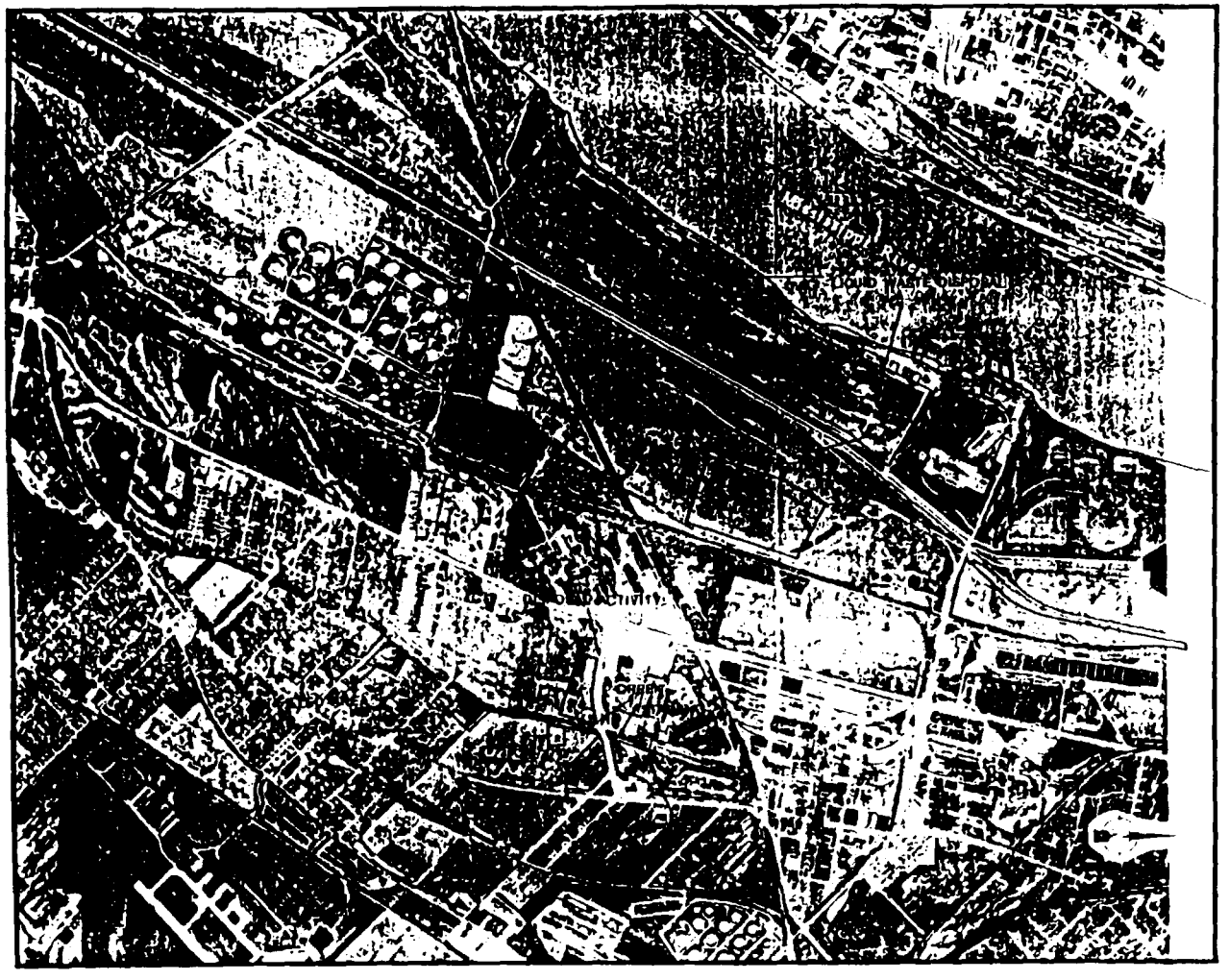


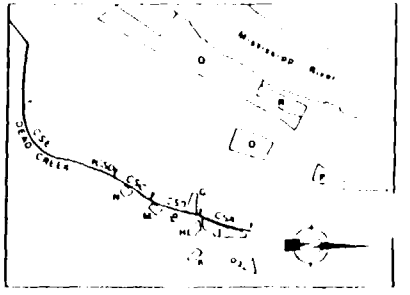
PA: Dead Creek Segment A (CS-A) ILD 984809277

J000740

SECTION 4

PHOTOGRAPHS

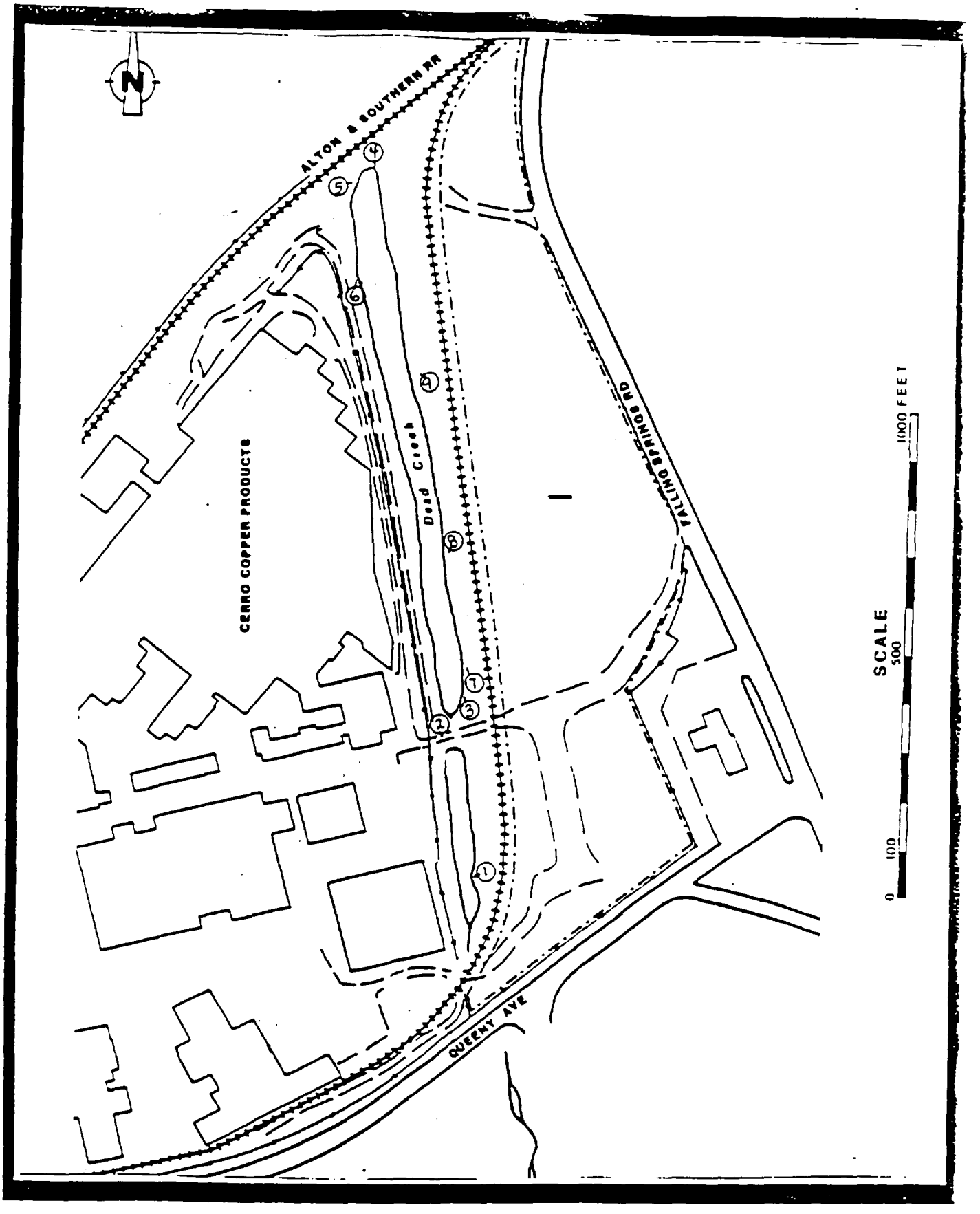




SITE LOCATION INDEX MAP

AERIAL PHOTOGRAPH
OF DCP AREA - 1962

J0007742



Photograph Location Map

J000743

DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER: 1

LOCATION: Dead Creek Seg. A at Cerro Copper Products, Sauget, IL.

PICTURE TAKEN TOWARD: W

COMMENTS: Looking at the S end of the S pond.

DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek at Cerro Copper Proc

Sauget, IL.

PICTURE TAKEN TOWARD

COMMENTS: Looking a

S pond.

DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

at Cerro Copper Prod

Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Looking at

N pond from where Ol

Queeny Ave. went thr

Cerro Copper Product

DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

at Cerro Copper Prod

Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Looking at

N pond from the begi

of Dead Creek at the

& Southern R.R. trac

DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

at Cerro Copper Proc

Sauget, IL.

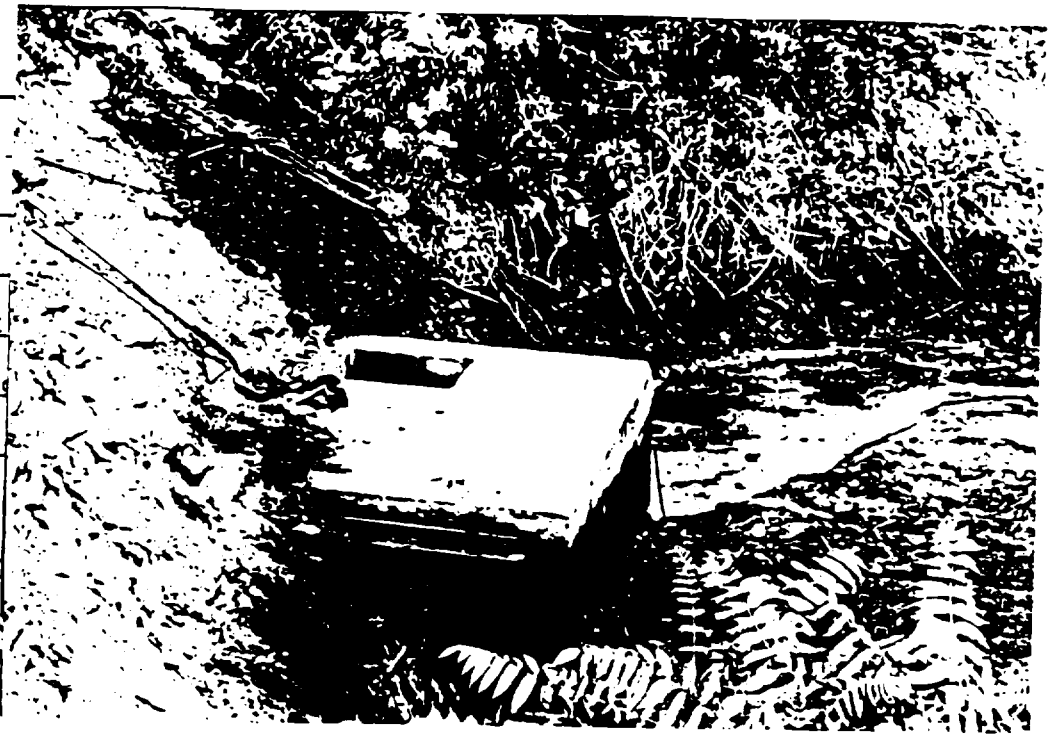
PICTURE TAKEN TOWARD

COMMENTS: Looking a

discharge box at th

of Dead Creek in th

pond.



DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

at Cerro Copper Proc

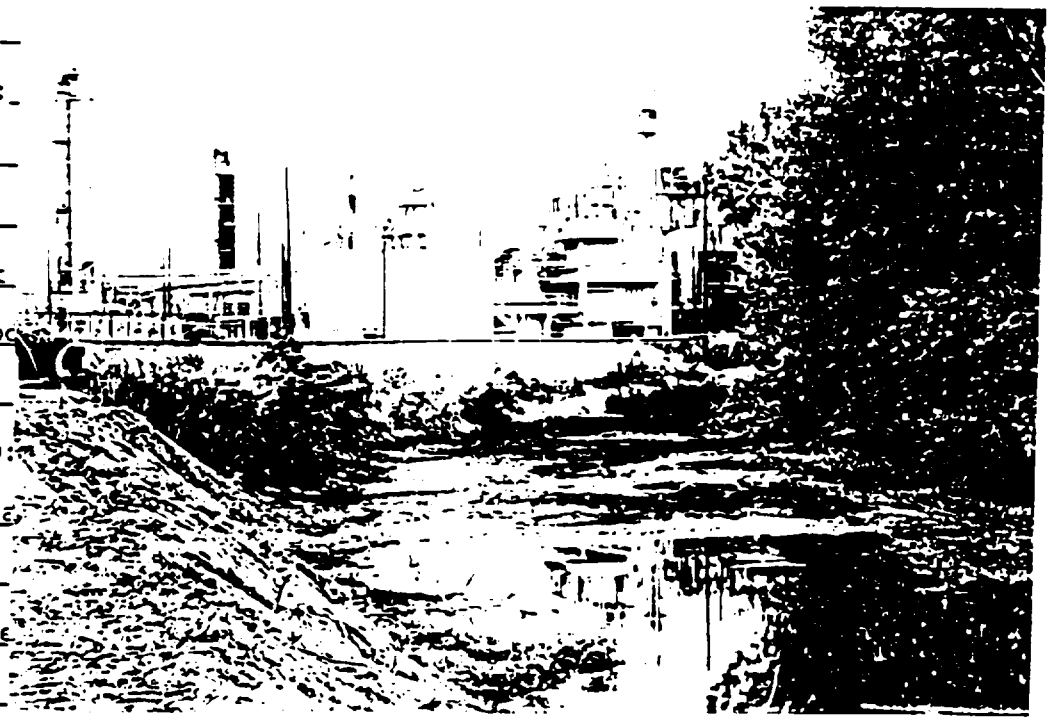
Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Looking a

disharge box in the

pond from a distance



DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

at Cerro Copper Prod

Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Looking at

N pond during srub/t

removal and sampling, note

outfall.

DATE: August, 1989

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

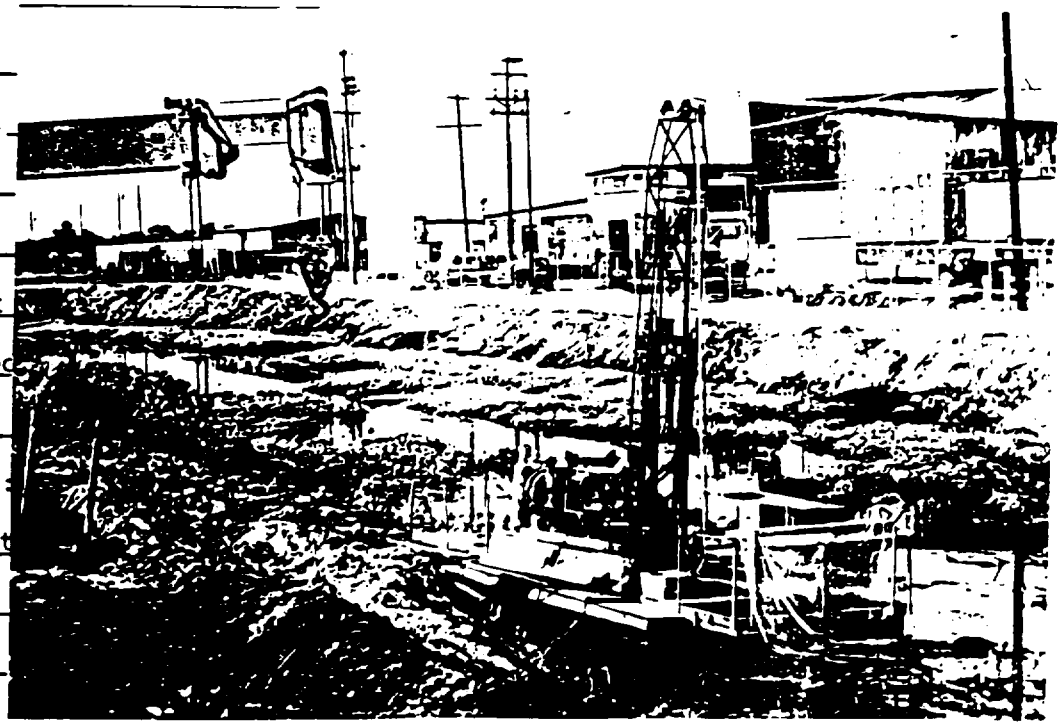
at Cerro Copper Prod

Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Sampling t

pond.



J000747

DATE: September, 199

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

at Cerro Copper Prod

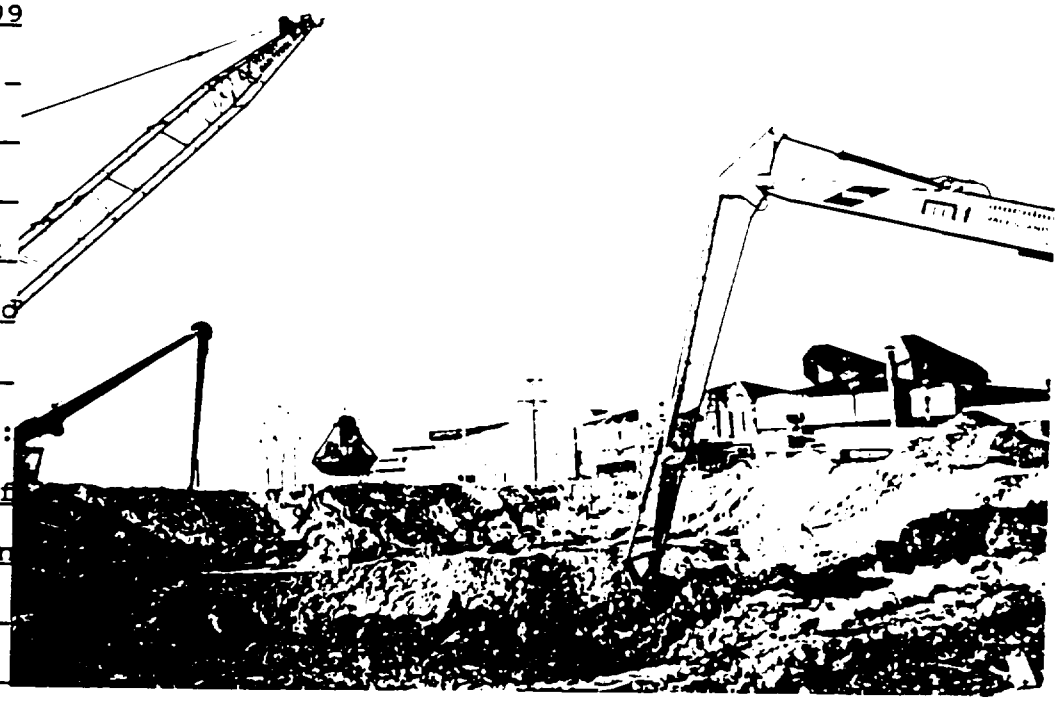
Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Removal of

contaminated soil an

sediment.



DATE: September, 1990

PHOTOGRAPH TAKEN BY:

Paul Takacs

PHOTOGRAPH NUMBER:

LOCATION: Dead Creek

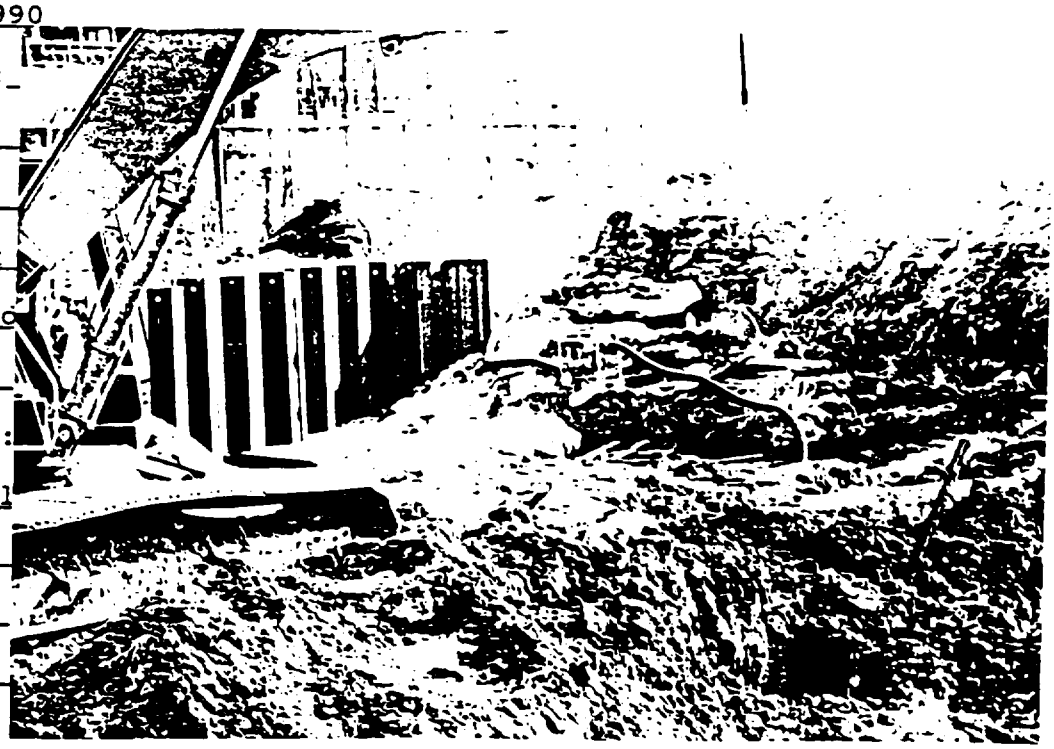
at Cerro Copper Proc

Sauget, IL.

PICTURE TAKEN TOWARD:

COMMENTS: Ongoing cl

up.



J000748

SECTION 5

SUPPORTING DOCUMENTATION AND REFERENCES

Reference Number 1

TABLE IA-1: ANALYSIS OF WATER SAMPLES FROM CREEK SECTOR A
(COLLECTED BY IEPA)

PARAMETERS	SAMPLE DATE AND LOCATION 11/26/80 5503	11/26/80 5504	1/26/81 5501	1/26/81 5502
Alkalinity	127	110		
Ammonia	0.2	1.0		
Arsenic	0.058	0.025		
Barium	1.2	0.7		
BOD-5	630	158		
Boron	0.2	0.3		
Cadmium	0.36	0.19		
COD		1190		
Chloride	33	36		
Chromium (Total)	0.61	0.21		
Copper	4.5	3.6		
Cyanide	.01	.01		
Fluoride	0.4	0.7		
Hardness	227	260		
Iron	58	28		
Lead	6.6	2.8		
Magnesium	35.8	28.7		
Manganese	1.0	0.67		
Mercury	0.0016	0.0016		
Nickel	4.2	3.3		
Nitrate-Nitrite	1.4	1.7		
pH	6.9	7.0		
Phenols	0.02	0.035		
Phosphorus	1.9	3.4		
Potassium	4.3	6.2		
R.O.E.	361	407		
Selenium	0.002			
Silver	0.24	0.14		
Sodium	19.7	22.4		
Sulfate	90	130		
Zinc	30	17		
PCB (ppb)	22	28	2.0	-
Aliphatic hydrocarbons (ppb)	23,000			

NOTES: All results in ppm unless otherwise noted
Blanks indicate that parameter was not analyzed
- Indicates below detection limits

J000751

TABLE IA-2: ANALYSIS OF SEDIMENT SAMPLES FROM CREEK SECTOR A
(COLLECTED BY IEPA)

	SAMPLE DATE AND LOCATION			
	11-26-80		1-28-81	
PARAMETERS	x128	x129	x128	x129
Ammonia			30	96
Barium			1200	2500
Cadmium			51	22
Calcium			5300	13,100
Chromium			140	490
Copper			5500	24,000
Iron			29,500	51,900
Lead			840	2600
Magnesium			2300	2100
Manganese			140	250
Mercury			101	6.9
Nickel			570	1500
Potassium			670	520
Silver			29	98
Zinc			2300	5800
Aliphatic Hydrocarbons	13	26		
Dichlorobenzene	-	1.7		
PCBs	2.2	13		

NOTES: All results in ppm
Blanks indicate parameter not analyzed for
- below detection limits

J000752

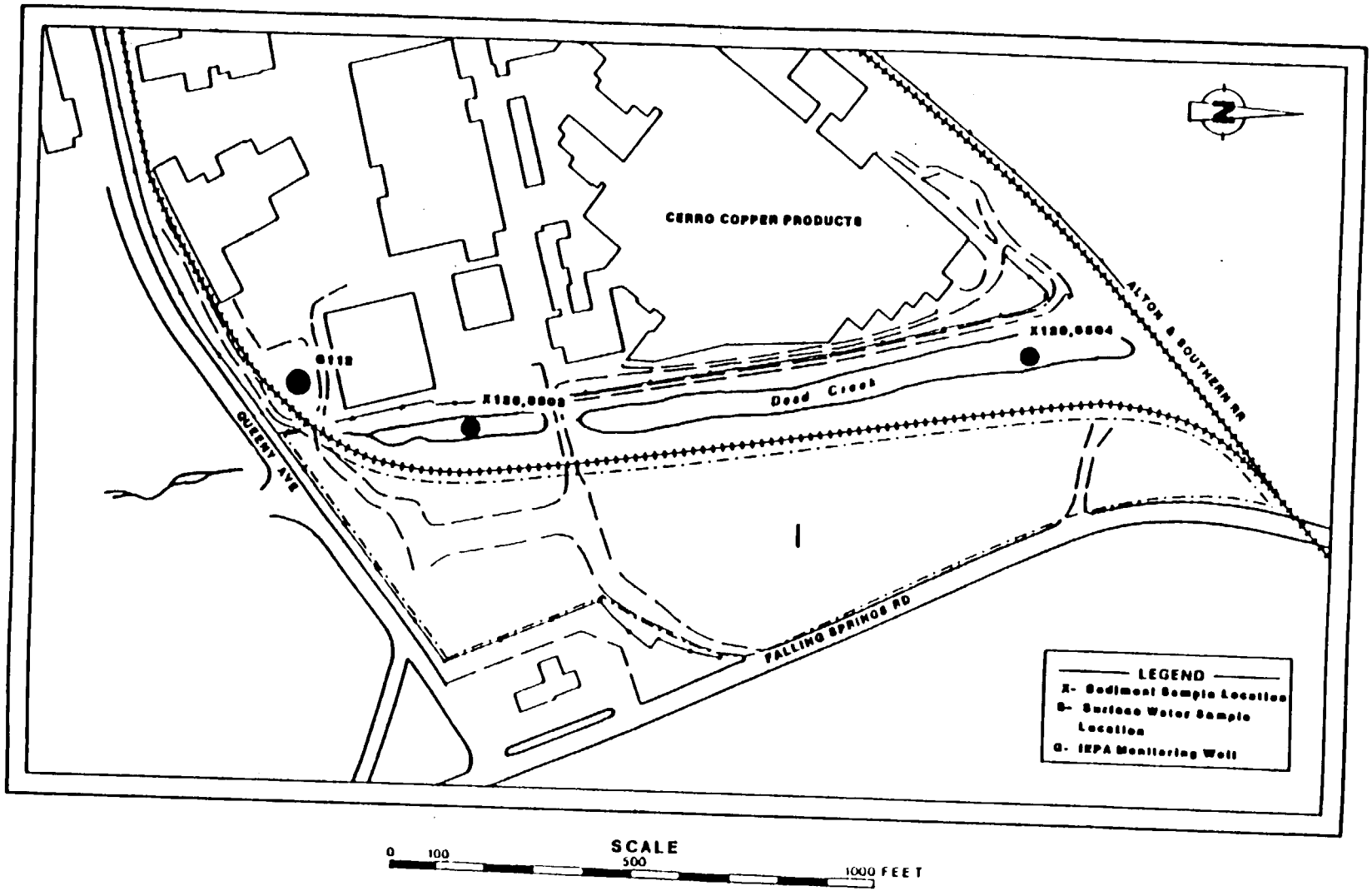
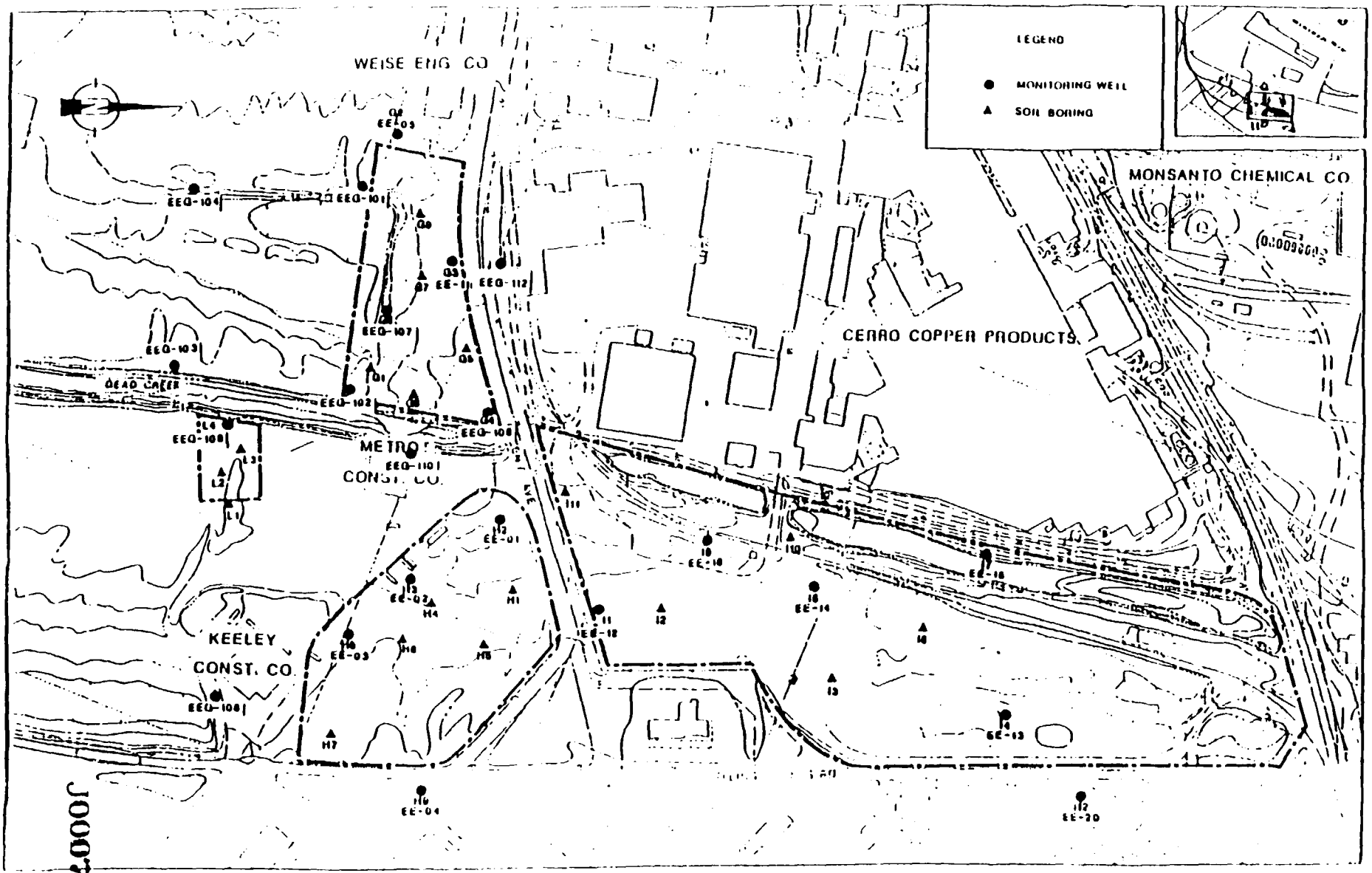


FIGURE IA-1
DEAD CREEK SITE AREA I AND CREEK SECTOR A WITH SAMPLING LOCATIONS

J0007253

Reference Number 2



SOURCE: Ecology and Environment, Inc., 1988

SCALE 0 200 400 600 800 1000 FEET

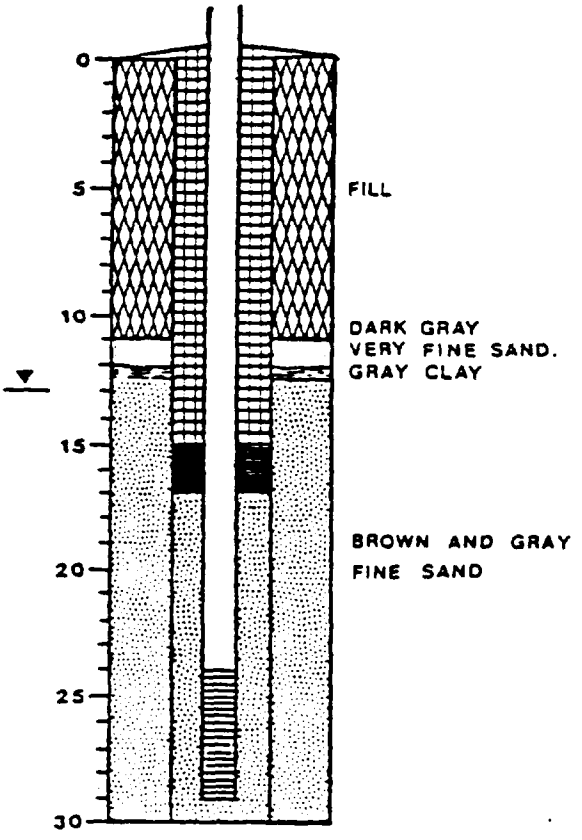
FIGURE 3-7 MONITORING WELL AND BORING LOCATIONS AT AREA 1

J0007755

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-3-87
Prepared by Tim Maley

Depth (ft) Description

EE-15



Boring/Well No. I-7/EE-15
Location Site I
Owner IEPA
Top of Inner Casing Elev. 406.41
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/3/87,2/3/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers, Rotary

WELL DATA

Hole Diam. 8 in.
Boring Depth 30 ft.
Casing and Screen Diam. 2 in.
Screen Interval 24 - 29 ft.
Screen Type stainless steel 0.01" slot
Stickup 1.33 ft.
Well Type monitoring
Well Construction:
Filter Pack 29 - 17 ft. Natural
Seal 17 - 15 ft.
Grout 15 ft. to surface
Lock No. 2834

TEST DATA

Static Water Elev. 397.63 Date 3-26-87
Static Water Elev. 398.93 Date 5-11-87
Slug Test Yes X No
Test Date 5-12-87
Hydraulic Conductivity 0.47 x10^{-5}cm/sec
Other pH = 7.2
Cond. = 1800 umhos Temp. = 56° F
Yellowish

WATER QUALITY

Samples Taken Yes X No
No. of Samples 1 round
Types of Samples groundwater

Date Sampled 3-23-87
Samplers E & E
Samples Analyzed for HSL compounds

Split Samples Yes X No
Recipient Sverdrup, Inc. for Cerro Copper

Comments Subsurface soil samples from boring 3.5 - 12.5 feet and 13.5 - 22.5 feet analyzed for HSL compounds.

REMARKS

Slight odor

J000756

Site Dead Creek Site-I

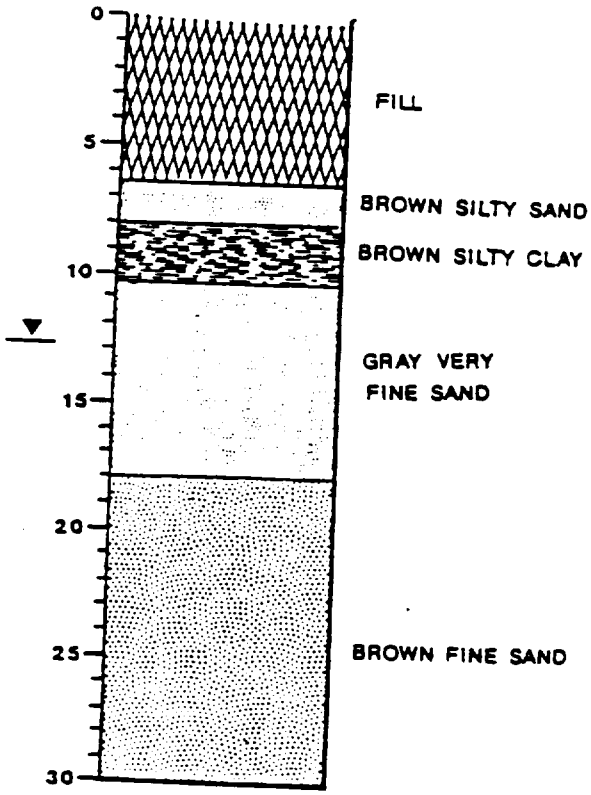
Boring/Well No. I-7/Well #EE-15

Sample Depth	Blow Count	Description
		0-1 Black clayey topsoil
1 - 2.5	3-3-4	FILL consisting of brown-gray silty CLAY. Dry.
3.5 - 5	4-8-4	FILL consisting of brown-gray silty CLAY. Trace of fine grain sand and crushed limestone. Dry.
6 - 7.5	1-1-1	FILL - same as above. Moist.
8.5 - 10	3-4-8	FILL consisting of brown-gray-black silty CLAY. Some fine to medium grain sand and crushed limestone. Dry.
		Fill apparently discontinues @ approx. 11'.
11 - 12.5	1-3-4	11-12' Dark gray very fine grain SAND. Moist. 12-12.5 Soft gray silty CLAY. Moist. Water @ 13'.
13.5 - 15	1-3-	Brown fine grain SAND. Wet.
16 - 17.5	1-3-5	Same as above.
18.5 - 20	2-6-8	Same as above; slightly siltier.
21 - 22.5	12-15-15	Same as above; less silt.
23.5 - 25	5-8-12	Gray very fine grain SAND. Wet.
26 - 27.5	12-10-10	Same as above.
28.5 - 30	6-6-10	Same as above.
		E.O.B. @ 30'

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-4-87
Prepared by Tim Maley

Depth (ft) Description

I-10



Boring/Well No. I-10
Location Site I
Owner IEPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/4 & 2/4/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers

WELL DATA

Hole Diam. 8 in.
Boring Depth 30.0 ft.
Casing and Screen Diam.
Screen Interval
Screen Type
Stickup
Well Type
Well Construction:
Filter Pack
Seal
Grout
Lock No.

TEST DATA

Static Water Elev. Date
Static Water Elev. Date
Slug Test Yes No
Test Date
Hydraulic Conductivity
Other

WATER QUALITY

Samples Taken Yes No X
No. of Samples
Types of Samples

Date Sampled
Samplers
Samples Analyzed for

Split Samples(soil) Yes X No
Recipient Sverdrup, Inc. for Cerro Copper

Comments Subsurface soil samples from boring 15 - 30' analyzed for HSL compounds.

REMARKS

Ground elev. 408.68

J000758

Site Dead Creek Site-I

Boring/Well No. I-10

Sample Depth	Blow Count	Description
		FILL material on surface.
1 - 2.5	12-15-12	FILL consisting of black-brown sandy CLAY including a mixture of wood, slag gravel, crushed limestone, a yellow powdery substance, and brick fragments. Dry.
3.5 - 5	6-3-3	FILL - same as above.
		Fill discontinues @ approx. 6.5'.
6 - 7.5	2-2-2	From 6.5' - brown very fine silty SAND. Dry. Trace of clay @ 7.5'.
8.5 - 10	4-3-3	Brown silty CLAY. Trace of fine grain sand. Slightly mottled with gray stringers. Dry.
11 - 12.5	6-6-8	Gray very fine silty SAND. Moist.
13.5 - 15	3-3-6	Same as above. Wet.
16 - 17.5	3-7-9	Same as above. Less silty, wet.
18.5 - 20	2-5-7	Brown fine grain SAND. Black staining @ 19-19.5'. Wet.
21 - 22.5	6-9-5	Same as above. Becomes gray fine grain SAND.
23.5 - 25	6-9-13	Same as above. Black staining @ 24.5-25'.
26 - 27.5	7-11-12	Same as above. Black staining.
28.5 - 30	11-12-14	Same as above.
		E.O.B. @ 30'

Reference Number 3

Explanation For Analytical Data Summary Tables

All ground water results in ug/l.
All soil/sediment organic results in ug/kg
All soil/ sediment inorganic results in mg/kg

For sample location headings, the following qualifiers are used :

+	Denotes blank samples.
*	Denotes duplicate samples.
^	Denotes that sample was not analyzed for the compounds listed.

For chemical results, the folling qualifiers are used :

B	Compound detected in blank samples.
J	Estimated value . Result is less than the specified detection limit, but greater than zero.
E	Estimated value. Concentration detected exceeds the calibrated range.
C	Result confirmed by GC/MS.
*	Duplicate analysis not with in control limits.
R	Spike sample recovery not with in control limits.

Surface Wat Volatiles

SITE	BLANK	SITE M	SITE M	CS-B	CS-B	CS-B	CS-C	CS-C	CS-D	CS-D	BLANK	CS-A	CS-A
SAMPLE NUMBER	DC-SW-01 *	DC-SW-02	DC-SW-03	DC-SW-04	DC-SW-05	DC-SW-06 *	DC-SW-07	DC-SW-08	DC-SW-09	DC-SW-10	DC-SW-11 *	DC-SW-12 *	DC-SW-13
DATE	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-6-86	11-6-86	11-6-86
1 Phenol													
2 bis(2-Chloroethyl)ether													
3 2-Chlorophenol													
4 1,3-Dichlorobenzene													
5 1,4-Dichlorobenzene													
6 Benzyl Alcohol													
7 1,2-Dichlorobenzene													
8 2-Methylphenol													
9 bis(2-Chloroisopropyl) ether													
10 4-Methylphenol													
11 N-Nitroso-n-Dipropylamine													
12 Hexachloroethane													
13 Nitrobenzene													
14 Isophorone													
15 2-Nitrophenol													
16 2,4-Dimethylphenol													
17 Benzoic Acid													
18 bis-(2-Chloroethoxy)methane													
19 2,4-Dichlorophenol													
20 1,2,4-Trichlorobenzene													
21 Naphthalene													
22 4-Chloroaniline													
23 Hexachlorobutadiene													
24 4-Chloro-3-methylphenol													
25 2-Methylnaphthalene													3 J
26 Hexachlorocyclopentadiene													
27 2,4,6-Trichlorophenol													
28 2,4,5-Trichlorophenol													
29 2-Chloronaphthalene													
30 2-Nitroaniline													

9 J

Surface Water volatiles

SITE	BLANK	SITE N	SITE N	CS-B	CS-B	CS-B	CS-C	CS-C	CS-B	CS-B	BLANK	CS-A	CS-A
SAMPLE NUMBER	DC SW-01 +	DC-SW-02	DC SW-03	DC SW-04	DC SW 05	DC-SW-06 B	DC-SW-07	DC-SW-08	DC-SW-09	DC-SW-10	DC-SW-11 +	DC-SW-12	DC-SW-13
DATE	11-5-86	11-5-86	11-5-86	11 5 86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-6-86	11-6-86	11-6-86
1 Dimethyl Phthalate													
2 Acenaphtylene													
3 3-Nitroaniline													
4 Acenaphthene													
5 2,4-Dinitrophenol													
6 4-Nitrophenol													
7 Dibenzofuran													
8 2,4-Dinitrotoluene													
9 2,6-Dinitrotoluene													
10 Diethylphthalate							1 J						
11 4-Chlorophenyl-Phenylether													
12 Fluorene													
13 4-Nitroaniline													
14 4,6-Dinitro-2-methylphenol													
15 N-Nitrosodiphenylamine													
16 4-Bromophenyl-phenylether													
17 Hexachlorobenzene													
18 Pentachlorophenol													
19 Phenanthrene												4 J	
20 Anthracene													
21 Di-n-butyl phthalate	15 B	26 B	25 B	18 B	15 B	16 B	19 B	19 B	19 B	20 B	17 B	5 BJ	22 B
22 Fluoranthene													
23 Pyrene													
24 Butyl Benzyl phthalate												12 J	
25 3,3'-Dichlorobenzidine													
26 Benzo(a)Anthracene													
27 bis(2-ethylhexyl) phthalate												7 J	5 J
28 Chrysene													
29 Di-n-octyl phthalate		4 J	2 J							1 J		36 J	1 J
30 Benzo(b)Fluoranthene													
31 Benzo(k)Fluoranthene													
32 Benzo(a)Pyrene													
33 Indeno(1,2,3-cd)Pyrene													
34 Benzo(g,h,i)Perylene													
35 Dibenzo(a,h)Anthracene													

J0000763

Surface-Water Inorganic

SITE	BLANK	SITE M	SITE M	CS-D	CS-D	CS-D	CS-C	CS-C	CS-B	CS-B	BLANK	CS-A	CS-A
SAMPLE NUMBER	DC-SW-01 *	DC-SW-02	DC-SW-03	DC-SW-04	DC-SW-05	DC-SW-06 *	DC-SW-07	DC-SW-08	DC-SW-09	DC-SW-10	DC-SW-11 *	DC-SW-12	DC-SW-13
DATE	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-5-86	11-6-86	11-6-86
1 Aluminum		464		1090	204	9080		767	5000	1170	323	354	294
2 Antimony		—										115	
3 Arsenic													
4 Barium		200				31							
5 Beryllium						7130			274				
6 Boron													
7 Cadmium													
8 Chromium, trivalent		14				25			0.1				
9 Cobalt						99			12			75	23
10 Copper		51	46	660	239	17900	226	84	619	57		81	65
11 Iron	255	937	350	1510	495	24500	528	2790	7470	1570		7030	2410
12 Lead		6.4		77	17	1300	710	30	29	36		2040	724
13 Manganese		97	95	188	66	222	141	234	196	28		3060	76
14 Mercury				0.6			1.9	0.2	0.26			68	252
15 Nickel		46				1500	83		189			0.59	0.2
16 Selenium												2600	667
17 Silver													
18 Thallium													
19 Tin												16	
20 Vanadium						60		46					
21 Zinc		106	73	404	302	10300	537	207	1090	185		499	
22 Cyanide												1450	480

Sediment Eva les

SITE	CS-B	CS-B	BLANK	BLANK	CS-A	CS-A	CS-A	CS-A	CS-A
SAMPLE NUMBER	DC-SD-27	DC-SD-28	DC-SD-29	DC-SD-31	DC-SD-32	DC-SD-33	DC-SD-34	DC-SD-35	DC-SD-36
SAMPLE DEPTH	0-6"	1.5'-2'			1.5'-2'	0-6"	0-6"	0-6"	1.5'-2'
DATE SAMPLED	11-5-86	11-5-86	11-5-86	11-6-86	11-6-86	11-6-86	11-6-86	11-6-86	11-6-86
1 Phenol									
2 bis(2-Chloroethyl)ether									
3 2-Chlorophenol									
4 1,3-Dichlorobenzene									
5 1,4-Dichlorobenzene					140 J				
6 Benzyl Alcohol					1000				550 J
7 1,2-Dichlorobenzene							410 J	130 J	2900 J
8 2-Methylphenol					480	270 J			
9 bis(2-Chloroisopropyl) ether									
10 4-Methylphenol									
11 N-Nitroso-n-Dipropylamine									
12 Hexachloroethane									
13 Nitrobenzene									
14 Isophorone									
15 2-Nitrophenol									
16 2,4-Dimethylphenol									
17 Benzoic Acid									
18 bis-(2-Chloroethoxy)methane									
19 2,4-Dichlorophenol									
20 1,2,4-Trichlorobenzene									
21 Naphthalene					580				
22 4-Chloroaniline								90 J	1500 J
23 Hexachlorobutadiene								130 J	
24 4-Chloro-3-methylphenol								1000 J	
25 2-Methylnaphthalene									
26 Hexachlorocyclopentadiene									
27 2,4,6-Trichlorophenol							450 J		
28 2,4,5-Trichlorophenol									
29 2-Chloronaphthalene									
30 2-Nitroaniline									

Sediment Pes

SITE	CS-B	BLANK	BLANK	CS-A	CS-A	CS-A	CS-A	CS-A
SAMPLE NUMBER	DC-SD-28	DC-SD-29	DC-SD-31	DC-SD-32	DC-SD-33	DC-SD-34	DC-SD-35	DC-SD-36
SAMPLE DEPTH	1.5'-2'			1.5'-2'	0-6"	0-6"	0-6"	1.5'-2'
DATE SAMPLED	11-5-86	11-5-86	11-6-86	11-6-86	11-6-86	11-6-86	11-6-86	11-6-86
1 Alpha-BHC								
2 Beta-BHC								
3 Delta-BHC								
4 Gamma-BHC (Lindane)								
5 Heptachlor								
6 Aldrin								
7 Heptachlor Epoxide								
8 Edosulfan I								
9 Dieldrin								
10 4,4'-DDE								
11 Endrin								
12 Edosulfan II								
13 4,4'-DDD								
14 Endosulfan Sulfate								
15 4,4'-DDT								
16 Methoxychlor								
17 Endrin Ketone								
18 Chlordane								
19 Toxaphene								
20 AROCLOR-1016								
21 AROCLOR-1221								
22 AROCLOR-1232								
23 AROCLOR-1242								
24 AROCLOR-1248								
25 AROCLOR-1254	1900			21000 C	7900	11000		
26 AROCLOR-1260				13000 JC	6500	10600	71000 C	38000
					2000 J	2200 J	24000 C	13000 J

Reference Number 4

Mitchell in Cahokia Quad.

437

LOG OF WATER WELL

Property owner Midwest Rubber Co. East St. Louis — Well No. #4

Drilled by Adams — Year May 1951

Formations passed through	Thickness	Depth of Bottom
Clay	7	7
dry yellow sand	21	28
Building sand	17	45
Fine gray sand	9	54
Med. Coarse sand	6	60
Lt. fine very dirty sand + silt	18	78
Coarse sand + Boulders	32	110

(Continue on back if necessary)

COUNTY No. 1940

Finished in _____ to _____ ft.

Cased with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf 36'10" ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen _____

Slot _____ Diam. _____ Length _____ Bottom set at _____ ft.

(Show location in Section Plat)

Township name _____ Elev. _____ Sec 26

Description of location _____ Twp 2N

Rge 10W

Location by Drawing Location File

Signed _____ County St Clair

E. CLAIR

Copy for Illinois State Geological Survey — Index: NO ENVELOPE 26-2N-10W

J0002968

ESTED AND MAIL ORIGINAL TO STATE
ER HEALTH PROTECTION, 535 WEST
DO NOT ATTACH GEOLOGICAL/WATER
PROPER NAME LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Clayton Chemical Co. — Completed 4-12-76 — Well No. _____
Address 101 S. Bynumwood Clayton Mo.
Driller Charles Nuttens — License No. 102-50
11. Permit No. 45480 — Date 3-22-76
12. Water from Sand & Gravel (Formation) — 13. County St Clair
at depth 40 to 78 ft.
14. Screen: Diam. _____ in.
Length: 10 ft. Slotted ✓
Sec. 26
Twp. 2N
Rge. 10W
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6 5/8	PVC	0	78

SHOW LOCATION IN SECTION PLAT

562'SL, 587'WL SW (permit)

6. Size Hole below casing: 10 in.
7. Static level 15 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 200+ gpm for _____ hours. Sub. pump set at 60'.

8.

FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	40	40
Sand & Gravel	38	78

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 5-4-76

ST. CLAIR — COUNTY No. 74077 — 26-2N-10W

Plotted on plate

LOG OF WATER WELL

Property owner Monsanto Chemical Co. Well No. 20
East of bldg. BI in plant 15'E. from RR. spur. [K.W. # 3]
Drilled by Layne-Western (Millikin) Year 7-13-49

Formations passed through	Thickness	Depth of Bottom
Clay	1	1
Cinders	1	2
Clay	2	5
Sandy clay	26	31
Blue fine sand	30	61
Med. sand, gray	13	74
Med. to coarse sand	5	79
Rock + coarse sand	2	81
Coarse sand	3	84
Coarse sand + gravel + small rocks	19	103

(Continue on back if necessary)

Finished in _____ at _____ to _____ ft.

COUNTY No. 1949

Cased with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf. _____ ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen Shutter

Slot _____ Diam. _____ Length 25 Bottom set at _____ ft.

(Show location in Section Plat)

Township name _____ Elev. _____ Sec. 26

Description of location _____ Twp. 2 N

2 N, _____ Rge. 10 W

Signed _____ County St. Clair

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2N-10W

10600169

Plotted on Photo 1F 39 Tices. U.S.
Log # 437

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 1

Drilled by Morgan (Morgan) Year ?

Formations passed through	Thickness	Depth of Bottom
Sandy loam	10	10
Dry sand	14	24
Coarse sand	14	38
Coarse sand, some gravel	4	42
Fine sand	24	66
Blk. fine sand	8	74
Coarse sand + boulders	8	82
Very coarse sand + gravel	24	106

(Continue on back if necessary)

Finished in _____ at _____ to _____ ft.

COUNTY No. 1937

Cased with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf. 28' 2" ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen _____

Slot _____ Diam. _____ Length _____ Bottom set at _____ ft.

(Show location in Section Plat)

Township name _____ Elev. _____ Sec. 26

Description of location _____ Twp. 2 N

Rge. 10 W

Signed _____ County St. Clair Co.

CLAIR NO ENVELOPE

280

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. 15

Drilled by H. L. Watson (Moretti) Year Feb. 1941 Mar. 1941

Formations passed through	Thickness	Depth of Bottom
No log	70	
Fine sand	5	75
Fine sand + gravel	5	80
Coarse sand + gravel	5	85
" " " "	5	90
Coarse sand	5	95
Coarse sand + gravel	5	100
" " " "	5	105
Sand + gravel	1½	106½

[Continue on back if necessary] T.D.

Finished in _____ at _____ to _____ ft.

COUNTY No. 1945

Cased with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf. 34' ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen Johnson

Slot 10-80-100 Diam. 16" Length 25' Bottom set at _____ ft.

[Show location in Section Plat]

Township name _____ Elev. _____ Sec. 26

Description of location SW, NE Sec. 26 Twp. 2N

T 2N R 10W Rge. 10W

Location by Brown Water Div.

Signed _____ County St. Clair

St. CLAIR NO ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

0020270

182

LOG OF WATER WELL

#16

Property owner Monsanto Chem. Co. Well No. 7

Drilled by Watson (Waly) Year June 1941

Formations passed through	Thickness	Depth of Bottom
Fill	10	10
Mud	8	18
Fine yellow sand → ?		
Sand	20	38
Gravel	38	76
Fine gravel	5	81
Gray gravel	10	91
Gravel	10	101
Gravel	5	106

[Continue on back if necessary] TD = 106'

Finished in _____ at _____ to _____ ft.

Cased with _____ inch _____ from 0 to _____ ft.

COUNTY No. 1946

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf. 30 ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen Johnson

Slot _____ Diam. 16" Length 30' Bottom set at _____ ft.

[Show location in Section Plat]

Township name _____ Elev. _____ Sec. 26

Description of location SW, NE Sec. 26 Twp. 2N

T 2N, R 10W Rge. 10W

Location by Brown Water Div.

Signed _____ County St. Clair

St. CLAIR NO ENVELOPE

Copy for Illinois State Geological Survey 26-2N-10W

375

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. 2 (Test well)

Drilled by Layne-Western (F. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Cinder fill	8	8
Hard green clay	4	12
Clay, black sand turning brown	3	15
Black & brown sand w/ clay	5	20
Brown sand	10	30
" " turning gray	5	35
Fine to med. gray sand	5	40
Med. gray sand	10	50
Med. to coarse gray sand	15	65
Med. gray sand	5	70
Sand & boulders, blue clay showing	5	75
Fine to med. sand, silt, few boulders	5	80
Med. sand, some gravel	5	85
Med. to coarse sand & gravel	15	100
Coarse sand, gravel & boulders	8	108
On rock at 108		

[Continue on back if necessary]

Finished in _____ at _____ to _____ ft.

Cased with _____ inch COUNTY No. 1942 from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf. _____ ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen _____

Slot _____ Diam. _____ Length _____ Bottom set at _____ ft.

[Show location in Section Plat]

Township name _____ Elev. 410 TOPO

Description of location NE, NE Sec. 26

T 2 N, R 10 W

Sec. 26

Twp. 2 N

Rge. 10 W

Signed _____ County St. Clair

Copy for Illinois State Geological Survey Index: NO ENVELOPE 26-2N-10W

377

LOG OF WATER WELL

(same as well #19)

Property owner Monsanto Chem. Co. Well No. #4 (Test hole)

Drilled by Layne-Western (F. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Cinders	1	1
Brown to yellow clay	9	10
Brown sandy clay	20	30
Brown sand clay showing	10	40
Brown packed sand	3	43
Med. sand some gravel, clay showing	7	50
Fine packed sand & gravel	10	65
Med. sand, some coarse gravel - wood at 68-70	5	70
Med. sand, some gravel	5	75
Fine to coarse sand & gravel, boulders	10	85
Medium fine sand, some gravel	5	90
Medium to coarse sand & gravel boulders	19'8"	109'8"
On rock at 109'8"		

[Continue on back if necessary]

Finished in _____ at _____ to _____ ft.

Cased with _____ inch COUNTY No. 1943 from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf. _____ ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft. _____ in. in _____ hrs. _____ min.

Length of test _____ hrs. _____ min. Screen _____

Slot _____ Diam. _____ Length _____ Bottom set at _____ ft.

[Show location in Section Plat]

Township name _____ Elev. _____

Description of location NE, NE Sec. 26

T 2 N, R 10 W

Sec. 26

Twp. 2 N

Rge. 10 W

Signed _____ County St. Clair

Copy for Illinois State Geological Survey Index: NO ENVELOPE 26-2N-10W

287

LOG OF WATER WELL

Property owner: Lewin-Mathes Well No.

Drilled by: H.L. Watson (Well) Year: June 1948

Formations passed through	Thickness	Depth of Bottom
Topsoil	3	3
Fine sand	12	15
" "	20	35
" " + gravel	10	45
Med sand + gravel	2	47
Clay	1	48
Med. Sand + gravel	4	52
" " " " + rock	10	62
" " " "	8	70
" " " " + rock	5	75
Coarse sand	5	80
Coarse sand + rock	5	85
Coarse sand	5	90
Boulder	5	95
Coarse sand + rock	1	96
	5	101

(Continue on back if necessary)

COUNTY No. 1932

Finished in _____ to _____ ft.

Cased with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf _____ ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft _____ in. in _____ hrs _____ min.

Length of test _____ hrs _____ min. Screen _____

Slot _____ Diam. _____ Length _____ Bottom set at _____ ft.

(Show location in Section Plat)

Township name _____ Elev. _____

Description of location NE SW Sec. 26 T 2 N R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

Signed _____ County St. Clair

Copy for Illinois State Geological Survey No ENVELOPE Index:

26-2N-10W

286

Ov Cahokia Quad.

LOG OF WATER WELL

Property owner: Lewin-Mathes - Monsanto, Ill. Well No.

Drilled by: H.L. Watson (Graves) Year: Feb. 1947

Formations passed through	Thickness	Depth of Bottom
Fine sand	70	70
Fine sand + gravel	8	78
Good formation	26	104 TD

COUNTY No. 1936

(Continue on back if necessary)

Finished in _____ at _____ to _____ ft.

Cased with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

Size hole below casing _____ inch. Static level from surf _____ ft.

Tested capacity _____ gal. per min. Temperature _____ °F.

Water lowered to _____ ft _____ in. in _____ hrs _____ min.

Length of test _____ hrs _____ min. Screen _____

Slot 30 Diam. 12" Length 26'5" Bottom set at _____ ft.

(Show location in Section Plat)

Township name _____ Elev. _____

Description of location NE, SW Sec. 26 T 2 N R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

Signed _____ County St. Clair

Copy for Illinois State Geological Survey NO ENVELOPE Index:

26-2N-10W

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 356308

TOWN E. St. Louis-Monsanto P. O. Map No. 4W
COMPANY F. Thorpe - Engineer R. 10W
FARM Evans-Wallower Zinc Co. No. 2 T. 2N Sec. 24 ?
AUTHORITY F. Thorpe
ELEVATION
COLLECTOR DATE DRILLED March 1929
CONFIDENTIAL

No.	STRATA COUNTY NO. 1740	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Subsoil & clay	16		16	
	Sand, extremely fine	11		27	
	Sand, very fine, loamy	8		35	
	Sand, very fine	11		46	
	Sand, fine	6		52	
	Sand, very fine	3		55	
	Sand, fine, gritty	7		62	
	Boulders up to 4" with some sand	5		67	
	Regular building sand	14		81	
	Sand, medium coarse	2		83	
	Sand, very coarse	19		102	

"During the month of March, 1929, I installed a porous concrete well 30" I.D. and 40" O.D. at the plant of the Evans-Wallower Zinc Co. at Monsanto P.O., East St. Louis, Ill. and the above is the log of all the strata we went through in Well #2.

"The static level of water varies with the river level."
(Letter of F. Thorpe rec'd. 4-3-29)

J000773

NO ENVELOPE

County St. Clair Index No. 04W24
T.—DRILL RECORD 24-2N-10W
17893 4M 6 29 26

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 790

TOWN East St. Louis TOWNSHIP Map No. 4W
COMPANY Thorpe Concrete Well Co. R. 10W
FARM Certain-teed Products No. 3 T. 2 N Sec. 24
AUTHORITY written log
ELEVATION 416 topo.
COLLECTOR Ireland DATE DRILLED 4-34
CONFIDENTIAL 18th and Broadway

No.	STRATA COUNTY NO. 1739	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Cinder fill	6		6	
	Gumbo	4		10	
	Soil, sandy	7		17	
	Sand, fine	10		27	
	Sand, extremely fine	13		40	
	Sand, fine, loamy	13		53	
	Sand, fine, gritty	7		60	
	Clay, blue	4		64	
	Sand, quick	26		90	
	Sand, fine	2		92	
	Sand, gritty	9		101	
	Gravel, fine	6		107	
	Sand, coarse	2		109	
	Boulders 2" to 10"	7		116	
	Baits drilled 3 wells	1-21		120	
		7-17		120	
		11-17		119	

NO ENVELOPE

County ST. CLAIR Index No. 04W24
T.—DRILL RECORD 24-2N-10W
47327—10M—4-35 Illinois Geological Survey, Urbana.

John O. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1908

(575—5M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W
COMPANY Union Electric Light & Power 10W
FARM 100 ft. S. of N. property line
AUTHORITY 258 ft. E. of Eastern Inner
ELEVATION Harbor line. HOLE No. 1
COLLECTOR DATE DRILLED

Proj. 23

COUNTY NO. 1730 STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Mud, black and fine sand	30		30	
Sand, fine	4		34	
Sand, coarse 5% 1/8 in. gravel	2		36	
25% 1/4 in. gravel	2		38	
30% 2½ in. gravel	2		40	
Sand, coarse 30% 1/8 to 1 in. gravel	8		48	
Sand, coarse 10% 1/4 in. gravel	4		52	

J0007724

County St. Clair Index No. 0414
DRILL RECORD ILLINOIS STATE Projected 23-2N-10W

John O. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1908

(575—5M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W
COMPANY Union Electric Light and Power 10W
FARM 300 ft. S. of N. Property Line
AUTHORITY 250 ft. E. of Eastern Inner
ELEVATION Harbor line HOLE No. 2
COLLECTOR DATE DRILLED

Proj. 23

No. COUNTY NO. 1731 STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Sand, fine	10		10	
Sand, very fine	8		18	
Mud, black	6		24	
Mud, black and fine sand mixed	11		33	
Sand, fine. 10% 1/4 in. gravel	5		38	
Sand, coarse. 15% 1/2 in. gravel	5		43	
Sand, coarse 20% 1/2 in. gravel	5		48	
Sand, fine	5		53	
Sand, coarse. Pieces of soapstone	5		58	
Sand, coarse 5% 1/4 in. gravel	8		66	
Sand, coarse 10% 1/2 in. gravel	6		72	
Sand, coarse 20% 4 in. gravel	4		76	
Sand, coarse, 20% 3/4 in. gravel	15		91	
Sand, coarse	10		101	
Minus 73.66 Rock				

County St. Clair Index No.
DRILL RECORD ILLINOIS STATE Projected 23-2N-10W

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

INDUSTRIAL Permit #NF4849	Thickness	Top	Bottom
Yellow brown clay		0	10
Fine sand brown		10	25
Medium coarse sand brown		25	30
Coarse sand brown with pea gravel		30	35
Coarse sand brown		35	40
Medium coarse sand brown		40	55
Medium fine sand brown		55	60
Fine sand brown		60	70
Very coarse sand gray with 1½" gravel		70	80
Very coarse sand gray with ¼" gravel		80	85
Very coarse sand gray with 3/4" gravel		85	90
Very coarse sand gray with ½" gravel		90	95
Very coarse sand gray with 3/8" gravel		95	100
Very coarse sand gray with 1" gravel		100	105
Very coarse sand gray with 3/4" gravel		105	107
Very coarse sand gray with ¼" gravel		107	113
Very coarse sand gray with ½" gravel		113	116
			TD

Size of hole 38"
Casing: 88" - 18" outside diameter steel
Casing elevation 2' above grade
Static water level 36.9' top of casing
24 tons gravel pack 11" wall 45' above screen
Screen: Johnson Stainless Steel 18" nominal diameter. Length 30' set at 116'
Slot size: .060'
Two well 300' apart were drilled under Permit #NF4849 S.S. # 55984
NO ENVELOPE
* North Reservoir

COMPANY Luhr Brothers, Inc.
FARM Midwest Rubber Reclaiming Co. 10
DATE DRILLED September 3, 1968 COUNTY NO. 2856
AUTHORITY Luhr Bros. Inc.
ELEVATION
LOCATION Lot 209 Third Subdivision of Cahokia* Commonfields
COUNTY ST. CLAIR 237-2N-10 W

J000775

Page 1

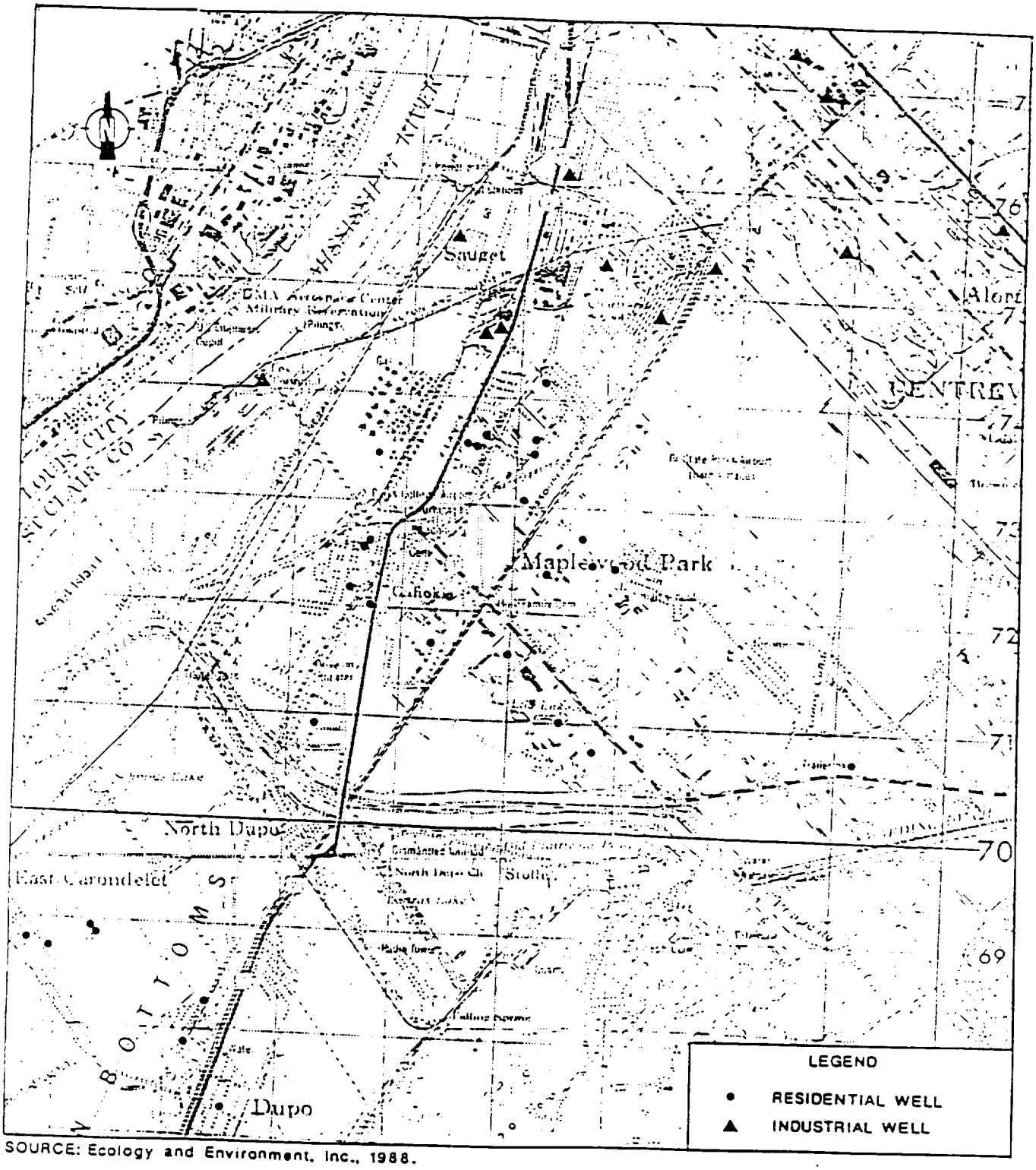
ILLINOIS GEOLOGICAL SURVEY, URBANA

INDUSTIRAL Permit #NF4849	Thickness	Top	Bottom
Brown Clay		0	5
Brown silty sand		5	20
Fine sand brown		20	25
Fine sand gray		25	30
Coarse sand gray with pea gravel		30	35
Medium coarse sand gray		35	40
Coarse sand gray		40	45
Medium fine sand gray		45	55
Very coarse sand gray with pea gravel		55	60
Medium coarse sand gray		60	65
Very coarse sand gray with 3/4" gravel		65	70
Medium coarse sand gray with pea gravel		70	75
Very coarse sand gray with 3/4" gravel		75	110
Very coarse sand gray with 1" gravel		110	115.5
			TD

Size of hole 38"
Casing: 88.70' - 18" outside diameter steel
Casing elevation 3.2' above grade
Static water level 37'
26.5 tons gravel pack 11" wall 55' above screen.
Screen: Johnson Stainless Steel 16" nominal diameter. Length 30' set at 115.5'
Slot size: .060
Two wells 300' apart were drilled under Permit #NF4849
NO ENVELOPE
* Southwest Reservoir S.S.#55983

COMPANY Luhr Brothers, Incorparted.
FARM Midwest Rubber Reclaiming Co. 11
DATE DRILLED September 6, 1968 COUNTY NO. 2857
AUTHORITY Luhr Bros. Inc.
ELEVATION
LOCATION Lot 209 Third Subdivision of Cahokia* Commonfields
COUNTY ST. CLAIR 237-2N-10W

Reference Number 5



SOURCE: Ecology and Environment, Inc., 1988.

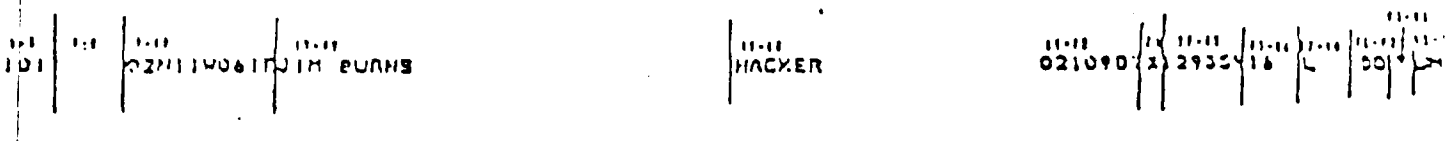
SCALE

0 1 2 3 4 MILES

RESIDENTIAL AND INDUSTRIAL WELL LOCATIONS IN THE DCP AREA

J000777

The following is an explanation of the ISWS Private Well Database Printout.



Columns	Field Length	Name	Description
1-3	3	FIPS	County Code Number

FIPS means Federal Information Processing System and is a Federal number to designate a county.

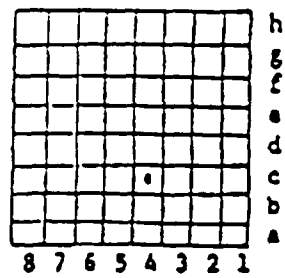
4-8	5	SGS County number	

SGS County number is the Geological Survey ID# that is assigned as an internal identification number.

9-18	10	Location	Township columns 9-11 Range columns 12-14 Section columns 15-16 Plot columns 12-18

The location system uses the township, range, and section. The location consists of five parts: county, township, range, section, and coordinate within the section. Sections are divided into rows of 1/8-mile squares. Each 1/8-mile square contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of 1 square mile contains 8 rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram.

St. Clair County
T.2N., R.10W.
Sec. 23



The location of the well shown above is STC 2N10W-23.4c. Where there is more than one well in a 10-acre square they are identified by arabic numbers after the lower-case letter in the well number.

Columns	Field Length	Name	Description
93-94	2	Well type -	A two letter code indicating the type of well Blank - Assumed drilled BD Bored and dug DU Dug (being phased out) DR Driven SP Sand point SG Spring
95-96	2	Aquifer type -	A two letter code indicating aquifer type Blank - Undeterminable BR Bedrock UN Unconsolidated

The data in the Private Well Inventory Database is a listing of those non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, from chemical analysis reports, from well sealing forms or well inventory forms from the 1930-34 well survey and other special projects. The accuracy of this data is controlled by those who submitted the form. Information in the private well database has not been field verified.

Columns	Field Length	Name	Description
19-48	30	Owner	
49-68	20	Driller	
69-75	7	Date	Month columns 69-70 Day columns 71-72 Century columns 73 Year columns 74-75
76	1	Permit code letter indicates agency which issued permit #. M Mines and Minerals (after 1988 only observation wells and irrigation wells) P Public Health - all non-community supplies E EPA - Community supplies N No fee X Undetermined	
77-82	6	Permit number	
83-86	4	Depth (in feet)	
87-90	4	Record type - Indicates paper source that documents the well exists, since records were collected before well log submittal was required. L Log A Affidavit C Chemical analysis I Inventory X Indicates comment in owner field something unusual	
91-92	2	Well use - A two letter code indicating the usage of the well CM Commercial CO Conservation DO Domestic IN Industrial IR Irrigation MO Monitoring MU Municipal NC Non-Community OB Observation PK Park SC School ST State	

163	01N09W047FLALUMIER E		0000943	29	C	DU
163	01N09W06 JC RR A YARD	LAYNE WESTERN	0400947	105	L	CM
163	01N09W081ABARBEAU E	DOHRMAN	0901977M065458207		L	DO
163	01N09W081CDLIVER M	DS DRILL	0911974M032393140		L	DO
163	01N09W087EPIAT E		0000943	27	C	DU
163	02N09W075DCIRCLE PKG CO	WATSON	0200942	120	L	CM
163	02N09W075ECIRCLE PKG CO	LUHR	0000962	112	IC	CM
163	02N09W075ECIRCLE PKG CO	LUHR	0719966	115	IC	CM
163	02N09W076DCIRCLE PKG CO		0000941	111	LC	CM
163	02N09W076EE SIDE PKG		0000906	100	L	CM
163	02N09W076EHUNTER PKG CO	BUTLER	0421958	116	L	CM
163	02N09W076EHUNTER PKG CO	LAYNE WESTERN	0000968	106	I	CM
163	02N09W077EHUNTER PKG CO	FRANK	0322957	100	L	CM
163	02N09W077EHUNTER PKG CO	LUHR	0306956	106	LC	CM
163	02N09W077FHUNTER PKG CO		0000943	110	C	CM
163	02N09W087APFIZER	LAYNE WESTERN	0914972M016352115		L	CM
163	02N09W087APFIZER	RUESTER	1100983M109867117		L	CM
163	02N09W092HPENN RR LAKE ROAD HOUSE	WATSON	0700941	115	L	CM
163	02N09W097ANIEDERER DAIRY		0000936	96	C	CM
163	02N09W097ANIEDERER DAIRY	WATSON	0300946	98	LC	CM
163	02N09W103DWATERLOO ICECREAM		0000942	122	C	CM
163	02N09W103DWATERLOO ICECREAM		0000942	124	C	CM
163	02N09W106GWALWORTH CO		0000943	122	C	CM
163	02N09W108HWALWORTH CO		0000943	124	C	CM
1632659102N09W151EFREEDOM CONCRETE		ST CH DRILL	1208987M137981100		L	CM
163	02N09W157ASCHRANZ J		0708964	98	L	DO
163	02N09W16		0000930	110	C	DO
163	02N09W16 JONES PK		0000954		C	PK
163	02N09W167AE ST LOUIS CASTING		0200943	116	LC	CM
163	02N09W168SWATERLOO ICECREAM	WATSON	0909939	59	L	CM
163	02N09W172BAM ASPHALT ROOFING	WATSON	0200947	105	L	CM
163	02N09W173BAM ASPHALT ROOFING		0000939	115	LC	CM
163	02N09W173FE ST LOUIS PK DIST		0000930	110	C	PK
163	02N09W177FWILLIAMS PAINT CO	THORPE	0600929	117	L	CM
163	02N09W177GWILLAIMS PAINT CO(TEST)	LAYNE WESTERN	0000947	116	LI	CM
163	02N09W177GWILLIAMS PAINT CO	THORPE	0000947	114	L	CM
163	02N09W177GWILLIAMS PAINT CO	THORPE	0000947	115	L	CM
163	02N09W177GWILLIAMS PAINT CO	THORPE	0600929	113	L	CM
163	02N09W177GWILLIAMS PAINT CO(TEST)	LAYNE WESTERN	0000947	117	LI	CM
163	02N09W177GWILLIAMS PAINT CP		0000928	100	C	CM
163	02N09W177HPFIZER	THORPE	0000947	114	IC	CM
163	02N09W178BDRUG STORE		0000949	84	C	CM
163	02N09W187CROXY THEATRE		0000944	91	C	CM
163	02N09W187GBANNER ICE	WATSON	0000943	116	CL	CM
1632590302N09W19 PRESTRESSED SLABS		ST CH DRILL	1029986M126802100		L	CM
163	02N09W193HHOME ICECREAM CO		0000933	115	LC	CM
163	02N09W198EOBEAR WESTER CO		0000943	104	C	CM
163	02N09W198FCERTAIN TEED PROD		0903952	106	L	CM
163	02N09W198FCERTAIN TEED PROD		1026950	110	L	CM
163	02N09W198FOBEAR WESTER CO		0000943	104	C	CM
163	02N09W198GLEMP BREWING CO		0000946	720	C	CM
163	02N09W208AALTON AND SOUTH RR		0000944	100	C	IN
163	02N09W231AOPEN AIR THEATRE	WATSON	1000941	83	L	CM
~~163~~	~~02N09W231EPOPP R~~	~~ST CH DRILL~~	~~0727977M063762114~~		~~L~~	~~DO~~
~~163~~	~~02N09W232FPOPP R~~	~~KOHNEN~~	~~0623984M11312561~~		~~L~~	~~IR~~
163	02N09W263HAM ZINC CO			97	C	CM
163	02N09W29 ALUMINUM ORE COO		1000940	1215	L	IN
163	02N09W295GIND TRACK SUP INC	KOHNEN	0119981M09811132		L	DU
163	02N09W296FCHEM TECK PROD		0000972	98	IC	CM

J000781

163	02N10W10IBNAT STOCK YD		0000967	108	C	CM
163	02N10W11 MISSOIRI ILL MATERIAL		0400943	115	L	CM
1630137002N10W22	MONSANTO CHEM	RANNEY	0800952	97	L	IN
1630137202N10W22	MONSANTO CHEM	RANNEY	0800952	97	L	IN
1630137102N10W22	MONSANTO CHEM	RANNEY	0907952	90	L	CB
163	02N10W23 AP GROCERY	WATSON	0600946	80	L	CM
163	02N10W241ECERTAIN TEED PROD		0000943	106	C	CM
163	02N10W241HCERTAIN TEED PROD	WATSON	1200942	123	L	CM
163	02N10W25 MOBIL OIL		0000987	105	A	IN
163	02N10W25 MOBIL OIL		0000987	109	A	IN
163	02N10W25 MOBIL OIL	EATSON	0000943	16	A	IN
163	02N10W25 MOBIL OIL	WATSON	0000940	115	A	IN
163	02N10W25 MOBIL OIL	WATSON	0000946	92	A	IN
163	02N10W25 MOBIL OIL	WATSON	0000951	106	A	IN
163	02N10W25 MOBIL OIL(PLANT CLOSED)	WATSON	0000939	115	AX	IN
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0404984M11165967		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0404984M11165968		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0405984M11162068		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166168		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166268		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166368		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166468		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166568		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166668		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166768		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166868		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11166968		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11167068		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11167168		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11167268		LX	DU
163	02N10W25 MONSANTO CHEM(TEMPORARY)	BARBATO	0414984M11167368		LX	DU
1632569702N10W25	TMI INC	ST CH DRILL	0702985M11870199		L	CM
163	02N10W25 TMI INC	ST CH DRILL	1217982M10581984		L	CM
163	02N10W255DMOBIL OIL	LUHR	0214961	107	LC	IN
163	02N10W255EMOBIL OIL	LUHR	0000959	114	C	IN
163	02N10W256AMIDWEST RUBBER CO	THORPE	0500951	110	L	CM
163	02N10W256ESOCONY OIL	WATSON	0000943	95	L	IN
163	02N10W257BMONSANTO CHEM		0000920	100	L	IN
163	02N10W257EMOBIL OIL	LUHR	0411957	113	L	IN
163	02N10W257EMOBIL OIL	THORPE	0000951	106	LA	IN
163	02N10W257ESOCONY MOBIL OIL	WATSON	0000955	112	L	IN
163	02N10W26 AM AG CHEM CO	WATSON	000000	102	L	IN
163	02N10W26 LEWIN MATHES	WATSON	0200947	104	L	CM
163	02N10W26 MIDEWST RUBBER CO	THORPE	1200946	111	L	CM
163	02N10W26 MIDWEST RUBBER	WATSON	0321960	113	L	CM
163	02N10W26 MIDWEST RUBBER CO	MORGAN	0000950	106	L	CM
163	02N10W26 MIDWEST RUBBER CO	MORGAN	0000950	114	L	CM
163	02N10W26 MIDWEST RUBBER CO	WATSON	1007959	110	L	CM
163	02N10W261EMONSANTO CHEM		0000947	105	C	IN
163	02N10W261ESTERLING STEEL CASTING		0000942	95	LC	CM
163	02N10W261GMONSANTO CHEM(TEST)	WATSON	0000950	108	LX	IN
163	02N10W261HCWS PLANT US ARMY		0000941	100	LC	CM
163	02N10W261HCWS PLANT US ARMY		0700941	105	L	CM
163	02N10W262DSTERLING STEEL CATSING		0000973		C	CM
163	02N10W262EMONSANTO CHEM		0000947	105	C	IN
163	02N10W262EMONSANTO CHEM		0300941	107	LC	IN
163	02N10W262EMONSANTO CHEM	WATSON	0000941	107	L	IN
163	02N10W262HAM ZINC CO(ABANDONED)	WATSON	0000943	107	LX	CM
163	02N10W262IEMPM WATSES		0000973	95	A	CM

J000782

163	02N10W263DLEWIN MATHES		0000942	110	C	CM
163	02N10W263GMONSANTO CHEM		0100942	110	LC	IN
163	02N10W263GMONSANTO CHEM		1000939	105	LC	IN
163	02N10W263HAM ZINC CO	WATSON	0100942	105	LC	CM
163	02N10W264DLEWIN MATHES	WATSON	0600948	101	L	CM
163	02N10W264EMONSANTO CHEM		0000947	109	C	IN
163	02N10W264FMONSANTO CHEM		1000939	105	LC	IN
163	02N10W264SMONSANTO CHEM		0200943	104	LC	IN
163	02N10W265DCERRO COPPER BRASS	LUHR	0000970	111	CI	CM
163	02N10W265DDARLING CO		0000939	70	LC	CM
163	02N10W266BMIDWEST RUBBER CO	THORPE	0300951	112	LC	CM
163	02N10W268ACLAYTON CHEM CO	ST CH DRILL	0225983M10620890		L	CM
163	02N10W268ACLAYTON CHEM CO	ST CH DRILL	0412976M04548078		L	CM
163	02N10W268AMIDWEST RUBBER	LUHR	0906969M004849115		LC	CM
163013760	2N10W27 MONSANTO CHEM	RANNEY	0000952	100	L	IN
163	02N10W27 MONSANTO CHEM	RANNEY	0801952	99	L	IN
163	02N10W27 MONSANTO CHEM	RANNEY	0826952	97	L	IN
163	02N10W273FMONSANTO CHEM	LUHR	0600959	101	L	IN
163	02N10W273HMONSANTO CHEM	RANNEY	0000952	102	I	IN
163	02N10W306BAP GROCERY	WATSON	0600946	120	L	CM
163	02N10W331FCARGILL ELEVATOR	WATSON	0600952	105	L	CM
163	02N10W333FMOBIL OIL	FUESTER	0217984M11117196		L	IN
163	02N10W34 PHILLIPS PETRO	WATSON	0000000	23	L	CM
163	02N10W34 US GOVT		0000000		L	RW
163	02N10W342FPHILLIPS PETRO	LAYNE WESTERN	0500978	100	IC	CM
163	02N10W342FPHILLIPS PETRO	RUESTER	0428979M072589102		L	CM
163	02N10W342GPHILLIPS PETRO		0000943	73	C	CM
163	02N10W345FCORPS OF ENGINEERS		1015947	102	L	CM
163	02N10W355AUP OIL AND READY CONCRETE	ST CH DRILL	1107977M068630103		L	CM

Reference Number 6

Brent Manning
Director

John W. Comeno
Deputy Director

Bruce F. Clay
Assistant Director

Illinois Department of Conservation
life and land together

LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601
[redacted]

June 24, 1991

Mr. Tim Murphy
IL EPA/LPC
P.O. Box 19276
Springfield, IL 62794-9276

Re: ILD #980606982, 000672329, 000605790, 000722074, 000665836
Sauget Sites Area #2

Dear Mr. Murphy:

In response to your June 10, 1991 request the Department has reviewed the proposed CERCLIS Sites (Sauget Area #2) in St. Clair County.

There are no sensitive areas on site, but there are several sensitive areas in the 0-¼ and ¼ to ½ mile radius of the site and along the water path, both on the Illinois and Missouri Sides.

The Resource Inventory for the Mississippi River for the 178-162 River Miles (see attached information) shows fish spawning areas, commercial fishing areas, sport fishing areas, important wildlife habitat and bald eagle use at selected areas in this reach.

Also, during September, 1989 fish contaminant sampling we observed numerous (~100) 9-12 inch sauger using this area of the river between RM. 178-176. Large numbers of channel catfish and white bass were also observed. It is likely these species also use much of the 178-162 mile reach.

Thank you for the opportunity to comment. If you need further information please advise.

Sincerely,

Richard W. Lutz

Richard W. Lutz, Supervisor
Impact Analysis Section
Division of Planning

RWL:ts

Att: sensitive areas form
Resource Inventory maps

RECEIVED
JUN 26 1991
IEPA/DLPC

J000785

DEPARTMENT OF CONSERVATION IDENTIFICATION OF
ENVIRONMENTAL SENSITIVE AREAS

ILD# 000665836
980606982
000672329
000605790
009722974

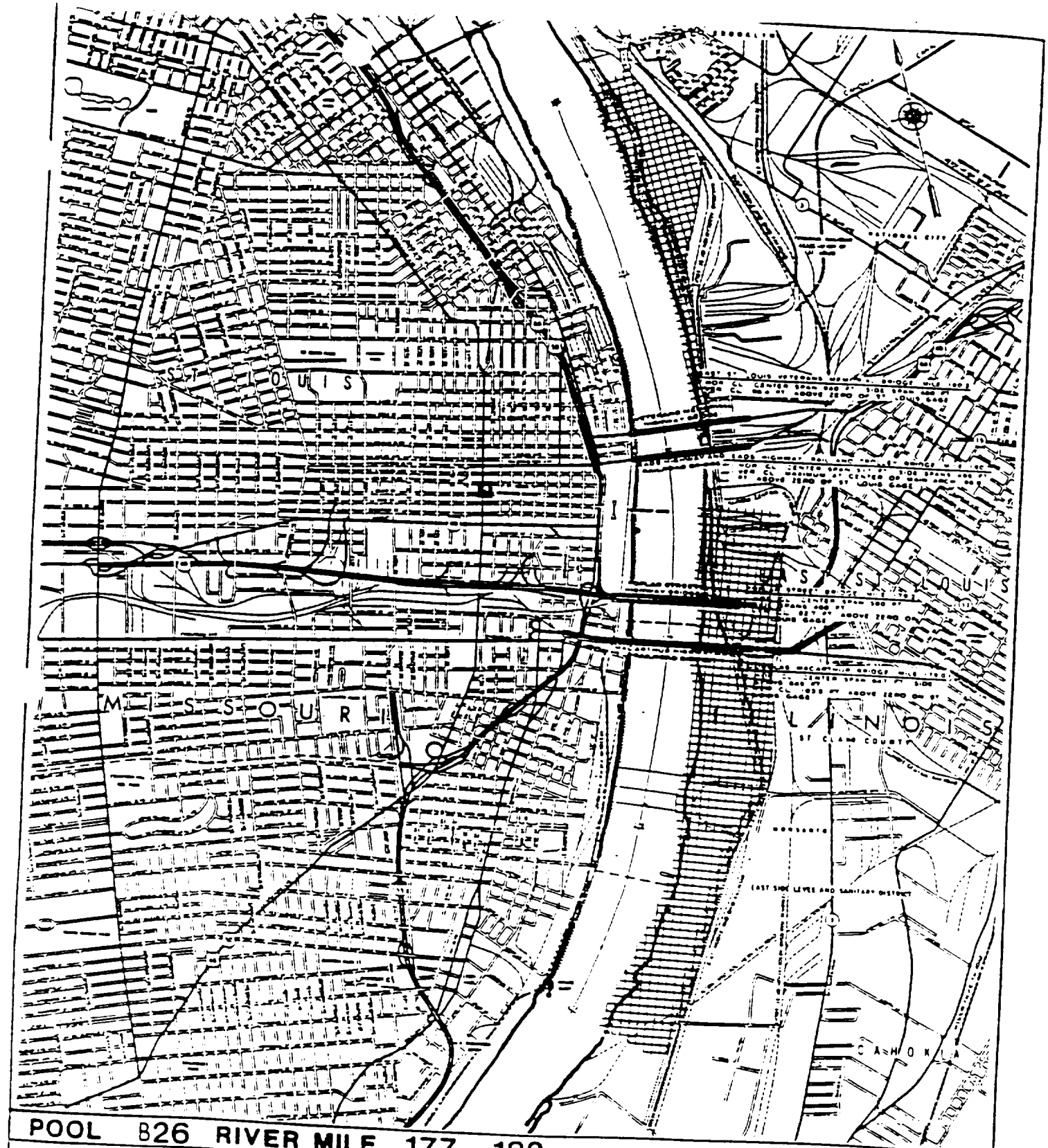
— = None in Area

TARGET DISTANCE LIMITS

SENSITIVE ENVIRONMENTS	Onsite	0-1/4 mile	1/4-1/2 mile	stream milage
I. Critical habitat for Federally designated or proposed endangered or threatened species	—	—	—	
II. Habitat known to be used by Federally designated or proposed endangered or threatened species	—	—	—	*
III. State wildlife refuge	—			
IV. Spawning areas critical for the maintenance of fish/shellfish species within a river system	—	*	*	*
V. Terrestrial areas utilized by large or dense aggregations of verbebrate animals for breeding	—	—	—	*
VI. Habitat known to be used by State designated or threatened species	—	—	—	*
VII. Habitat known to be used by a species under review as to its Federal endangered or threatened status	—	—	—	—
VIII. State lands designated for wildlife or game management	—	—	—	*
IX. State designated natural area	—	—	—	—
X. Particular areas, relatively small in size, important to the maintenance of unique biotic communities	—	—	—	—

If any of the sensitive areas identified above exist within the designated target distance limits, please put an asterisk (*) in the appropriate column.

J0007786

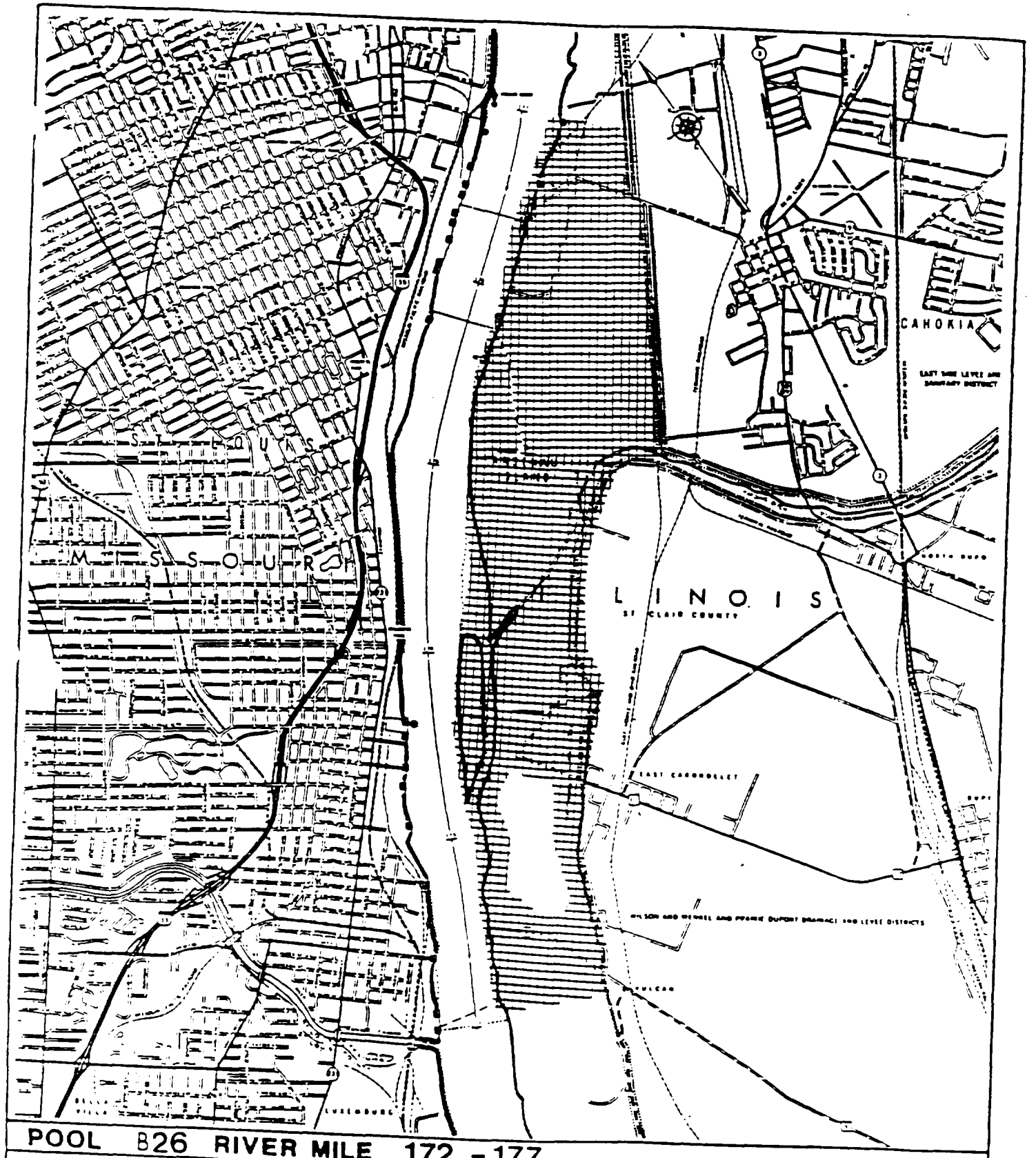


POOL B26 RIVER MILE 177 - 182

USFWS Closed area (restricted hunting)
Important wildlife habitat
Rookery
Bald eagle

WILDLIFE

J000787



POOL B26 RIVER MILE 172 - 177

USFWS Closed area (restricted hunting)
Important wildlife habitat
Rookery
Bald eagle

WILDLIFE

J000788

River Mile 177-182

Recreation

179.5(L) - The East St. Louis Access contains bank fishing and a scenic view of Gateway Arch.

179.7(R) - St. Louis City Harbor (boat ramp and marina).

179.8(R) - Jefferson National Expansion Memorial.

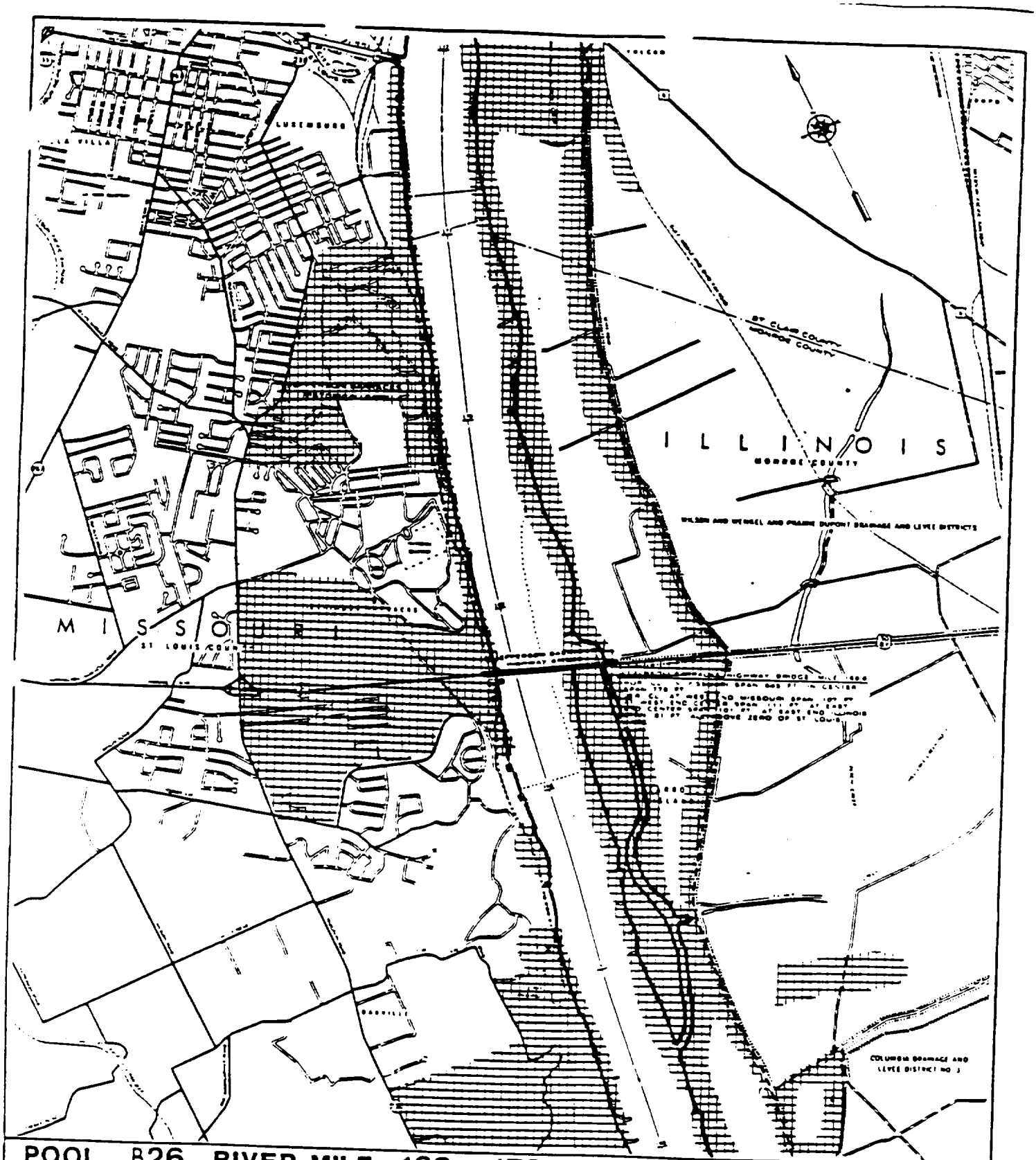
River Mile 172-177

Wildlife

172.5-176.0(L) - Important area for mourning dove.

Recreation

174.4(R) - Upper and Lower Bellerive Park.



POOL B26 RIVER MILE 166 - 172

USFWS Closed area (restricted hunting)
Important wildlife habitat
Rookery
Bald eagle

WILDLIFE

J000791

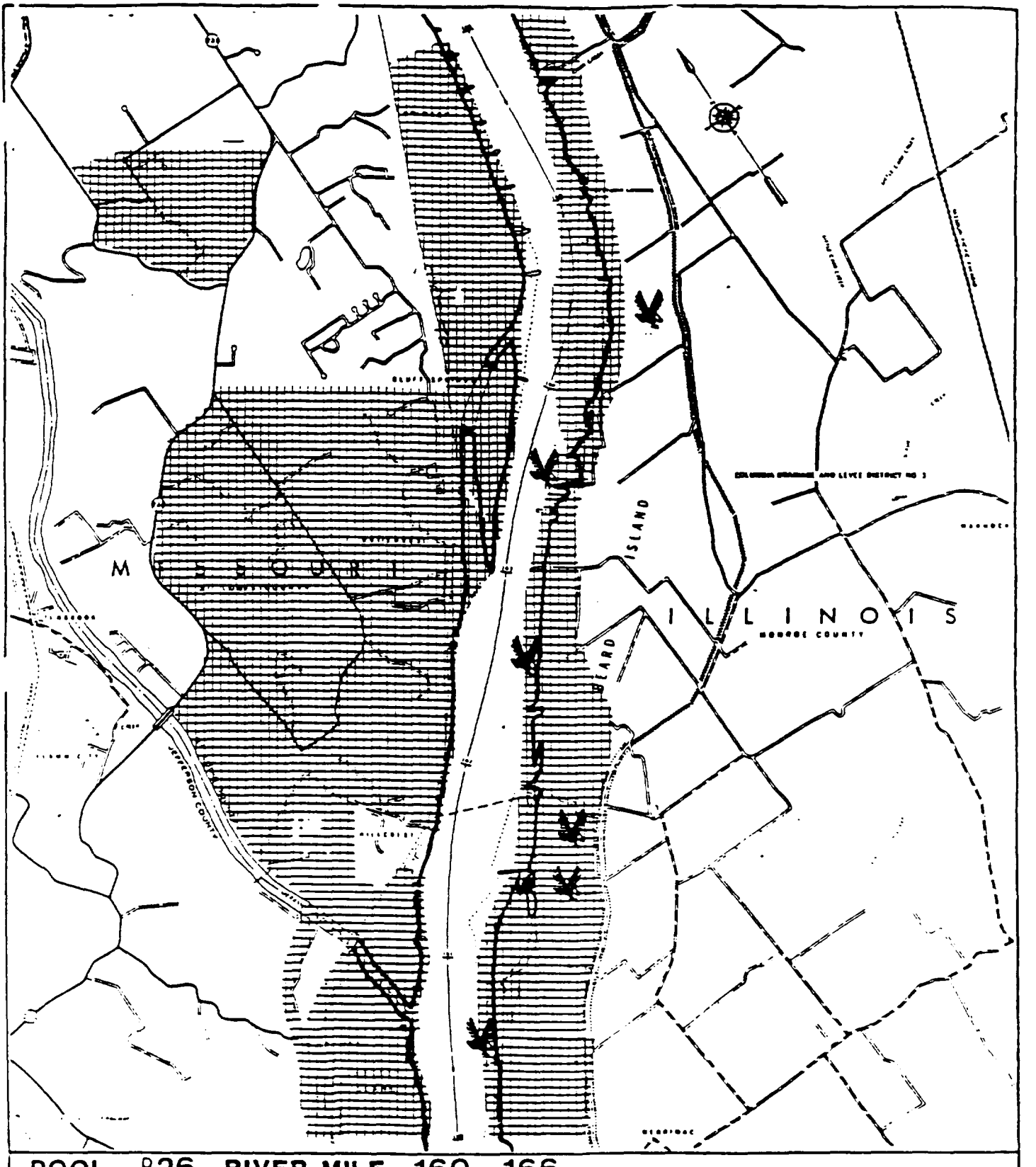
River Mile 166-172

Recreation

167.0(R) - Cliff Cave contains a picnic area, bluffs, and caves. The Cliff Cave Natural Area is also located here.

170.0-171.0(R) - Jefferson Barracks Historical Park (camping, picnic area, historic site).

171.5(R) - Black Forest Park (picnic area).



POOL B26 RIVER MILE 160 - 166

USFWS Closed area (restricted hunting)
Important wildlife habitat
Rookery
Bald eagle

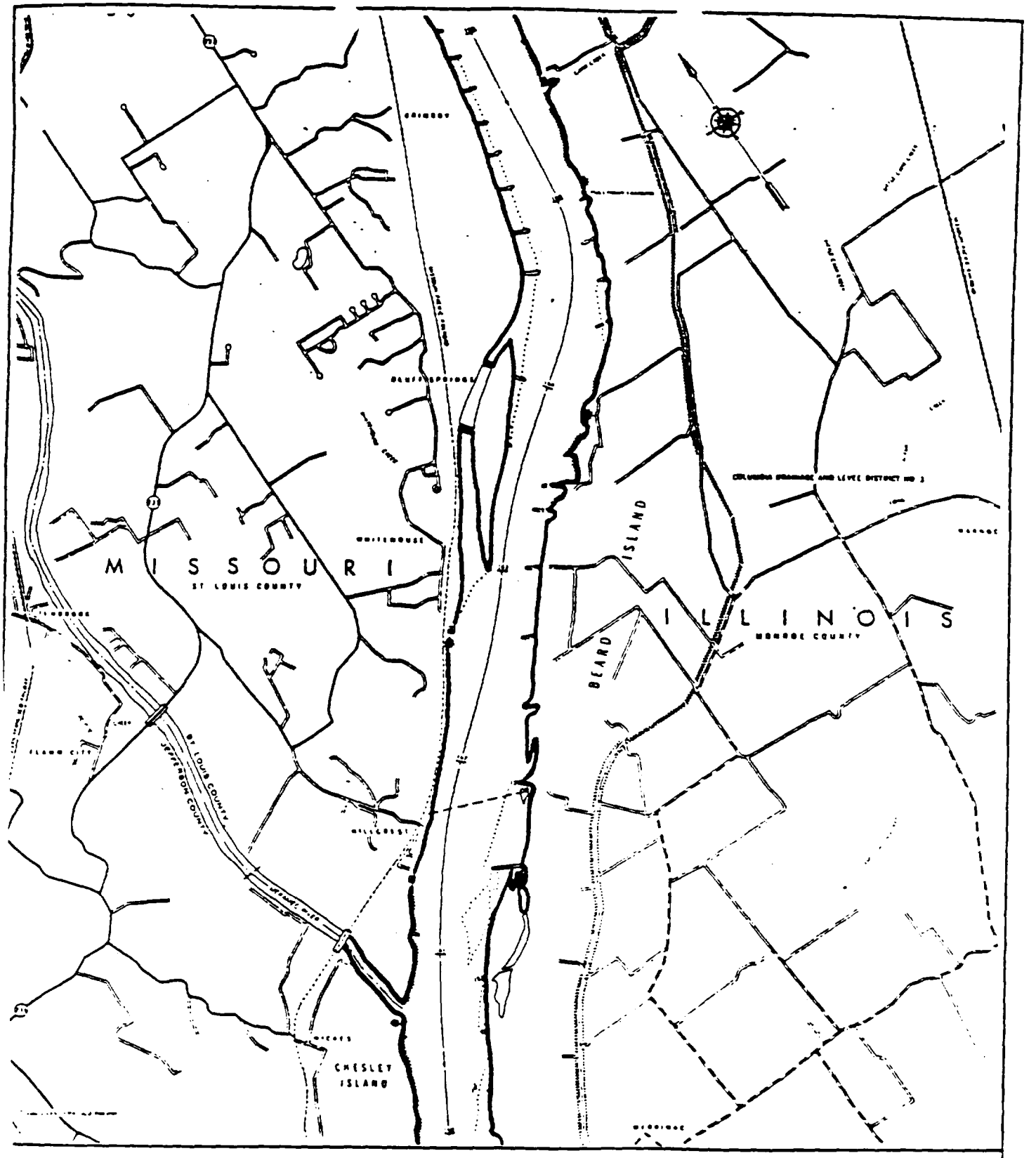
WILDLIFE

J000793

River Mile 160-166

Recreation

162.8 - Bee Tree (hiking trail and picnic area).

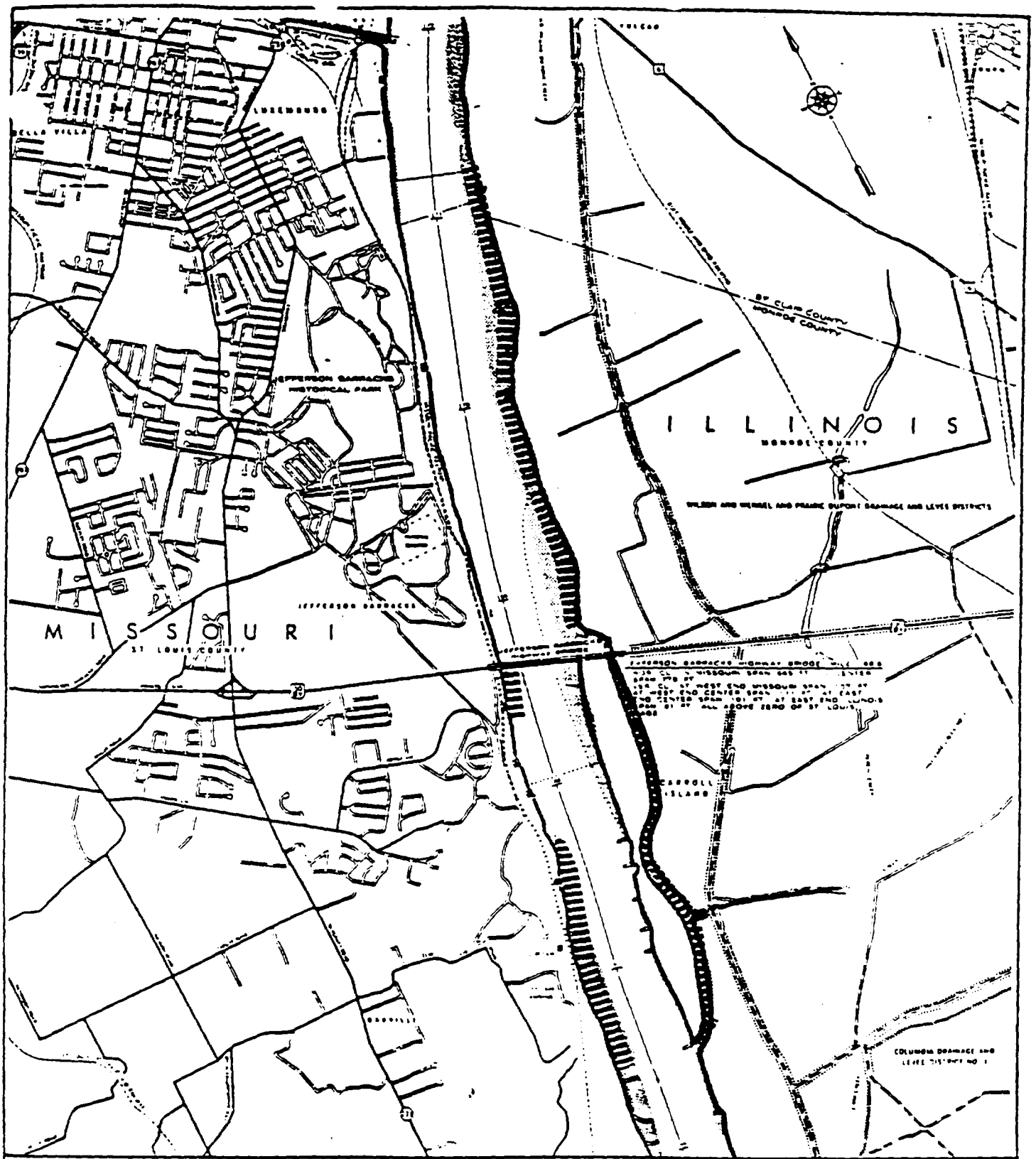


Popular sand beach
Water oriented recreation facility
Public park or recreation area
Popular water sport area
Access to side channel

Significant vista

RECREATION

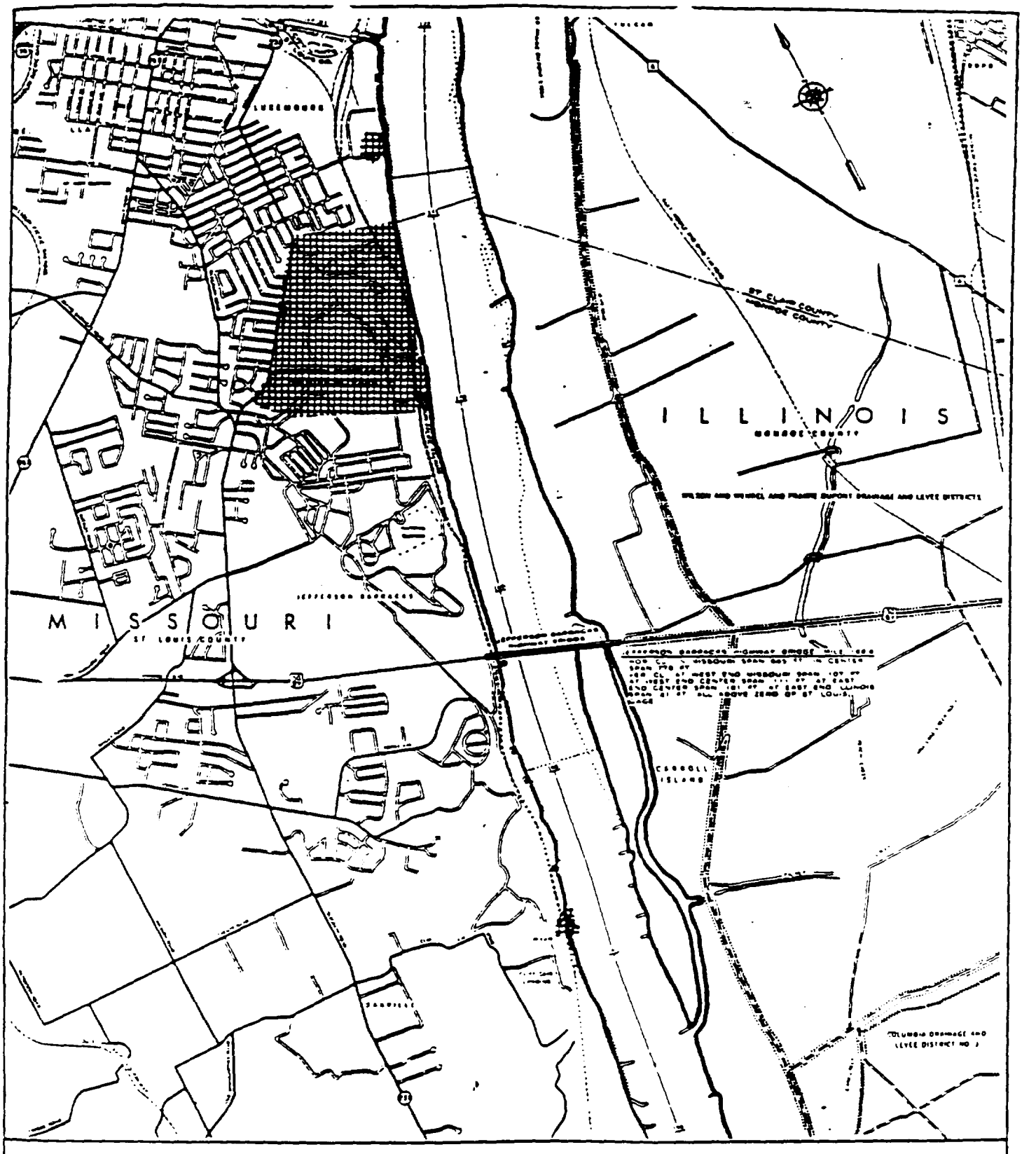
J000795



Spawning habitat
Sport fishing area
Important commercial fishing area
Mussel bed

FISHERIES

J000796

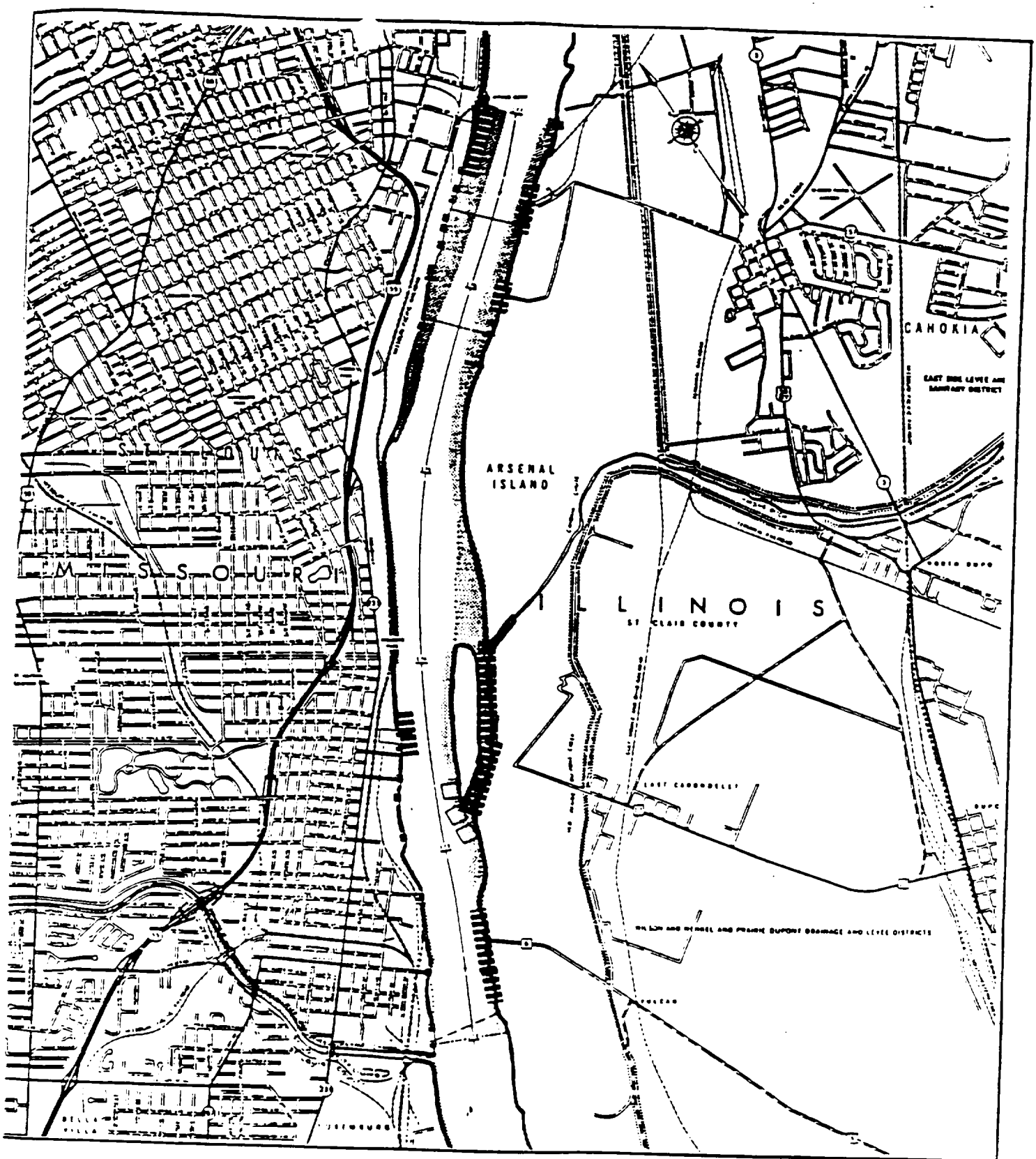


Popular sand beach
Water oriented recreation facility
Public park or recreation area
Popular water sport area
Access to side channel

Significant vista

RECREATION

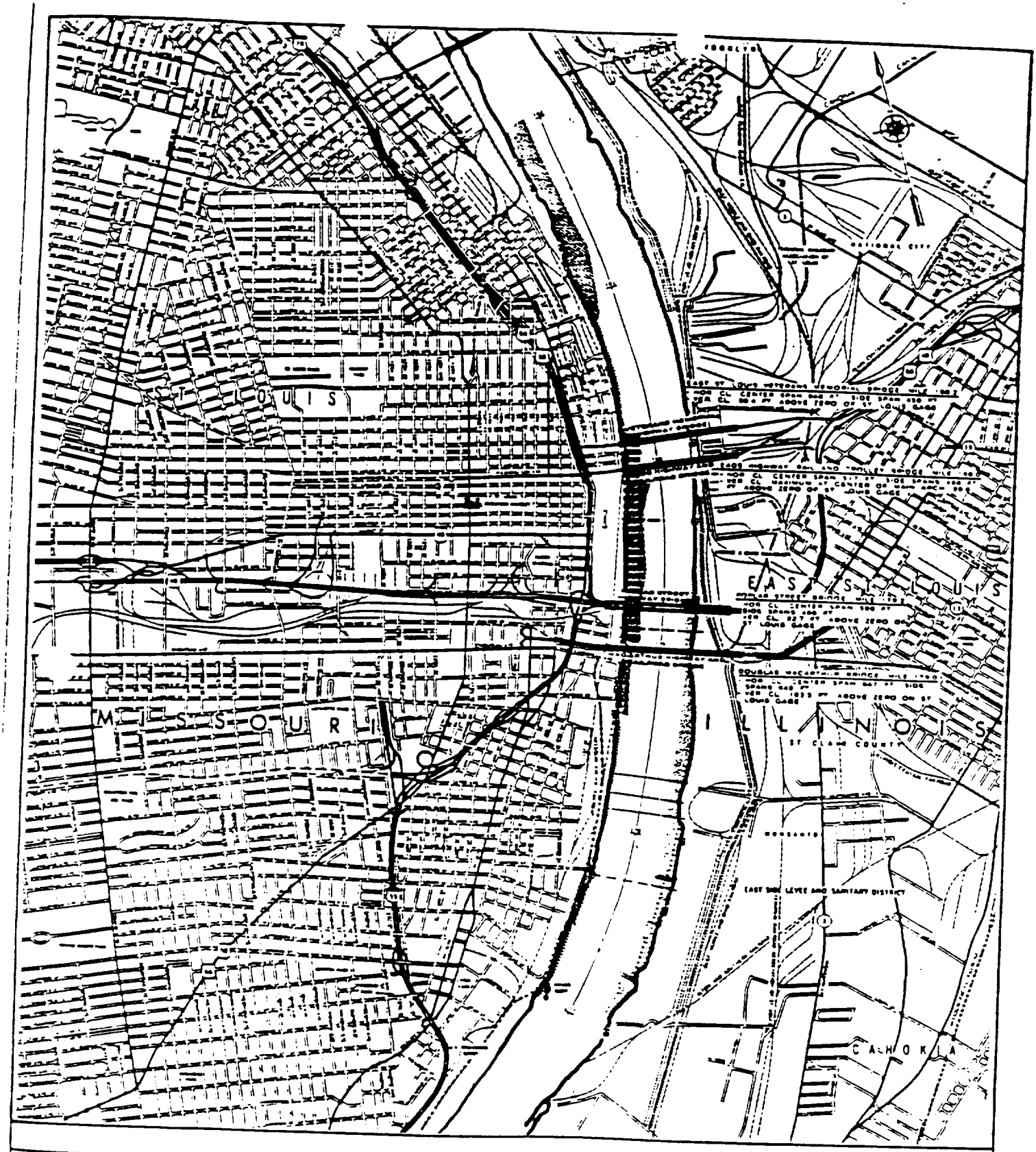
J000797



Spawning habitat
Sport fishing area
Important commercial fishing area
Mussel bed

FISHERIES

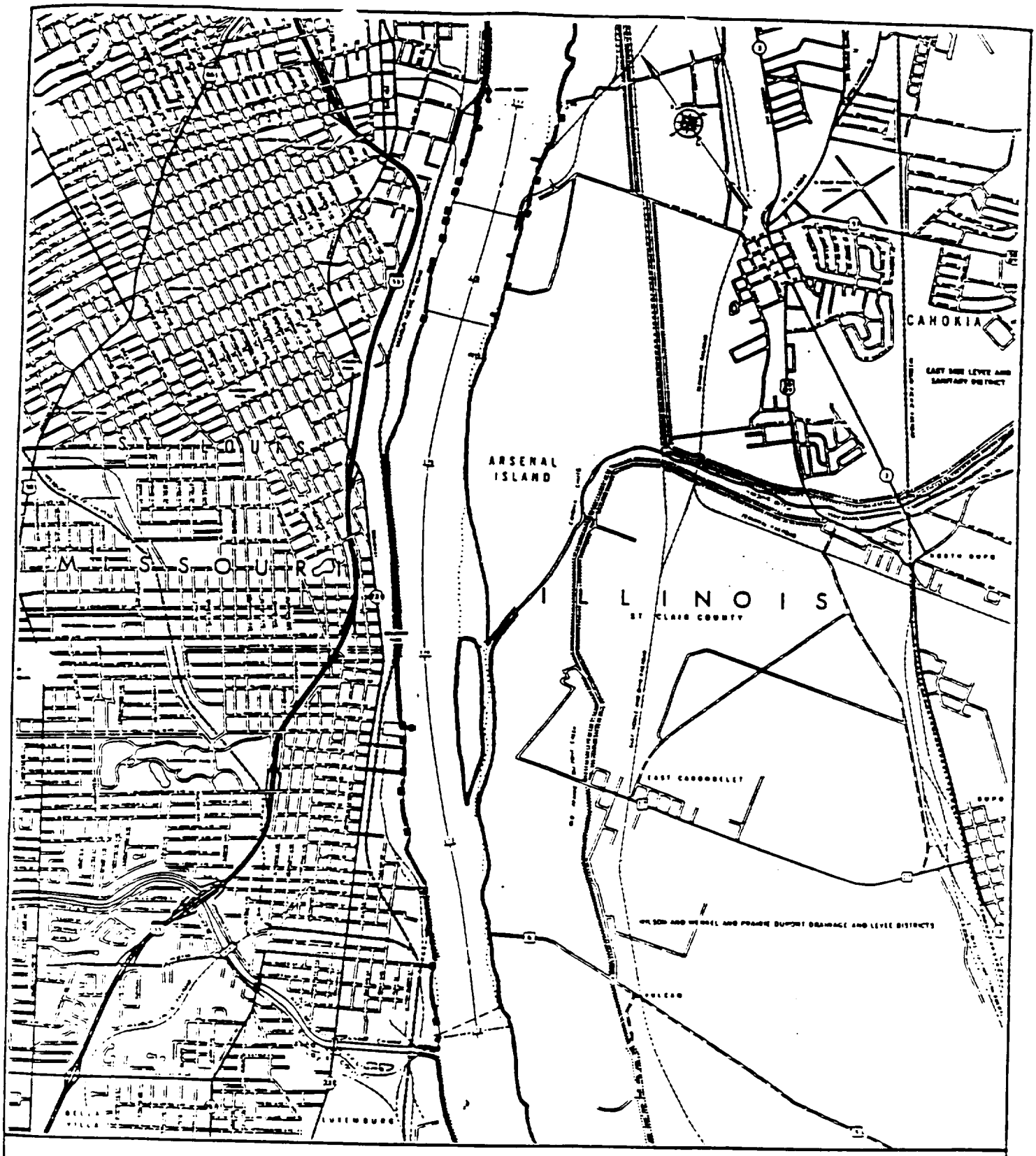
J000798



Spawning habitat
Sport fishing area
Important commercial fishing area
Mussel bed

FISHERIES

J000739

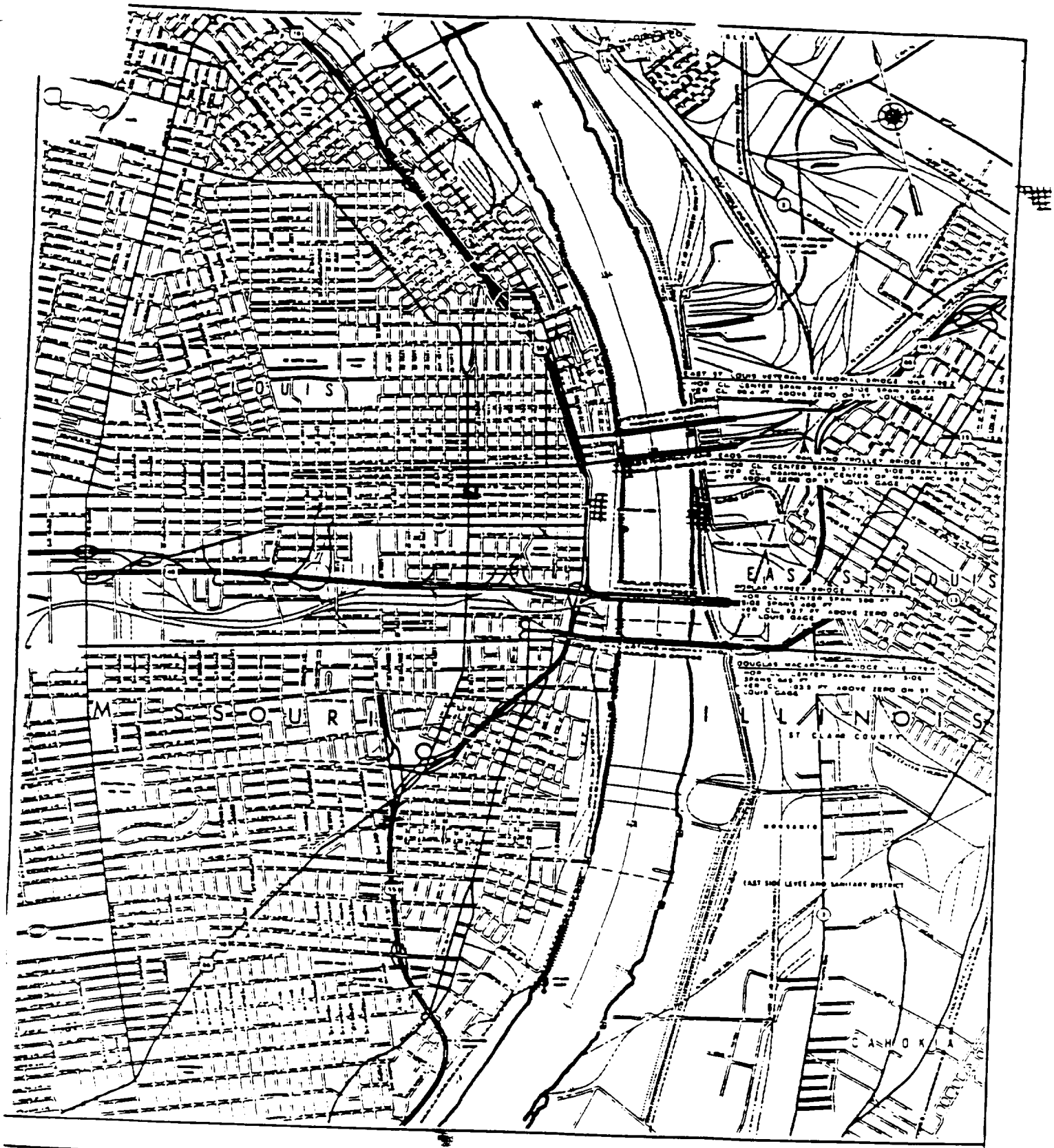


Popular sand beach
Water oriented recreation facility
Public park or recreation area
Popular water sport area
Access to side channel

Significant vista

RECREATION

J000800



Popular sand beach
Water oriented recreation facility
Public park or recreation area
Popular water sport area
Access to side channel

Significant vista

RECREATION

J000301

L1631210008 ST CLAIR
CERRO COPPER PRODUCTS
ILD984809277

FILE DIV SF/HRS

THIS FILE HAS BEEN ORGANIZED AND/OR SCREENED
IN ACCORDANCE WITH FILE MANAGEMENT CRITERIA

Date: _____ R/U Initials: _____
Reviewer Initials: _____
7-8-92 Attorney Initials: _____

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