ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

US EPA RECORDS CENTER REGION 5
1000316

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809 IEPA ID #: 1198010003

Facility Name: Chemetco, Inc. Phone #: 618/254-4381

Location: Chemetco Lane, Box 187 County: Madison

City: Hartford State: Illinois Zip Code: 62048

Region: Collinsville Inspection Date: June 07, 2000 Time: 9:30 - 13:15

Weather: Sunny and warm

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G-1/S/D

TYPE OF INSPECTION

CEI: CME/O&M: CSI: X NRR: F/U to: / / CCI: PIF: CVI: CSB: CAO: Other:

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11 / 17 / 80 (initial) / / (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08 / 15 / 80 Amended: 07 / 03 / 90 Withdrawn: / /

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03 / 03 / 93 Post-Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: 02/24/97 IAGO: 10/14/97 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / / CAFO: / / Federal Court Order: / /

Consent Decree: / / IPCB Order: / / State Court Order: 06 / 30 / 88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1994 1995 1996
S03*	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83***	No	No	Yes	No	Yes	No	N / N / N
S03****	No	No	Yes	No	Yes	No	N / N / N
SO2*****	No	No	Yes	No	Yes	No	N / N / N
							/ /
							/ /
							/ /

OWNER		OPERATOR	
Name: Chemetco, Inc.		Name:	
Address: Hwy 3, Box 187		Address:	
City: Hartford		City:	
State: Illinois	Zip Code: 62048	State:	Zip Code:
Phone #: 618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Heather Young	Environmental Manager	618/254-4381 ext 268
Marc Simmering	CDS Environmental Services, Inc.	217/522-4085
Joe Truesdale	CDS Environmental Services, Inc. - Project Manager	217/522-4085

INSPECTION PARTICIPANT(S)	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120
Phil Hudson	IEPA/OPP	618/346-5120

PREPARED BY	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
	12(d)	X	DPP	724.131	X	DSI	724.323(a)	X
	21(a)	X	DCP	724.151	X	DSI	724.326	X
	21(d)(1)&(2)	X	DCP	724.156(a)	X	DWP	724.351(a)	X
	21(e)	X	DCP	724.156(j)	X	DWP	724.351(c)	X
	21(f)(1)&(2)	X	DMR	724.173	X	DWP	724.351(d)	X
	21(p)(1)&(4)	X	DMR	724.174	X	DWP	724.351(f)	X
DOR	703.121(a)	X	DMR	724.175	X	DWP	724.354	X
DOR	703.121(b)	X	DMR	724.177	X	DWP	724.358(a)	X
DOR	703.151(a)	X	DCL	724.212(a)	X	DWP	724.358(c)	X
GGR	722.111	X	DFR	724.242	X	GLB	728.107(a)	X
GGR	722.141(b)	X	DFR	724.243	X	G/DLB	728.135	X
DGS	724.114(a)	X	DFR	724.244	X	G/DLB	728.139	X
DGS	724.114(b)	X	DFR	724.245	X		807.201	X
DGS	724.114(c)	X	DSI	724.321(c)	X		807.202	X
DGS	724.115(a)	X	DSI	724.321(g)	X		808.121(a)	X
DGS	724.115(b)	X	DSI	724.321(h)	X	DTR	724.291(a)	X

x = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
DTR	724.294(a)	X						
DTR	724.296	X						
DTR	724.296(d)	X						

X = Continuing Violation

* Zinc Oxide Bunker
** Zinc Oxide Pits, floor wash impoundment and cooling water canals
*** Newly discovered zinc oxide disposal in surface impoundment (Long Lake release)
**** Refractory brick disposal area, refractory brick remediation waste and slag fine waste piles
***** Black acid storage tank

1198010003 -- Madison County
Chemetco, Inc.
Date of Inspection: June 7, 2000
Prepared by: Chris Cahnovsky

NARRATIVE

On June 7, 2000, I conducted a Compliance Sampling Inspection at Chemetco, Inc., in Hartford, Illinois. Accompanying me on this inspection was Phil Hudson with the Illinois Environmental Protection Agency's Office of Pollution Prevention. Present for Chemetco were Heather Young, Environmental Manager, Joe Truesdale, Project Manager for CDS Environmental Service, Inc. and Marc Simmering of CDS Environmental.

The purpose of this inspection was to collect duplicate samples of the sediment in Long Lake with Chemetco. In January 2000, Chemetco submitted a closure plan titled Phase I - Material Removal and Partial Closure for the removal of zinc oxide from Long Lake and to determine the extent of contamination. The IEPA approved the closure plan on April 26, 2000. As part of the approved closure plan, Chemetco submitted a revised sampling and analysis plan (SAP). In the SAP, Chemetco proposed to collect eight sediment samples in Long Lake. At each sampling point two samples will be collected, one zero to six inches and one at six to eighteen inches.

Marc Simmering with CDS Environmental collected all of the samples for Chemetco and the Agency. The sampling equipment was decontaminated between each sample. The samples were placed in a cooler for preservation. It appears that Chemetco followed their Revised Sampling and Analysis Plan for the Zinc Oxide Spill Area dated January 19, 2000.

The Agency analyzed the samples for total calcium, magnesium, sodium, potassium, mercury, aluminum, antimony, arsenic, barium, boron, beryllium, cadmium, chromium, copper, cobalt, iron, lead, manganese, nickel, selenium, silver, strontium, thallium, vanadium and zinc. The samples were also analyzed for Toxic Characteristic Leachate Procedure (TCLP) mercury, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, nickel, selenium, silver, thallium, vanadium and zinc. Soil pH and percent solids were also analyzed.

Chemetco and the Agency used different sample numbers. Table 1 is a cross reference of the samples numbers used by Chemetco and the Agency. The sample locations are shown on Attachment 1. The results are included as Attachment 2 and summarized in Table 2 and Table 3.

The following is a summary of the sampling event. The results were compared to 35 Ill. Adm. Code 742 Tiered Approach to Corrective Action Objectives and 35 Ill. Adm. Code 721.124 Toxicity Characteristics.

Sample X101

Sample X101-6" and X101-18" (LL-1-6" and LL-1-18") were taken about three feet from where Long Lake drains under Route 3 via a culvert. Sediment was collected at a depth of 0-6" and 6-18". Sample X101-6" taken at a depth of 0-6" showed cadmium, lead and nickel levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X101-6" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X101-18" taken at a depth of 6-18" showed cadmium and lead levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X101-18" also had arsenic, beryllium and lead levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X102

Sample X102-6" and X102-18" (LL-2-6" and LL-2-18") were taken about 20 feet west of Containment Area #3. Sample X102-6" taken at a depth of 0-6" showed beryllium, cadmium, lead, nickel and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X102-6" also had arsenic, beryllium, cadmium, copper and lead levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X102-18" taken at a depth of 6-18" showed cadmium, lead and nickel levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X102-18" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X103

Sample X103-6" and X103-18" (LL-3-6" and LL-3-18") were taken in the middle of Long Lake about 50 feet from the east berm of Containment Area #3. Sample X103-6" taken at a depth of 0-6" showed lead, nickel and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X103-6" also had arsenic, beryllium, cadmium and lead levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The TCLP cadmium level of X103-6" was 1.1 mg/l. The regulatory limit for cadmium is 1.0 mg/l. The soil at this sampling location exhibits the characteristic of a hazardous waste for cadmium.

Sample X103-18" taken at a depth of 6-18" showed cadmium, lead and nickel levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X103-18" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X104

Sample X104-6" and X104-18" (LL-4-6" and LL-4-18") were taken along the south bank of Long Lake about 20 feet from Containment Area #3. Sample X104-6" taken at a depth of 0-6" showed beryllium, cadmium, lead, nickel and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X104-6" also had arsenic, beryllium and cadmium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The TCLP cadmium level of X104-6" was 2.3 mg/l. The regulatory limit for cadmium is 1.0 mg/l. The soil at this sampling location exhibits the characteristic of a hazardous waste for cadmium.

Sample X104-18" taken at a depth of 6-18" showed cadmium and lead levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X104-18" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X105

Sample X105-6" and X105-18" (LL-5-6" and LL-5-18") were taken on the north bank of Long Lake about 25 feet from Containment Area #3. Sample X105-6" taken at a depth of 0-6" showed beryllium, cadmium, lead, nickel and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X105-6" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The TCLP cadmium level of X105-6" was 0.94 mg/L. The regulatory limit for cadmium is 1.0 mg/l.

Sample X105-18" taken at a depth of 6-18" showed cadmium and lead levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X105-18" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X106

Sample X106-6" and X106-18" (LL-6-6" and LL-6-18") were taken in the middle of Long Lake about 400 feet east of Containment Area #3. This sample location is downstream from the discharge area. Sample X106-6" taken at a depth of 0-6" showed cadmium, lead, nickel and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X106-6" also had arsenic, beryllium and cadmium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The TCLP cadmium level of X106-6" was 2.2 mg/l. The regulatory limit for cadmium is 1.0 mg/l. The soil at this sampling location exhibits the characteristic of a hazardous waste for cadmium.

Sample X106-18" taken at a depth of 6-18" showed cadmium, lead and nickel levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X106-18" also had arsenic, beryllium and cadmium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X107

Sample X107-6" and Sample X107-18" (LL-7-6" and LL-7-18") were taken in the middle of Long Lake about 650 feet downstream of Containment Area #3. Sample X107-6" taken at a depth of 0-6" showed cadmium, lead, nickel and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X107-6" also had arsenic, beryllium and cadmium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The TCLP cadmium level of X107-6" was 1.2 mg/l. The regulatory limit for cadmium is 1.0 mg/l. The soil at this sampling location exhibits the characteristic of a hazardous waste for cadmium.

Sample X107-18" taken at a depth of 6-18" showed cadmium and lead levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X107-18" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Sample X108

Sample X108-6" and Sample X108-18" (LL-8-6" and LL-8-18") were taken in the middle of Long Lake about 925 feet (about 0.2 miles) downstream of Containment Area #3. Sample X108-6" taken at a depth of 0-6" showed cadmium, lead and zinc levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X108-6" also had arsenic, beryllium, cadmium and lead levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The TCLP cadmium level of X108-6" was 2.4 mg/l. The regulatory limit for cadmium is 1.0 mg/l. The soil at this sampling location exhibits the characteristic of a hazardous waste for cadmium.

Sample X108-18" taken at a depth of 6-18" showed cadmium and lead levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. Sample X108-18" also had arsenic and beryllium levels above Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

In conclusion, contamination from the illegal discharge to Long Lake has been found outside Containment Area #3. The TCLP metal results from zero to six inches show beryllium, cadmium, lead, nickel and zinc at levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route. The TCLP results from six to eighteen inches show cadmium, lead and nickel levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Soil Component of the Groundwater Ingestion Exposure Route.

The total metal results at zero to six inches show that the Agency found arsenic, beryllium, cadmium, copper and lead at levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion. The total metal results from six to eighteen inches show arsenic, beryllium, cadmium and lead levels above the Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil Ingestion.

Most significantly, half the samples exhibit the characteristics of a hazardous waste. Samples locations X103-6", X104-6", X107-6" and X108-6" had TCLP levels of cadmium above the regulatory limit of 1.0 mg/L. The sediments in Long Lake for a distance of about 950 feet downstream of the discharge area contain levels of cadmium above the regulatory limits. This sediment will need to be excavated and treated.

Table 1
Chemetco and IEPA Sample Number
Cross Reference

Chemetco's Sample Numbers	IEPA's Sample Numbers
LL-1-6"	X101-6"
LL-1-18"	X101-18"
LL-2-6"	X102-6"
LL-2-18"	X102-18"
LL-3-6"	X103-6"
LL-3-18"	X103-18"
LL-4-6"	X104-6"
LL-4-18"	X104-18"
LL-5-6"	X105-6"
LL-5-18"	X105-18"
LL-6-6"	X106-6"
LL-6-18"	X106-18"
LL-7-6"	X107-6"
LL-7-18"	X107-18"
LL-8-6"	X108-6"
LL-18-18"	X108-18"

Table 2
TCLP Soil Sample Results (mg/l)
Chemetco, Inc.
June 07, 2000

Parameter/Sample	X101-6	X101-18	X102-6	X102-18	X103-6	X103-18	X104-6	X104-18	TCLP	Tier 1[1]
Beryllium	0.001K[2]	0.001K	0.008	0.001	0.004	0.001	0.007	0.002	NA	0.004
Cadmium	0.044	0.007	0.007	0.14	1.1	0.011	2.3	0.047	1.0	0.005
Lead	0.082	1.6	0.92	0.022	0.41	0.021	0.62	0.013	5.0	0.0075
Nickel	0.11	0.042	0.65	0.30	2.8	0.13	0.73	0.047	NA	0.1
Zinc	1.6	0.50	14.0	1.1	11.0	0.27	12.0	0.15	NA	5.0

Parameter/Sample	X105-6	X105-18	X106-6	X106-18	X107-6	X107-18	X108-6	X108-18	TCLP	Tier 1
Beryllium	0.005	0.001	0.004	0.002	0.003	0.001K	0.001	0.001K	NA	0.004
Cadmium	0.94	0.01	2.2	0.53	1.2	0.48	2.4	0.015	1.0	0.005
Lead	1.0	0.011	0.12	0.01	0.051	0.008	0.10	0.008	5.0	0.0075
Nickel	0.70	0.036	1.0	0.64	0.58	0.19	0.83	0.005K	NA	0.1
Zinc	9.2	0.16	11.0	3.4	8.0	3.2	14.0	0.13	NA	5.0

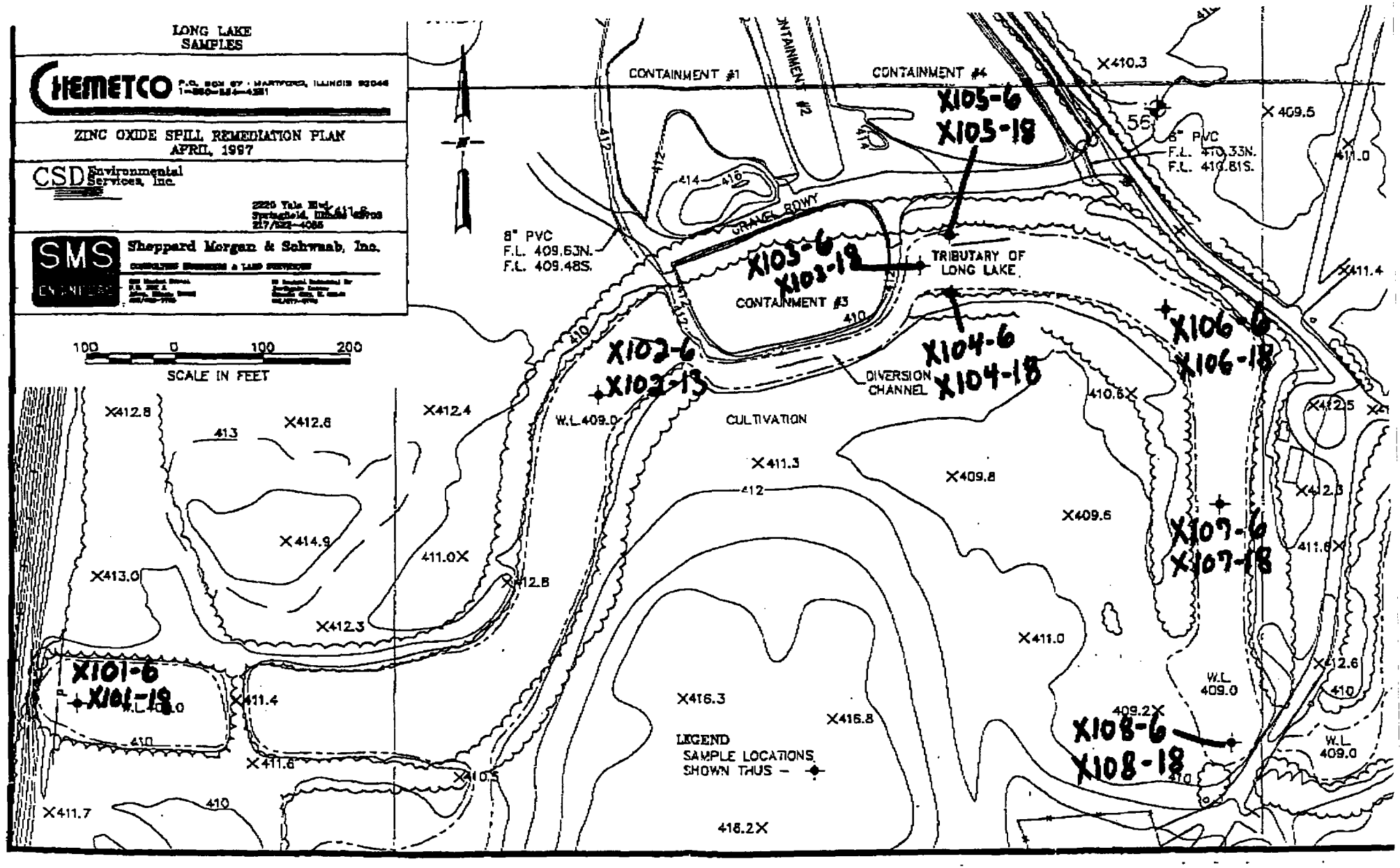
1. Tier 1 Soil Remediation Objectives for Residentail Properties - Soil Component of the Groundwater Ingestion Exposure Route Values, Class I (mg/L).
2. K = Less than value

Table 3
Total Soil Sample Results (mg/kg)
Chemetco Inc.
June 07, 2000

Parameter/Sample	X101-6	X101-18	X102-6	X102-18	X103-6	X103-18	X104-6	X104-18	Tier 1[1]
Arsenic	9.3	6.9	18	7.2	15	5.1	7.4	4.9	0.4
Beryllium	0.7	0.7	3.5	1.0	1.4	1.0	1.3	1.1	0.1
Cadmium	21	1.2	2600	76	120	6.6	81	45	78
Copper	370	28	5300	200	1300	62	300	49	2900
Lead	190	980	8000	57	420	32	260	32	400
Zinc	390	150	21,000	480	3500	150	770	240	23000

Parameter/Sample	X105-6	X105-18	X106-6	X106-18	X107-6	X107-18	X108-6	X108-18	Tier 1
Arsenic	7.5	6.5	3.3	7.0	6.7	4.3	9.9	4.0	0.4
Beryllium	1.1	1.0	1.0	1.0	1.3	1.3	1.8	1.0	0.1
Cadmium	30	17	190	110	110	56	1000	22	78
Copper	220	260	910	87	370	43	1700	50	2900
Lead	220	210	280	270	150	28	910	45	400
Zinc	440	320	1400	930	1100	590	5000	230	23000

1. Tier 1 Soil Remediation Objectives for Residential Properties - Exposure Route Specific Values for Soil - Ingestion (mg/kg)
2. K = Less than value



Attachment 1

THE ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION
RECEIPT FOR SAMPLES

Site Inventory #: 1198010003 Facility Name: [illegible]
Federal I.D. #: _____ County: [illegible]

Sample #:	Consisting of the Indicated # of Bottles	Date Collected
LL1-6 X101-6	1	6/7/00
LL1-18 X101-18	1	6/7/00
LL2-6 X102-6	1	6/7/00
LL2-18 X102-18	1	6/7/00
LL3-6 X103-6	1	6/7/00
LL3-18 X103-18	1	6/7/00
LL4-6 X104-6	1	6/7/00
LL4-18 X104-18	1	6/7/00
~~LL5~~ LL5-6 X105-6	1	6/7/00

Duplicate Samples requested: [X] Yes [ ] No

Receipt for samples listed above is hereby acknowledged.

[illegible]	[illegible]	6/7/00
Signature Owner/Operator/Agent	Title	Date
[illegible]	6/7/00	6/7/00
Agency Representative	Title	Date

COMMENTS: Total + TCLP metals + Pb, Zn

NOTE: White Copy - Division File
Yellow Copy - Regions
Pink Copy - Owner/Operator/Agent

GS:TH:lhh:AC-XI

Attachment 2

IL 532-1762
IPD 300 1276

THE ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION
RECEIPT FOR SAMPLES

Site Inventory #: 1178010003 Facility Name: [illegible]
Federal I.D. #: _____ County: Madison

Sample #:	Consisting of the Indicated # of Bottles	Date Collected
LL5-18 X105-18	1	6/7/00
LL6-6 X106-6	1	6/7/00
LL6-18 X106-18	1	6/7/00
LL7-6 X107-6	1	6/7/00
LL7-18 X107-18	1	6/7/00
LL8-6 X108-6	1	6/7/00
LL8-18 X108-18	1	6/7/00

Duplicate Samples requested: [X] Yes [ ] No

Receipt for samples listed above is hereby acknowledged.

Signature Owner/Operator/Agent	Title	Date
[signature]	Env. Manager	6/7/00
Agency Representative	Title	Date
[signature]	EPS	6/7/00

COMMENTS: Total & TCLP metals + Cu, Zn

NOTE: White Copy - Division File
Yellow Copy - Regions
Pink Copy - Owner/Operator/Agent

GS:TH:lhh:AC-XI

Attachment 2

IL 532-1752

Illinois Environmental Protection Agency
DLPC/FOS Chain of Custody Document
(Analysis Request and Receipt for Samples)
Page 1 of 2

Fund [10]	LPC # [17]	County	Locality
LP41	119801 0003	Madison	Hartford
Section [14] F	USEPA ID# ILD048843809	Site Name [19] Chemetco, Inc.	Groundwater File

RECEIVED IEPA JUL 20 2000 COLLINSVILLE OFFICE

Project Manager's Name/Address/Phone #: Chris Cahnovsky, c/o IEPA, 2009 Mail St., Collinsville, 618 346-5120

IEPA Laboratory (circle one): 2125 S. 1st Street, Champaign, IL 61820, 217/278-5858 — 825 N. Rutledge Street, Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address and Phone #:

Delivered by [23]: UPS

Case # (if applicable):

Lab Sample # [01]	Parameter Group [03] & Other Analytes: TOTL2	TCLP2						[15] Field Sample #	HOLD (y/n)	Collection Information: Split (y/n)	# Bottles	VOL (ml)	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	Collector or Laboratory Comments	[24]	Seal Intact? (y/n)
B009138	X	X						X101-6	Y	Y	1	16	06/07/200	10:20	10:31	CNC	LL1-6	Please Report Cu + Zn	
B009139	X	X						X101-18	Y	Y	1	16	06/07/200	10:20	10:37	CNC	LL1-18	Cu + Zn	
B009140	X	X						X102-6	Y	Y	1	16	06/07/2000	11:00	11:15	CNC	LL2-6	Cu + Zn	
B009141	X	X						X102-18	Y	Y	1	16	06/07/2000	11:00	11:08	CNC	LL2-18	Cu + Zn	
B009142	X	X						X103-6	Y	Y	1	16	06/07/2000	11:36	11:46	CNC	LL3-6	Cu + Zn	
B009143	X	X						X103-18	Y	Y	1	16	06/07/2000	11:36	11:39	CNC	LL3-18	Cu + Zn	
B009144	X	X						X104-6	Y	Y	1	16	06/07/2000	11:50	12:06	CNC	LL4-6	Cu + Zn	
B009145	X	X						X104-18	Y	Y	1	16	06/07/2000	11:50	11:59	CNC	LL4-18	Cu + Zn	
B009146	X	X						X105-6	Y	Y	1	16	06/07/2000	12:08	12:49	CNC	LL5-6	Cu + Zn	
009147	X	X						X105-18	Y	Y	1	16	06/07/2000	12:08	12:49	CNC	LL5-18	Cu + Zn	

Receipt for Samples: Collection of the above-listed sample(s) at the indicated site is hereby acknowledged. Split(s) Offered? y / n Accepted? y / n

Signature/Title of Facility Representative, Date

Samplers (printed names and signatures): Chris Cahnovsky

LEGAL HOLD

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).

Sealer's Signature & Initials	Date	Time (24 hr clk)
CNC	06/12/00	10:30

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by (Sealer)	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
	06/12/00	16:00	UPS	06/12/00	16:00

☐ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times or locked in a secured area.

Printed Name, Signature, and Initials [07]: Pat Dixon — Date [05]: JUN 13 2000 — Time [06] (24 hr clk) — Sample Temp. (°C)

Supervisor releasing results (signature): M. Mui — Date: 7/17/00

532-2311
PC 525
Rev. 5/2000

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND / FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #:	ILD048843809		**IEPA ID #:**	1198010003	
Facility Name:	Chemetco, Inc.			**Phone #:**	618/254-4381
Location	Chemetco Lane, Box 187			**County:**	Madison
City:	Hartford	**State:**	Illinois	**Zip Code:**	62048
Region:	6 - Collinsville	**Inspection Date:**	March 6, 7 & 8, 2000	**Time:**	0900-1530
Weather:					

TYPE OF FACILITY

Notified As:	G/TSD	**Regulated As:**	G-1/S/D

TYPE OF INSPECTION

CEI:	☐	**CME/O&M:**	☐	**CSI:**	☒	**NRR:**	☐	**CCI:**	☐	**PIF:**	☐	**CVI:**	☐	**CSE:**	☐	**CAO:**	☐
FUI to:		**Other:**															

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date:	11/17/80 **(initial)**		**(subsequent)**

PART A PERMIT INFORMATION (EPA 3510-3 OR EPA 8700-23)

Part A Date:	08/15/80	**Amended:**	07/03/90	**Withdrawn:**	

PART B PERMIT INFORMATION

(Check one if applicable) Application Submitted?	☐	**Permit Issued?**	☒	**Date:**	03/03/99 POST-CLOSURE

ACTIVE ENFORCEMENT

Date facility referred to:	**USEPA:**	02/24/97	**IAGO:**	**10/14/97**	**County State's Attorney:**	

ACTIVE ENFORCEMENT ORDERS

CACO:	**CAFO:**	**Federal Court Order:**	
Consent Decree:	**IPCB Order:**	**State Court Order:**	06/30/88

TSD Facility Activity Summary

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during inspection?	Exempt per 35 IAC Sec:	On Annual Report:		
							1994	1995	1996
S03*	☒	☒	☒	☐	☒	NO	N	N	N
D83**	☒	☒	☒	☐	☒	NO	N	N	N
D83**	☒	☒	☒	☐	☒	NO	N	N	N
D83**	☒	☒	☒	☐	☒	NO	N	N	N
D83***	☐	☐	☒	☐	☒	NO	N	N	N
S03****	☐	☐	☒	☐	☒	NO	N	N	N
S02*****	☐	☐	☒	☐	☒	NO	N	N	N
	☐	☐	☐	☐	☐				
	☐	☐	☐	☐	☐				
	☐	☐	☐	☐	☐				

Owner				Operator			
Name:	Chemetco, Inc.			**Name:**			
Address:	Hwy 3 Box 187			**Address:**			
City:	Hartford			**City:**			
State:	IL	**Zip Code:**	62048	**State:**		**Zip Code:**	
Phone #:	618/254-4381			**Phone #:**			

Person(s) Interviewed	Title	Phone #
Heather Young	**Environmental Manager**	618/254-4381
Brian Gibson	**Environmental Analysis**	314/921-4488
Billy Stork	**Environmental Analysis**	314/921-4488

Inspection Participants	Agency/Bureau	Phone #
Gina Search	**IEPA/BOL**	618/346-5120

***Report prepared by this person.**

RCRA TSD Facility Violations Checklist

Section	Area	V	C	R	Section	Area	V	C	R	Section	Area	V	C	R
725.987(b)(2)	DOR				725.988(c)(7)	DOR				725.1101(c)(1)(C)	DOR			
725.987(c)(1)	DOR				725.989(a)	DOR				725.1101(c)(1)(D)	DOR			
725.987(c)(2)	DOR				725.989(b)	DOR				725.1101(c)(2)	DOR			
725.987(c)(3)	DOR				725.990(a)	DOR				725.1101(c)(3)	DOR			
725.987(c)(4)	DOR				725.990(b)(1)	DOR				725.1101(c)(3)(A)	DOR			
725.987(c)(5)	DOR				725.990(b)(2)	DOR				725.1101(d)	DOR			
725.987(d)(1)	DOR				725.990(c)	DOR				725.1102	DOR			
725.987(d)(2)	DOR				725.990(d)	DOR				***725.Subpart EE***				
725.987(d)(3)	DOR				725.990(e)(1)(A)	DOR				725.1201(a)	DOR			
725.987(d)(4)	DOR				725.990(e)(1)(B)	DOR				725.1201(b)(1)	DOR			
725.987(e)(1)	DOR				725.990(e)(1)(C)	DOR				725.1201(b)(2)	DOR			
725.987(e)(2)	DOR				725.990(e)(1)(D)	DOR				725.1201(b)(3)	DOR			
725.987(f)	DOR				725.990(e)(1)(E)	DOR				725.1201(c)	DOR			
725.987(g)	DOR				725.990(e)(1)(F)	DOR				725.1201(d)	DOR			
725.987(h)	DOR				725.990(e)(1)(G)	DOR				725.1201(e)	DOR			
725.988(b)(1)	DOR				725.990(f)	DOR				725.1201(f)	DOR			
725.988(b)(2)	DOR				725.990(g)	DOR				725.1202	DOR			
725.988(b)(3)	DOR				725.990(i)	DOR				***Additional Requirements***				
725.988(b)(4)	DOR				725.990(j)(1)	DOR				21(f)(1)+(2)			X	
725.988(c)(1)	DOR				725.990(j)(2)	DOR				725.211			X	
725.988(c)(2)	DOR				***725.Subpart DD***					725.213(b)			X	
725.988(c)(2)(A)	DOR				725.1101(a)(1)	DOR				12a			X	
725.988(c)(2)(D)	DOR				725.1101(a)(2)	DOR				12d			X	
725.988(c)(2)(E)	DOR				725.1101(a)(3)	DOR				620.115			X	
725.988(c)(2)(F)	DOR				725.1101(a)(4)	DOR				620.301(a)			X	
725.988(c)(3)	DOR				725.1101(b)(1)	DOR				620.405			X	
725.988(c)(3)(A)	DOR				725.1101(b)(2)	DOR				620.410(a)			X	
725.988(c)(3)(B)	DOR				725.1101(b)(2)(A)	DOR				620.410(d)			X	
725.988(c)(5)(A)	DOR				725.1101(b)(2)(B)	DOR								
725.988(c)(5)(B)	DOR				725.1101(b)(3)	DOR								
725.988(c)(5)(C)	DOR				725.1101(b)(3)(B)	DOR								
725.988(c)(5)(D)	DOR				725.1101(b)(3)(C)	DOR								
725.988(c)(5)(E)	DOR				725.1101(c)(1)(A)	DOR								
725.988(c)(6)	DOR				725.1101(c)(1)(B)	DOR								

V = Violation Observed; C = Continuing; R = Resolved **NA = Not Applicable; NE = Not Evaluated**

RCRA TSD Facility Violations Checklist

Section	Area	V	C	R	Section	Area	V	C	R	Section	Area	V	C	R
725.543(j)	DOR				*725.Subpart BB*					725.964(i)	DOR			
725.543(k)	DOR				725.950(c)	DOR				725.964(j)	DOR			
725.543(l)	DOR				725.950(d)	DOR				725.964(k)	DOR			
725.543(m)	DOR				725.952(a)	DOR				725.964(l)	DOR			
725.543(n)	DOR				725.952(c)	DOR				725.964(m)	DOR			
725.544(a)	DOR				725.953(a)	DOR				*725.Subpart CC*				
725.544(b)	DOR				725.953(b)	DOR				725.982(a)(1)	DOR			
725.545	DOR				725.953(c)	DOR				725.982(b)(1)	DOR			
725.Subpart AA					725.953(d)	DOR				725.982(c)	DOR			
725.932(a)	DOR				725.953(e)	DOR				725.983(b)	DOR			
725.932(b)	DOR				725.953(g)	DOR				725.984(a)(1)	DOR			
725.932(c)	DOR				725.954(a)	DOR				725.984(a)(2)	DOR			
725.932(d)	DOR				725.954(b)	DOR				725.984(b)(1)	DOR			
725.933(a)	DOR				725.955(a)	DOR				725.984(b)(2)	DOR			
725.933(b)	DOR				725.955(b)	DOR				725.984(c)(1)	DOR			
725.933(c)	DOR				725.956(a)	DOR				725.984(c)(2)	DOR			
725.933(d)	DOR				725.956(b)	DOR				725.984(d)	DOR			
725.933(e)	DOR				725.957(a)	DOR				725.985(b)	DOR			
725.933(f)	DOR				725.957(c)	DOR				725.985(c)(1)	DOR			
725.933(g)	DOR				725.957(d)	DOR				725.985(c)(2)	DOR			
725.933(h)	DOR				725.958(a)	DOR				725.985(c)(3)	DOR			
725.933(i)	DOR				725.958(c)	DOR				725.985(c)(4)	DOR			
725.933(j)	DOR				725.959	DOR				725.985(d)	DOR			
725.933(k)	DOR				725.960	DOR				725.985(j)	DOR			
725.933(l)	DOR				725.961	DOR				725.985(k)	DOR			
725.933(m)	DOR				725.962	DOR				725.986(b)	DOR			
725.933(n)	DOR				725.963	DOR				725.986(c)(1)	DOR			
725.934	DOR				725.964(b)	DOR				725.986(c)(2)	DOR			
725.935(a)	DOR				725.964(c)	DOR				725.986(c)(3)	DOR			
725.935(b)	DOR				725.964(d)	DOR				725.986(d)	DOR			
725.935(c)	DOR				725.964(e)	DOR				725.986(e)	DOR			
725.935(d)	DOR				725.964(f)	DOR				725.986(f)	DOR			
725.935(e)	DOR				725.964(g)	DOR				725.986(g)	DOR			
725.935(f)	DOR				725.964(h)	DOR				725.987(b)(1)	DOR			

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RCRA TSD Facility Violations Checklist

Section	Area	V	C	R	Section	Area	V	C	R	Section	Area	V	C	R
725.297(b)	DTR				***725.Subpart M***					725.447	DIN			
725.297(c)	DTR				725.372	DLT				725.451	DIN			
725.298(a)	DTR				725.373	DLT				725.452	DIN			
725.298(b)	DTR				725.376	DLT				***725.Subpart P***				
725.299	DTR				725.378	DLT				725.473	DTT			
725.300	DTR				725.379	DLT				725.475	DTT			
725.302	DTR				725.380	DLT				725.477	DTT			
725.Subpart K					725.381	DLT				725.481	DTT			
725.321(a)	DSI				725.382	DLT				725.482	DTT			
725.321(b)	DSI				***725.Subpart N***					725.483	DTT			
725.321(f)	DSI				725.401	DLF				***725.Subpart Q***				
725.321(h)	DSI				725.402(a)	DLF				725.501	DCH			
725.322(a)/(b)	DSI				725.402(c)	DLF				725.502	DCH			
725.322(c)	DSI				725.403(a)	DLF				725.503	DCH			
725.323(a)	DSI				725.403(b)	DLF				725.504	DCH			
725.323(b)	DSI				725.403(c)	DLF				725.505	DCH			
725.323(c)	DSI				725.404(a)	DLF				725.506	DCH			
725.324	DSI				725.404(b)	DLF				***725.Subpart R***				
725.325	DSI				725.409	DLF				725.530	DOR			
725.326	DSI				725.410(a)	DLF				***725.Subpart W***				
725.328	DSI				725.410(b)	DLF				725.541(a)	DOR			
725.329	DSI				725.412	DLF				725.541(b)	DOR			
725.330	DSI				725.413	DLF				725.541(c)	DOR			
725.331	DSI				725.414(b)	DLF				725.541(d)	DOR			
725.Subpart L					725.414(c)	DLF				725.542	DOR			
725.351	DWP				725.414(d)	DLF				725.543(a)	DOR			
725.352(a)	DWP				725.414(e)	DLF				725.543(b)	DOR			
725.352(b)	DWP				725.414(f)	DLF				725.543(c)	DOR			
725.353(a)	DWP				725.414(g)	DLF				725.543(d)	DOR			
725.353(b)	DWP				725.415	DLF				725.543(e)	DOR			
725.354	DWP				725.416	DLF				725.543(f)	DOR			
725.356	DWP				***725.Subpart O***					725.543(g)	DOR			
725.357	DWP				725.441	DIN				725.543(h)	DOR			
725.358	DWP				725.445	DIN				725.543(i)	DOR			

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RCRA TSD Facility Violations Checklist

Section	Area	V	C	R	Section	Area	V	C	R	Section	Area	V	C	R
Part 703					725.116(e)	DGS				***725.Subpart H***				
703.Subpart B					725.117(a)	DGS				725.242(a)	DFR			
703.121(a)	DOR		X		725.117(b)	DGS				725.244(a)	DFR			
703.121(b)	DOR				***725.Subpart C***					***725.Subpart I***				
703.Subpart C					725.131	DPP				725.271	DMC			
703.150(a)	DOR				725.132	DPP				725.272	DMC			
703.151(a)	DOR				725.133	DPP				725.273(a)	DMC			
703.152(a)(1)	DOR				725.134	DPP				725.273(b)	DMC			
703.152(a)(2)	DOR				725.135	DPP				725.274	DMC			
703.154(a)	DOR				725.137	DPP				725.276	DMC			
703.154(b)	DOR				***725.Subpart D***					725.277	DMC			
703.154(c)	DOR				725.151(a)	DCP				725.278	DMC			
703.155	DOR				725.151(b)	DCP				***725.Subpart J***				
703.301(b)(1)	DOR				725.152(a)	DCP				725.291(a)	DTR			
Part 725					725.152(c)	DCP				725.291(b)	DTR			
725.Subpart A					725.152(d)	DCP				725.291(c)	DTR			
725.101(d)	DGS				725.152(e)	DCP				725.292(a)	DTR			
725.Subpart B					725.152(f)	DCP				725.292(g)	DTR			
725.111	DGS				725.153	DCP				725.293(a)	DTR			
725.112(a)	DGS				725.154	DCP				725.293(b)	DTR			
725.112(b)	DGS				725.155	DCP				725.293(c)	DTR			
725.113(a)	DGS				725.156	DCP				725.293(d)	DTR			
725.113(b)	DGS				***725.Subpart E***					725.293(e)	DTR			
725.113(c)	DGS				725.171(a)	DMR				725.293(f)	DTR			
724.114(a)/(b)	DGS				725.171(d)	DMR				725.293(i)	DTR			
725.114(c)	DGS				725.172(d)	DMR				725.294(a)	DTR			
725.115(a)	DGS				725.173	DMR				725.294(b)	DTR			
725.115(b)	DGS				725.174(a)	DMR				725.295(a)	DTR			
725.115(c)	DGS				725.175	DMR				725.295(b)	DTR			
725.115(d)	DGS				725.176	DMR				725.295(c)	DTR			
725.116(a)	DGS				725.177	DMR				725.296	DTR			
725.116(b)	DGS				***725.Subpart G***					725.296(d)	DTR			
725.116(c)	DGS				725.212(a)	DCL				725.296(e)	DTR			
725.116(d)	DGS				725.218(a)	DCL				725.297(a)	DTR			

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State of Illinois
ENVIRONMENTAL PROTECTION AGENCY **MEMORANDUM**

DATE: January 11, 20001

TO: Division File

FROM: Gina Search, P.G.

SUBJECT: 1198010003 – Madison County
Chemetco, Inc.
FOS

This report documents a sampling inspection conducted on March 6, 7 & 8, 2000 to collect groundwater samples from monitor wells located on Chemetco, Inc. property. The Agency split samples with Chemetco on all wells listed in their required sampling list. The Agency also collected samples from the on-site monitoring wells that Chemetco uses only for groundwater measurements. These samples were taken to verify pH levels and confirm contaminant concentrations present in the groundwater.

Present for the March 6, 7 & 8, 2000 groundwater sample collection activities were: Gina Search, IEPA, Heather Young, Environmental Manager with Chemetco and Brian Gibson and Billy Stork with Environmental Analysis. Paula Stein and Scott Kaufman, IEPA GAU/Permits staff were present on March 7, 2000 to receive sampling training and assist in the sample collection activities. Terri Myers, IEPA GAU Manager was present on March 7, 2000 to assist with the training activities.

Site Setting
The Chemetco facility is located on Route 3 south of Hartford within a primarily agricultural, light residential area. The plant is bounded on the west by major, heavily traveled rail and highway routes and on the south by a limited use secondary road. The Mississippi River is approximately one mile east of the plant and Long Lake is directly south of the operation.

Sampling Activities
Chemetco collected their first quarter groundwater samples during this round of sampling. The sampling activities were conducted under the guidelines provided in the interim-status sampling and analysis plan contained in Chemetco's Closure Plan dated January 1991. During this round of sampling, Chemetco analyzed for Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Tin, Zinc, pH, Specific Conductance, TOC and TOX. The inorganic parameters are analyzed for totals rather than dissolved constituents.

Mr. Brian Gibson and Mr. Billy Stork with Environmental Analysis collected the samples. For several years Chemetco has contracted with Environmental Analysis to complete this work. I have observed their sampling protocol several times and their work has been in compliance with their approved sampling and analysis plan.

Before groundwater samples were collected, pH measurements were taken at each well. These measurements were taken in the field due to the incomparable results obtained from the Agency's laboratory pH data and Chemetco's field pH data. The Agency's pH meter was not functioning properly; therefore we relied on pH paper and Environmental Analysis's meter to provide these measurements. Mr. Gibson stated that the pH meter was calibrated for this sampling trip. The following table is a comparison of the field pH measurement data taken with pH paper and the pH meter.

GROUNDWATER pH LEVELS
COLLECTED MARCH 6, 7 & 8, 2000

WELL	EPA pH Level (pH paper)	Environmental Analysis pH level (pH meter)
G127	6	6.22
G116	5	5.54
G128	6	6.4
G129	6	6.7
G119	6	6.77
G141	6	6.78
G156	6	6.7
G155	7	6.81
G125	7	6.86
G144R	7	7.24
G131A	4	4.81
G152	7	6.61
G151	7	6.97
G154	4	4.01
G112	4	4.25
G150	7	6.67
G153	7	7.10
G149	6	7.05
G126	7	7.29
G147R	7	6.70
G136R	7	6.83
G137R	7	6.77
G138R	6	7.05
G139R	7	7.10
G148R	7	7.20
G132R	7	6.34
*SIDS	5	5.88

***SIDS – This sample was collected from the sump connected to the subsurface interceptor drainage system.**

pH – pH paper measurements cannot be read to one decimal point. The pH meter provided measurements to two decimal points.

The following wells had low pH values in the 4 to 5 pH unit range: G116, G131A, G154, G112 and the SIDS. These wells all lie downgradient of the former acid impoundment and are all screened in the shallow perched aquifer. The only exception to this is G112, which lies to the east of the former acid pit. This may indicate that a radial flow pattern is present in the perched sand lense. Chemetco's historic flow maps depicted this radial flow.

The perched sand aquifer extends from 5 to 20 feet below grade with a maximum thickness of 15 feet. These wells are also highlighted on Attachment A. Chemetco's geology is complex; an outline and description of the units present beneath the site is contained in Attachment B.

The inorganic analytical results, collected by the Agency, confirming exceedences of the 35 IAC 620 Class I Groundwater Standards are contained in the following tables that are separated by monitoring zones.

PERCHED "SHALLOW" AQUIFER
620 GROUNDWATER EXCEEDENCES OF THE CLASS I STANDARDS

Arsenic 35 IAC 620 Class I Groundwater Standard 50.0 UG/L

MW31A	1400.0
MW54	71.0

Beryllium 35 IAC 620 Class I Groundwater Standard 4.0 UG/L

MW54	11.0
SIDS	9.4

Boron 35 IAC 620 Class I Groundwater Standard 2000.0 UG/L

MW31A	3500.0
MW54	2600.0
MW12	3100.0
SIDS	3100.0
MW27	8300.0
MW25	7600.0

Cadmium 35 IAC 620 Class I Groundwater Standard 5.0 UG/L

MW31A	290.0
MW54	150.0
MW12	39.0
SIDS	360.0
MW16	47.0
MW28	38.0
MW25	790.0

Chloride 35 IAC 620 Class I Groundwater Standard 200.0 MG/L

MW16	436.0
MW28	253.0

Chromium 35 IAC 620 Class I Groundwater Standard 100.0 UG/L

MW31A 220.0

Copper 35 IAC 620 Class I Groundwater Standard 650.0 UG/L

MW31A 24000.0
MW54 92000.0
MW12 21000.0
SIDS 43000.0
MW16 40000.0

Fluoride 35 IAC 620 Class I Groundwater Standard 4.0 MG/L

MW27 4.67
MW25 12.3

Iron 35 IAC 620 Class I Groundwater Standard 5000.0 UG/L

MW31A 36000.0
MW54 68000.0
SIDS 18000.0
MW16 28000.0
MW29 17000.0
MW56 47000.0
MW25 6600.0

Lead 35 IAC 620 Class I Groundwater Standard 7.5 UG/L

MW31A 360.0
MW54 9.8
SIDS 150.0
MW28 16.0
MW29 10.0
MW19 9.1
MW41 14.0
MW56 8.0
MW25 8.9

Manganese 35 IAC 620 Class I Groundwater Standard 150.0 UG/L

MW31A 12000.0
MW54 16000.0
MW12 4600.0
SIDS 27000.0
MW27 79000.0
MW16 6800.0
MW28 28000.0

MW29	730.0
MW19	300.0
MW41	1100.0
MW56	4100.0
MW25	12000.0

Mercury 35 IAC 620 Class I Groundwater Standard 2.0 UG/L

MW31A 2.51

Nickel 35 IAC 620 Class I Groundwater Standard 100.0 UG/L

MW31A	32000.0
MW54	92000.0
MW12	19000.0
SIDS	70000.0
MW27	76000.0
MW16	38000.0
MW28	150000.0
MW25	5400.0

Selenium 35 IAC 620 Class I Groundwater Standard 50.0 UG/L

MW31A 98.0

Sulfate 35 IAC 620 Class I Groundwater Standard 400.0 MG/L

MW31A	1600.0
MW54	1720.0
SIDS	1610.0
MW27	4720.0
MW16	1850.0
MW28	2230.0
MW19	978.0
MW41	894.0
MW56	967.0
MW25	2990.0

Zinc 35 IAC 620 Class I Groundwater Standard 5000.0 UG/L

MW31A	10000.0
MW54	6800.0
SIDS	16000.0
MW27	7500.0
MW16	16000.0
MW25	5900.0

TDS 35 IAC 620 Class I Groundwater Standard 1200.0 MG/L

MW31A	7340.0
MW54	4860.0
SIDS	5560.0
MW27	1400.0
MW16	4100.0
MW28	5880.0
MW41	2300.0
MW56	2390.0
MW25	8660.0

pH 35 IAC 620 Class I Groundwater Standard 6.5-9.0

MW16	5.54
MW28	6.4
MW31A	4.81
MW54	4.01
MW12	4.25

UPPER REGIONAL AQUIFER
620 GROUNDWATER EXCEEDENCES OF THE CLASS I STANDARDS

Arsenic 35 IAC 620 Class I Groundwater Standard 50.0 UG/L

MW33R	220.0

Beryllium 35 IAC 620 Class I Groundwater Standard 4.0 UG/L

MW33R	4.7

Boron 35 IAC 620 Class I Groundwater Standard 2000.0 UG/L

MW26	9000.0
MW33R	14000.0
MW44R	7800.0

Cadmium 35 IAC 620 Class I Groundwater Standard 5.0 UG/L

MW37	5.2
MW32R	7.4
MW33R	125.0

Chloride 35 IAC 620 Class I Groundwater Standard 200.0 MG/L

MW32R	334.0
MW55	286.0

Copper 35 IAC 620 Class I Groundwater Standard 650.0 UG/L

MW33R	2300.0

Fluoride 35 IAC 620 Class I Groundwater Standard 4.0 MG/L

MW26	4.71
MW33R	208.0

Iron 35 IAC 620 Class I Groundwater Standard 5000.0 UG/L

MW51 (Background)	19000.0
MW50	9000.0
MW49	11000.0
MW47R	9600.0
MW38R	9700.0
MW48R	16000.0
MW32R	13000.0
MW33R	43000.0
MW55	59000.0

Lead 35 IAC 620 Class I Groundwater Standard 7.5 UG/L

MW51 (Background)	14.0
MW26	9.5
MW47R	38.0
MW37R	18.0
MW38R	30.0
MW48R	34.0
MW32R	94.0
MW33R	2200.0

Manganese 35 IAC 620 Class I Groundwater Standard 150.0 UG/L

MW51 (Background)	660.0
MW50	270.0
MW49	400.0
MW26	240.0
MW47R	400.0
MW37R	2400.0
MW38R	550.0
MW48R	520.0

MW32R	3200.0
MW33R	1800.0
MW55	1900.0

Mercury 35 IAC 620 Class I Groundwater Standard 2.0 UG/L

MW50	738.0
MW33R	3.41

Nickel 35 IAC 620 Class I Groundwater Standard 100.0 UG/L

MW32R	110.0
MW33R	170.0

Selenium 35 IAC 620 Class I Groundwater Standard 50.0 UG/L

MW33R	240.0

Sulfate 35 IAC 620 Class I Groundwater Standard 400.0 MG/L

MW26	672.0
MW37R	416.0
MW32R	896.0
MW33R	3720.0
MW55	1320.0
MW44R	1050.0

Zinc 35 IAC 620 Class I Groundwater Standard 5000.0 UG/L

MW33R	12000.0

TDS 35 IAC 620 Class I Groundwater Standard 1200.0 MG/L

MW26	9000.0
MW37R	1820.0
MW32R	2830.0
MW33R	3720.0
MW55	3800.0
MW44R	4260.0

pH 35 IAC 620 Class I Groundwater Standard 6.5-9.0

MW32R	6.34

LOWER REGIONAL AQUIFER
620 GROUNDWATER EXCEEDENCES OF THE CLASS I STANDARDS

Iron 35 IAC 620 Class I Groundwater Standard 5000.0 UG/L

MW52 (Background)	7200.0
MW36R	6500.0
MW39R	19000.0

Lead 35 IAC 620 Class I Groundwater Standard 7.5 UG/L

MW39R	22.0

Manganese 35 IAC 620 Class I Groundwater Standard 150.0 UG/L

MW52 (Background)	640.0
MW53	480.0
MW36R	790.0
MW39R	1400.0

TDS 35 IAC 620 Class I Groundwater Standard 1200.0 MG/L

MW 39R	1690.0

pH 35 IAC 620 Class I Groundwater Standard 6.5-9.0
ND

The following data was collected from the (Subsurface Intercepter Drainage) SID System.

SID SYSTEM

Beryllium	9.4	UG/L
Boron	3100.0	UG/L
Cadmium	360.0	UG/L
Copper	43000.0	UG/L
Iron	18000.0	UG/L
Lead	150.0	UG/L
Manganese	27000.0	UG/L
Nickel	70000.0	UG/L
Sulfate	1610.0	MG/L
Zinc	16000.0	UG/L
pH	5.88	

The organic analytical data did not confirm the presence of organic chemical constituents in the groundwater. The laboratory did not achieve quality control criteria for SW846

methods during analysis of certain samples. The following chart contains the data which did not meet QA/QC standards.

Well Number	MW16 (G116)	MW28 (G128)	MW54 (MW154)	MW41 (G141)
Heptachlor	0.02	ND	ND	ND
Metolachlor	0.14	ND	ND	ND
Cis-1,2-Dichloroethylene	4.9	ND	ND	ND
MTBE	2.8	ND	12.0	ND
Trichloroethylene	65.0	3.0	2.2	ND
Xylene	ND	ND	3.6	4.9
Bis (2-Ethylhexyl) phthalate	ND	ND	5.6	ND

All Parameters reported in PPB
ND – Nondetect

Verification sampling has been scheduled for the 2001 Second Quarter Sampling Round. The Agency will split samples with Chemetco from the following wells: MW16, MW54, MW28 and MW41. These samples will be analyzed for organic and inorganic parameters.

cc: Scott Kauffman
Chris Perzan
USEPA
Collinsville Region

Illinois Environmental Protection Agency

DLPC/EPS Chain of Custody Document (Analysis Request and Receipt for Samples)

Page 1 of 1

Site [10]: LP41

LPC # [17]: 1195[illegible]0003

County: Madison

Locality: Hartford

Section [14]: F

USEPA ID: ILD078843809

Site Name [19]: Chemetco

Project Manager's Name/Address/Phone #: Gina Search, 3001 Mall St, Collinsville, IL 62234, (618) 346-5120

IEPA Laboratory (circle one): 2125 S. 1st Street, Champaign, IL 61820, 217/333-6907 — 825 N. Rutledge Street, Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #:

Delivered by [2]:

Case # (if applicable):

Lab Sample # [01]	SVOC	PCB	Pest/Herb	Voc-MS			Field Sample # [15]	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	Date Collected & Sealed [20]	Time Collected (24 hr clk) [21]	Time Sealed (24 hr clk)	Sampler's Initials [22]	Collector or Laboratory Comments [24]	Seal Intact? (y/n)
002833	X	X	X	X			G127		y	3		3/6/00	9:45	1426	GS		y
002834	X	X	X	X			G116		y	3		3/6/00	10:05	1430	GS		y
002835	X	X	X	X			G128		y	3		3/6/00	10:30	1437	GS		y
002836	X	X	X	X			G129		y	3		3/6/00	11:10	1440	GS		y
002837	X	X	X	X			G119		y	3		3/6/00	11:40	1455	GS		y
002838	X	X	X	X			G141		y	3		3/6/00	12:10	1446	GS		y
002839	X	X	X	X			G156		y	3		3/6/00	13:10	1415	GS		y
002840	X	X	X	X			G155		y	3		3/6/00	14:54	1506	GS		y
002841	X	X	X	X			G125		y	3		3/6/00	15:20	1527	GS		y
002842	X	X	X	X			G144R		y	3		3/6/00	1520	1646	GS		y

RECEIVED APR 12 2000 IEPA-DLPC

RECEIVED IEPA APR 17 2000 COLLINSVILLE OFFICE

Receipt (of Samples): Collection of the above-listed sample(s) at the indicated site is hereby acknowledged.

Signature/Title of Facility Representative/Date: Heather [illegible] Environmental Manager 3/6/00

Split(s) Offered? (y) / n Accepted? (y) / n

Samplers (printed names and signatures): Gina Search [signature]

Blank 2nd at 3-7-00

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).

Sealer's Signature & Initials: Gina Search GS Date: 3/7/2000 Time (24 hr clk): 842

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
(Sealer) Gina Search	3/7/00	1344	[signature]	3/7/00	1344
[illegible] Scott Rankin	3/7/00	1553			

☐ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times or locked in a secured area.

Printed Name, Signature, and Initials [07]: Michelle Hamm [signature] Date [05]: 3-7-00 Time [06] (24 hr clk): 15:53

Supervisor releasing results (signature): [signature] Date: APR 11 2000

IL 532-2311
LPC 525
REV. 2/99

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D002833
SAMPLING POINT DESC. : G127/MADISON/HARTFORD/CHEMETCO

UB[illegible]TING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000306 TIME COLLECTED : 0945 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	0.01K
81284	TRIFLURALIN	UG/L	0.01K
39337	ALPHA-BHC	UG/L	0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	0.01K
39630	ATRAZINE	UG/L	0.1K
39410	HEPTACHLOR	UG/L	0.01K
39330	ALDRIN	UG/L	0.01K
77325	ALACHLOR	UG/L	0.02K
81408	METRIBUZIN	UG/L	0.05K
39356	METOLACHLOR	UG/L	0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	0.01K
9[illegible]	PENDIMETHALIN	UG/L	0.05K
9[illegible]	GAMMA-CHLORDANE	UG/L	0.01K
39348	ALPHA-CHLORDANE	UG/L	0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	0.1K
39380	DIELDRIN	UG/L	0.01K
39640	CAPTAN	UG/L	0.05K
81757	CYANAZINE	UG/L	0.1K
39390	ENDRIN	UG/L	0.01K
39320	P,P'-DDE	UG/L	0.01K
39310	P,P'-DDD	UG/L	0.01K
39300	P,P'-DDT	UG/L	0.01K
39370	TOTAL DDT	UG/L	0.1K
39480	METHOXYCHLOR	UG/L	0.05K
39516	TOTAL PCBS	UG/L	0.1K
34694	PHENOL	UG/L	3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	3K
34586	2-CHLOROPHENOL	UG/L	3K
34566	1,3-DICHLOROBENZENE	UG/L	3K

AMPLE NUMBER : D002833

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
39[illegible]0	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34[illegible]	CHLOROETHANE	UG/L	: 2K
4[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
1552	ACETONE	UG/L	: 10K
4489	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
5491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
1130	TRICHLOROETHYLENE	UG/L	: 2K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002834
AMPLING POINT DESC. : G116/MADISON/HARTFORD/CHEMETCO

UB TING SOURCE # : 1198010003 SITE # : ILD048843809
AT OLLECTED : 000306 TIME COLLECTED : 1005 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.02
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.14
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91	PENDIMETHALIN	UG/L	: 0.05K
39	GAMMA-CHLORDANE	UG/L	: 0.01K
9348	ALPHA-CHLORDANE	UG/L	: 0.01K
9350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
9380	DIELDRIN	UG/L	: 0.01K
9640	CAPTAN	UG/L	: 0.05K
1757	CYANAZINE	UG/L	: 0.1K
9390	ENDRIN	UG/L	: 0.01K
9320	P,P'-DDE	UG/L	: 0.01K
9310	P,P'-DDD	UG/L	: 0.01K
9300	P,P'-DDT	UG/L	: 0.01K
9370	TOTAL DDT	UG/L	: 0.1K
9430	METHOXYCHLOR	UG/L	: 0.05K
9516	TOTAL PCBS	UG/L	: 0.1K
4694	PHENOL	UG/L	: 3K
4273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
4536	2-CHLOROPHENOL	UG/L	: 3K
4566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : 0002334

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
4581	2-CHLORONAPHTHALENE	UG/L	: 3K
0000	2-NITROANILINE	UG/L	: 6K
4341	DIMETHYLPHTHALATE	UG/L	: 3K
4200	ACENAPHTHYLENE	UG/L	: 3K
4626	2,6-DINITROTOLUENE	UG/L	: 3K
3300	3-NITROANILINE	UG/L	: 6K
4205	ACENAPHTHENE	UG/L	: 3K
4616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
2700	HEXACHLOROBENZENE	UG/L	: 3K
1032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : D002834

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
39[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
43[illegible]	CHLOROETHANE	UG/L	: 2K
44[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
1552	ACETONE	UG/L	: 10K
4488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 4.9
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
5491	METHYL TERT-BUTYL ETHER	UG/L	: 2.8
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
4180	TRICHLOROETHYLENE	UG/L	: 65

AMPLE NUMBER : D002834

P32105	CHLORODIBROMOMETHANE	UG/L	: 2K
P34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
P73124	BENZENE	UG/L	: 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
P32104	BROMOFORM	UG/L	: 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
P77103	2-HEXANONE(MBK)	UG/L	: 2K
P34475	TETRACHLOROETHYLENE	UG/L	: 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
P78131	TOLUENE	UG/L	: 2K
P34301	CHLOROBENZENE	UG/L	: 2K
P78113	ETHYLBENZENE	UG/L	: 2K
P77128	STYRENE	UG/L	: 2K
P81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: MISCELLANEOUS COMPOUNDS UG/L ; 48 cnc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002835
AMPLING POINT DESC. : G128/MADISON/HARTFORD/CHEMETCO

UB[illegible]TING SOURCE # : 1198010003 SITE # : ILD048843809
ATE [illegible]OLLECTED : 000306 TIME COLLECTED : 1030 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
51284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
51408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91[illegible]	PENDIMETHALIN	UG/L	: 0.05K
98[illegible]	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

AMPLE NUMBER : 0002835

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
4626	2,6-DINITROTOLUENE	UG/L	: 3K
8300	3-NITROANILINE	UG/L	: 6K
4205	ACENAPHTHENE	UG/L	: 3K
4616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : D002335

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

QUALITY CONTROL CRITERIA FOR SW846 METHOD
8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

4418	CHLOROMETHANE	UG/L	: 2K
4413	BROMOMETHANE	UG/L	: 2K
9175	VINYL CHLORIDE	UG/L	: 2K
43[illegible]	CHLOROETHANE	UG/L	: 2K
44[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
1552	ACETONE	UG/L	: 10K
4488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
4491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
180	TRICHLOROETHYLENE	UG/L	: 3.0

AMPLE NUMBER : D002835

P32105	CHLORODIBROMOMETHANE	UG/L	: 2K
P34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
P78124	BENZENE	UG/L	: 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
P32104	BROMOFORM	UG/L	: 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
P77103	2-HEXANONE(MBK)	UG/L	: 2K
P34475	TETRACHLOROETHYLENE	UG/L	: 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
P78131	TOLUENE	UG/L	: 2K
P34301	CHLOROBENZENE	UG/L	: 2K
P78113	ETHYLBENZENE	UG/L	: 2K
P77128	STYRENE	UG/L	: 2K
P31551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: MISCELLANEOUS PNAS UG/L ; 57 CMC
: MISCELLANEOUS PHENOLS UG/L ; 3.3

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002836
AMPLING POINT DESC. : G129/MADISON/HARTFORD/CHEMETCO

UB[illegible]ING SOURCE # : 1198010003 SITE # : ILD048843309
ATE [illegible]OLLECTED : 000306 TIME COLLECTED : 1110 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
A9 OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
31284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
31402	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91[illegible]	PENDIMETHALIN	UG/L	: 0.05K
98[illegible]	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

AMPLE NUMBER : 002836

P34571	1,4-DICHLOROBENZENE	UG/L	: 3K
P77147	BENZYL ALCOHOL	UG/L	: 3K
P34536	1,2-DICHLOROBENZENE	UG/L	: 3K
400000	2-METHYLPHENOL	UG/L	: 3K
P34233	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
400000	4-METHYLPHENOL	UG/L	: 3K
P34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
P34396	HEXACHLOROETHANE	UG/L	: 3K
P34447	NITROBENZENE	UG/L	: 3K
P34408	ISOPHORONE	UG/L	: 3K
P34591	2-NITROPHENOL	UG/L	: 3K
P34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77637	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34331	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
8300	3-NITROANILINE	UG/L	: 6K
4205	ACENAPHTHENE	UG/L	: 3K
4616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : D002836

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
3441[illegible]	CHLOROMETHANE	UG/L	: 2K
4413	BROMOMETHANE	UG/L	: 2K
9173	VINYL CHLORIDE	UG/L	: 2K
4311	CHLOROETHANE	UG/L	: 2K
44[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
15[illegible]	ACETONE	UG/L	: 10K
44[illegible]	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
6491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
4180	TRICHLOROETHYLENE	UG/L	: 2K
4105	CHLORODIBROMOMETHANE	UG/L	: 2K
4511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

AMPLE NUMBER : D002836

P78124	BENZENE	UG/L	: 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
P32104	BROMOFORM	UG/L	: 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
P77103	2-HEXANONE(MBK)	UG/L	: 2K
P34475	TETRACHLOROETHYLENE	UG/L	: 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
P78131	TOLUENE	UG/L	: 2K
P34301	CHLOROBENZENE	UG/L	: 2K
P78113	ETHYLBENZENE	UG/L	: 2K
P77128	STYRENE	UG/L	: 2K
P81551	XYLENE	UG/L	: 2K

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002337
AMPLING POINT DESC. : G119/MADISON/HARTFORD/CHEMETCO

UB[illegible]ING SOURCE # : 1198010003 SITE # : ILD048843309
ATE COLLECTED : 000306 TIME COLLECTED : 1140 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
394[illegible]	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91[illegible]	PENDIMETHALIN	UG/L	: 0.05K
9[illegible]	GAMMA-CHLORDANE	UG/L	: 0.01K
39343	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : D002837

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34596	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : D002837

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
11[illegible]	ACETONE	UG/L	: 10K
344[illegible]	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
6491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
9180	TRICHLOROETHYLENE	UG/L	: 2K
2105	CHLORODIBROMOMETHANE	UG/L	: 2K
4511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

AMPLE NUMBER : D002837

P78124	BENZENE	UG/L	: 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
P32104	BROMOFORM	UG/L	: 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
P77103	2-HEXANONE(MBK)	UG/L	: 2K
P34475	TETRACHLOROETHYLENE	UG/L	: 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
P78131	TOLUENE	UG/L	: 2K
P34301	CHLOROBENZENE	UG/L	: 2K
P78113	ETHYLBENZENE	UG/L	: 2K
P77128	STYRENE	UG/L	: 2K
P81551	XYLENE	UG/L	: 2K

CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002842
AMPLING POINT DESC. : G144R/MADISON/HARTFORD/CHEMETCO

UBM ING SOURCE # : 1198010003 SITE # : ILD048843809
ATE OLLECTED : 000306 TIME COLLECTED : 1520 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : 3

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

9700	HEXACHLOROBENZENE	UG/L	: 0.01K
1234	TRIFLURALIN	UG/L	: 0.01K
9337	ALPHA-BHC	UG/L	: 0.01K
9340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
9630	ATRAZINE	UG/L	: 0.1K
9410	HEPTACHLOR	UG/L	: 0.01K
9330	ALDRIN	UG/L	: 0.01K
7825	ALACHLOR	UG/L	: 0.02K
1408	METRIBUZIN	UG/L	: 0.05K
9356	METOLACHLOR	UG/L	: 0.1K
942	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91	PENDIMETHALIN	UG/L	: 0.05K
98	GAMMA-CHLORDANE	UG/L	: 0.01K
9348	ALPHA-CHLORDANE	UG/L	: 0.01K
9350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
9380	DIELDRIN	UG/L	: 0.01K
9640	CAPTAN	UG/L	: 0.05K
1757	CYANAZINE	UG/L	: 0.1K
9390	ENDRIN	UG/L	: 0.01K
9320	P,P'-DDE	UG/L	: 0.01K
9310	P,P'-DDD	UG/L	: 0.01K
9300	P,P'-DDT	UG/L	: 0.01K
9370	TOTAL DDT	UG/L	: 0.1K
9480	METHOXYCHLOR	UG/L	: 0.05K
9516	TOTAL PCBS	UG/L	: 0.1K
694	PHENOL	UG/L	: 3K
273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
586	2-CHLOROPHENOL	UG/L	: 3K
566	1,3-DICHLOROBENZENE	UG/L	: 3K

AMPLE NUMBER : D002842

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
33300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
31302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : D002842

34461	PHENANTHRENE	UG/L	: 3K
342[illegible]	ANTHRACENE	UG/L	: 3K
3911[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
4596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
4230	BENZO(B)FLUORANTHENE	UG/L	: 3K
4242	BENZO(K)FLUORANTHENE	UG/L	: 3K
4247	BENZO(A)PYRENE	UG/L	: 3K
4403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
4556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
4521	BENZO(GHI)PERYLENE	UG/L	: 3K
4418	CHLOROMETHANE	UG/L	: 2K
4413	BROMOMETHANE	UG/L	: 2K
9175	VINYL CHLORIDE	UG/L	: 2K
4311	CHLOROETHANE	UG/L	: 2K
4423	METHYLENE CHLORIDE	UG/L	: 5K
15[illegible]	ACETONE	UG/L	: 10K
44[illegible]	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
1106	CHLOROFORM	UG/L	: 2K
531	1,2-DICHLOROETHANE	UG/L	: 2K
595	2-BUTANONE(MEK)	UG/L	: 2K
506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
102	CARBON TETRACHLORIDE	UG/L	: 2K
491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
101	DICHLOROBROMOMETHANE	UG/L	: 2K
541	1,2-DICHLOROPROPANE	UG/L	: 2K
704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
180	TRICHLOROETHYLENE	UG/L	: 2K
105	CHLORODIBROMOMETHANE	UG/L	: 2K
511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

AMPLE NUMBER : D002842

P78124	BENZENE	UG/L : 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L : 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L : 2K
P32104	BROMOFORM	UG/L : 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 2K
P77103	2-HEXANONE(MBK)	UG/L : 2K
P34475	TETRACHLOROETHYLENE	UG/L : 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L : 2K
P78131	TOLUENE	UG/L : 2K
P34301	CHLOROBENZENE	UG/L : 2K
P78113	ETHYLBENZENE	UG/L : 2K
P77128	STYRENE	UG/L : 2K
P81551	XYLENE	UG/L : 2K

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002841
AMPLING POINT DESC. : G125/MADISON/HARTFORD/CHEMETCO

UB[illegible]ING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000306 TIME COLLECTED : 1520 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-30 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	0.01K
31284	TRIFLURALIN	UG/L	0.01K
39337	ALPHA-BHC	UG/L	0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	0.01K
39630	ATRAZINE	UG/L	0.1K
39410	HEPTACHLOR	UG/L	0.01K
39330	ALDRIN	UG/L	0.01K
77825	ALACHLOR	UG/L	0.02K
81408	METRIBUZIN	UG/L	0.05K
39356	METOLACHLOR	UG/L	0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	0.01K
91[illegible]	PENDIMETHALIN	UG/L	0.05K
93[illegible]	GAMMA-CHLORDANE	UG/L	0.01K
39348	ALPHA-CHLORDANE	UG/L	0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	0.1K
39320	DIELDRIN	UG/L	0.01K
39640	CAPTAN	UG/L	0.05K
81757	CYANAZINE	UG/L	0.1K
39390	ENDRIN	UG/L	0.01K
39320	P,P'-DDE	UG/L	0.01K
39310	P,P'-DDD	UG/L	0.01K
39300	P,P'-DDT	UG/L	0.01K
39370	TOTAL DDT	UG/L	0.1K
39480	METHOXYCHLOR	UG/L	0.05K
39516	TOTAL PCBS	UG/L	0.1K
694	PHENOL	UG/L	3K
273	BIS(2-CHLOROETHYL)ETHER	UG/L	3K
586	2-CHLOROPHENOL	UG/L	3K
566	1,3-DICHLOROBENZENE	UG/L	3K

AMPLE NUMBER : D002841

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
342 3	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
4200	ACENAPHTHYLENE	UG/L	: 3K
4626	2,6-DINITROTOLUENE	UG/L	: 3K
8300	3-NITROANILINE	UG/L	: 6K
4205	ACENAPHTHENE	UG/L	: 3K
4616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
700	HEXACHLOROBENZENE	UG/L	: 3K
032	PENTACHLOROPHENOL	UG/L	: 6K

AMPLE NUMBER : D002841

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
15[illegible]	ACETONE	UG/L	: 10K
44[illegible]	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
6491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
2180	TRICHLOROETHYLENE	UG/L	: 2K
2105	CHLORODIBROMOMETHANE	UG/L	: 2K
511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

AMPLE NUMBER : D002841

78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE

: 2-FLUORO-6-NITRO-PHENOL# UG/L ; 4.8

cmc

: MISCELLANEOUS COMPOUNDS UG/L ; 130

: ALIPHATIC ALCOHOLS UG/L ; 4.4

: # TENTATIVE IDENTIFICATION.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002840
AMPLING POINT DESC. : G155/MADISON/HARTFORD/CHEMETCO

UBM ING SOURCE # : 1198010003 SITE # : ILD044843809
ATE OLLECTED : 000306 TIME COLLECTED : 1454 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91	ENDIMETHALIN	UG/L	: 0.05K
93	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
81516	TOTAL PCBS	UG/L	: 0.1K
694	PHENOL	UG/L	: 3K
273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
536	2-CHLOROPHENOL	UG/L	: 3K
566	1,3-DICHLOROBENZENE	UG/L	: 3K

AMPLE NUMBER : D002840

P34571	1,4-DICHLOROBENZENE	UG/L	: 3K
P77147	BENZYL ALCOHOL	UG/L	: 3K
P34536	1,2-DICHLOROBENZENE	UG/L	: 3K
A00000	2-METHYLPHENOL	UG/L	: 3K
P34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
A00000	4-METHYLPHENOL	UG/L	: 3K
P34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
P34396	HEXACHLOROETHANE	UG/L	: 3K
P34447	NITROBENZENE	UG/L	: 3K
P34408	ISOPHORONE	UG/L	: 3K
P34591	2-NITROPHENOL	UG/L	: 3K
P34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
P77247	BENZOIC ACID	UG/L	: 30K
P34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
P34601	2,4-DICHLOROPHENOL	UG/L	: 3K
P34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : 0002840

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

34413	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
43[illegible]	CHLOROETHANE	UG/L	: 2K
44[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
1552	ACETONE	UG/L	: 10K
4486	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
6491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
2180	TRICHLOROETHYLENE	UG/L	: 2K

AMPLE NUMBER : D002840

P32105	CHLORODIBROMOMETHANE	UG/L	: 2K
P34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
P78124	BENZENE	UG/L	: 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
P32104	BROMOFORM	UG/L	: 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
P77103	2-HEXANONE(MBK)	UG/L	: 2K
P34475	TETRACHLOROETHYLENE	UG/L	: 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
P78131	TOLUENE	UG/L	: 2K
P34301	CHLOROBENZENE	UG/L	: 2K
P78113	ETHYLBENZENE	UG/L	: 2K
P77128	STYRENE	UG/L	: 2K
P81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: MISCELLANEOUS COMPOUNDS UG/L ; 22 CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D002339
SAMPLING POINT DESC. : G156/MADISON/HARTFORD/CHEMETCO

SUBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
DATE COLLECTED : 000306 TIME COLLECTED : 1310 SAMPLING PROGRAM :

COLLECTED BY : GINA DELIVERED BY : DAVE
COMMENTS : SVOC/PCB/PEST-ECD
FUNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : 3

DATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
LAB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002344
SUPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91[illegible]	PENDIMETHALIN	UG/L	: 0.05K
98[illegible]	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
96400	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
94800	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 6K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 6K
34586	2-CHLOROPHENOL	UG/L	: 6K
34566	1,3-DICHLOROBENZENE	UG/L	: 6K

AMPLE NUMBER : D002839

34571	1,4-DICHLOROBENZENE	UG/L	: 6K
77147	BENZYL ALCOHOL	UG/L	: 6K
34536	1,2-DICHLOROBENZENE	UG/L	: 6K
00000	2-METHYLPHENOL	UG/L	: 6K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 6K
00000	4-METHYLPHENOL	UG/L	: 6K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 6K
34396	HEXACHLOROETHANE	UG/L	: 6K
34447	NITROBENZENE	UG/L	: 6K
34408	ISOPHORONE	UG/L	: 6K
34591	2-NITROPHENOL	UG/L	: 6K
34606	2,4-DIMETHYLPHENOL	UG/L	: 6K
77247	BENZOIC ACID	UG/L	: 60K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 6K
34601	2,4-DICHLOROPHENOL	UG/L	: 6K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 6K
34696	NAPHTHALENE	UG/L	: 6K
00000	4-CHLOROANILINE	UG/L	: 6K
34391	HEXACHLOROBUTADIENE	UG/L	: 6K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 6K
77416	2-METHYLNAPHTHALENE	UG/L	: 6K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 6K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 6K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 6K
34581	2-CHLORONAPHTHALENE	UG/L	: 6K
00000	2-NITROANILINE	UG/L	: 12K
34341	DIMETHYLPHTHALATE	UG/L	: 6K
4200	ACENAPHTHYLENE	UG/L	: 6K
4626	2,6-DINITROTOLUENE	UG/L	: 6K
8300	3-NITROANILINE	UG/L	: 12K
4205	ACENAPHTHENE	UG/L	: 6K
4616	2,4-DINITROPHENOL	UG/L	: 12K
4646	4-NITROPHENOL	UG/L	: 12K
1302	DIBENZOFURAN	UG/L	: 6K
4611	2,4-DINITROTOLUENE	UG/L	: 5.0K
4336	DIETHYLPHTHALATE	UG/L	: 5.0K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 6K
4381	FLUORENE	UG/L	: 6K
0000	4-NITROANILINE	UG/L	: 12K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 12K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 6K
9700	HEXACHLOROBENZENE	UG/L	: 6K
0032	PENTACHLOROPHENOL	UG/L	: 12K

MPLE NUMBER : D002839

34461	PHENANTHRENE	UG/L	: 6K
34[illegible]	ANTHRACENE	UG/L	: 6K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 6K
34376	FLUORANTHENE	UG/L	: 6K
34469	PYRENE	UG/L	: 6K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 6K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 12K
34526	BENZO(A)ANTHRACENE	UG/L	: 6K
34320	CHRYSENE	UG/L	: 6K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 6K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 6K
34230	BENZO(B)FLUORANTHENE	UG/L	: 6K
34242	BENZO(K)FLUORANTHENE	UG/L	: 6K
34247	BENZO(A)PYRENE	UG/L	: 6K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 6K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 6K
34521	BENZO(GHI)PERYLENE	UG/L	: 6K

QUALITY CONTROL CRITERIA FOR SW846 METHOD
8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

4418	CHLOROMETHANE	UG/L	: 2K
4413	BROMOMETHANE	UG/L	: 2K
9175	VINYL CHLORIDE	UG/L	: 2K
43[illegible]	CHLOROETHANE	UG/L	: 2K
44[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
1552	ACETONE	UG/L	: 10K
4485	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
4106	CHLOROFORM	UG/L	: 2K
531	1,2-DICHLOROETHANE	UG/L	: 2K
595	2-BUTANONE(MEK)	UG/L	: 2K
506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
102	CARBON TETRACHLORIDE	UG/L	: 2K
491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
101	DICHLOROBROMOMETHANE	UG/L	: 2K
541	1,2-DICHLOROPROPANE	UG/L	: 2K
704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
160	TRICHLOROETHYLENE	UG/L	: 2K

AMPLE NUMBER : D002839

P32105	CHLORODIBROMOMETHANE	UG/L	: 2K
P34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
P78124	BENZENE	UG/L	: 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
P32104	BROMOFORM	UG/L	: 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
P77103	2-HEXANONE(MBK)	UG/L	: 2K
P34475	TETRACHLOROETHYLENE	UG/L	: 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
P78131	TOLUENE	UG/L	: 2K
P34301	CHLOROBENZENE	UG/L	: 2K
P78113	ETHYLBENZENE	UG/L	: 2K
P77128	STYRENE	UG/L	: 2K
P81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: ALIPHATIC ALCOHOLS UG/L ; 5.2
: MISCELLANEOUS COMPOUNDS UG/L ; 38

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002338
AMPLING POINT DESC. : G141/MADISON/HARTFORD/CHEMETCO

UBM ING SOURCE # : 1198010003 SITE # : ILD048843209
ATE COLLECTED : 000306 TIME COLLECTED : 1210 SAMPLING PROGRAM :

OLLECTED BY : GINA DELIVERED BY : DAVE
OMMENTS : SVOC/PCB/PEST-ECD
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
94[illegible]	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
91[illegible]	PENDIMETHALIN	UG/L	: 0.05K
98[illegible]	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
94380	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

AMPLE NUMBER : 0002838

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
4626	2,6-DINITROTOLUENE	UG/L	: 3K
8300	3-NITROANILINE	UG/L	: 6K
4205	ACENAPHTHENE	UG/L	: 3K
4616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

AMPLE NUMBER : 0002838

34401	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
391[illegible]	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
4423	METHYLENE CHLORIDE	UG/L	: 5K
15[illegible]	ACETONE	UG/L	: 10K
44[illegible]	TRICHLOROFLUOROMETHANE	UG/L	: 2K
7277	BROMOCHLOROMETHANE	UG/L	: 2K
7041	CARBON DISULFIDE	UG/L	: 2K
4501	1,1-DICHLOROETHYLENE	UG/L	: 2K
4496	1,1-DICHLOROETHANE	UG/L	: 2K
4546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
7093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
2106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
3491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
2130	TRICHLOROETHYLENE	UG/L	: 2K
2105	CHLORODIBROMOMETHANE	UG/L	: 2K
511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

AMPLE NUMBER : 0002838

P78124	BENZENE	UG/L : 2K
P34699	TRANS-1,3-DICHLOROPROPENE	UG/L : 2K
P34576	2-CHLOROETHYLVINYL ETHER	UG/L : 2K
P32104	BROMOFORM	UG/L : 2K
P78133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 2K
P77103	2-HEXANONE(MBK)	UG/L : 2K
P34475	TETRACHLOROETHYLENE	UG/L : 2K
P34516	1,1,2,2-TETRACHLOROETHANE	UG/L : 2K
P78131	TOLUENE	UG/L : 2K
P34301	CHLOROBENZENE	UG/L : 2K
P78113	ETHYLBENZENE	UG/L : 2K
P77128	STYRENE	UG/L : 2K
P81551	XYLENE	UG/L : 4.9

: ISOPROPYLBENZENE UG/L; 2.2

cnc

Groundwater

Environmental Protection Agency
Chain of Custody Document
(Request and Receipt for Samples)
1 of 1

Fund [10]	LPC # [17]	County	Locality
LP41	1198010[redacted]	Madison	Hartford
Section [14]	**USEPA ID#**	**Site Name [19]**	
F	ILD048843809	Chemetco	

Project Manager's Name/Address/Phone #:
Gina Search
2009 Mall St.
Collinsville, IL
618 346-5120

Case # (if applicable)

IEPA Laboratory (circle one)
2125 S. 1st Street, Champaign, IL 61820, 217/333-6907
825 N. Rutledge Street, Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #

Delivered by [23]

Lab Sample # [01]	Parameter Group [03] & Other Analytes: SVOC	PCB	Pest/Herb	VOC				[15] Field Sample #	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	[24] Collector or Laboratory Comments	Seal Intact? (y/n)
								~~G131A~~					~~3/6/00~~	~~1630~~	~~1640~~	~~GS~~		~~n/a~~
002892	X	X	X	X				G152	~~Y~~ N	Y	3		3/7/00	1010	12:05	GS	RECEIVED	Y
002893	X	X	X	X				G151	~~Y~~ N	Y	3		3/7/00	1100	12:01	SK GS	APR 17 2000	Y
002894	X	X	X	X				G141	~~Y~~ N	Y	3		3/7/00	1130	12:00	SK GS	IEPA-DLPC	Y
								~~G112~~					~~3/7/00~~	~~1150~~	~~1425~~	~~SK GS~~		~~n/a~~
002895	X	X	X	X				G150	~~Y~~ N	Y	3		3/7/00	1325	1410	SK GS	RECEIVED IEPA	Y
002896	X	X	X	X				G153	~~Y~~ N	Y	3		3/7/00	1335	1414	SK GS	APR 19 2000	Y
002897	X	X	X	X				G149	~~Y~~ N	Y	3		3/7/00	1445	1458	GS	COLLINSVILLE OFFICE	Y
002898	X	X	X	X				G120	~~Y~~ N	Y	3		3/7/00	1520	1550	GS		Y

Receipt for Samples: Collection of the above-listed sample(s) at the indicated site is hereby acknowledged.
Signature, Title of Facility Representative, Date: Environmental Services 3/7/00
Split(s) Offered? (y) n Accepted? y / n

Samplers (printed names and signatures):
Scott Kaufmann
Paula Stine

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials: Gina Search GS
Date: 3/7/00
Time (24 hr clk): 1550

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).
Relinquished by (Sealer): Gina Search
Date: 3/9/00
Time (24 hr clk): 1017
Received by:
Date:
Time (24 hr clk):

☐ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times or locked in a secured area.
Printed Name, Signature, and Initials [07]: Stan Lowe
Date [05]: 3-9-00
Time [06] (24 hr clk): 1017

Supervisor releasing results (signature):
Date: APR 17 2000

IL 532-2311
LPC 525
REV. 2/99

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002392
AMPLING POINT DESC. : G152/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 119801C003 SITE # : ILD048843809
ATE COLLECTED : 000307 TIME COLLECTED : 1010 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : S

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81406	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79[illegible]	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : 0002892

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77657	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34561	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

PLE NUMBER : 0002592

34461	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
81[illegible]	ACETONE	UG/L	: 10K
34[illegible]	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
86491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
91180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

PLE NUMBER : 0002392

71	34 BENZENE	UG/L	: 2K
34	699 TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34	576 2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32	104 BROMOFORM	UG/L	: 2K
78	133 4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77	103 2-HEXANONE(MBK)	UG/L	: 2K
34	475 TETRACHLOROETHYLENE	UG/L	: 2K
34	516 1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78	131 TOLUENE	UG/L	: 2K
34	301 CHLOROBENZENE	UG/L	: 2K
78	113 ETHYLBENZENE	UG/L	: 2K
77	128 STYRENE	UG/L	: 2K
81	551 XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: MISCELLANEOUS COMPOUNDS UG/L ; 9.2

RTM
CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002893 151
AMPLING POINT DESC. : 3132/MADISON/HARTFORD/CHEMETCO

UPPLYING SOURCE # : 1198010003 SITE # : ILD048843509
ATE COLLECTED : 000307 TIME COLLECTED : 1100 SAMPLING PROGRAM :

OLLECTED BY : D S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-30 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79[illegible]	PENDIMETHALIN	UG/L	: 0.05K
39510	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : D002893

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81332	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

MPLE NUMBER : 0002893

34461	PHENANTHRENE	UG/L	: 3K
3[illegible]0	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
3[illegible]	ACETONE	UG/L	: 10K
34[illegible]8	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

MPLE NUMBER : 0002893

78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002894
AMPLING POINT DESC. : G154/MADISON/HARTFORD/CHEMETCO

UB TING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000307 TIME COLLECTED : 1130 SAMPLING PROGRAM :

OLLECTED BY : D S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L : 0.01K
81284	TRIFLURALIN	UG/L : 0.01K
39337	ALPHA-BHC	UG/L : 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L : 0.01K
39630	ATRAZINE	UG/L : 0.1K
39410	HEPTACHLOR	UG/L : 0.01K
39330	ALDRIN	UG/L : 0.01K
77825	ALACHLOR	UG/L : 0.02K
81408	METRIBUZIN	UG/L : 0.05K
39356	METOLACHLOR	UG/L : 0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L : 0.01K
79[illegible]	PENDIMETHALIN	UG/L : 0.05K
39[illegible]	GAMMA-CHLORDANE	UG/L : 0.01K
39348	ALPHA-CHLORDANE	UG/L : 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L : 0.1K
39380	DIELDRIN	UG/L : 0.01K
39640	CAPTAN	UG/L : 0.05K
1757	CYANAZINE	UG/L : 0.1K
39390	ENDRIN	UG/L : 0.01K
39320	P,P'-DDE	UG/L : 0.01K
39310	P,P'-DDD	UG/L : 0.01K
39300	P,P'-DDT	UG/L : 0.01K
39370	TOTAL DDT	UG/L : 0.1K
39480	METHOXYCHLOR	UG/L : 0.05K
39516	TOTAL PCBS	UG/L : 0.1K
4694	PHENOL	UG/L : 3K
4273	BIS(2-CHLOROETHYL)ETHER	UG/L : 3K
4586	2-CHLOROPHENOL	UG/L : 3K
4566	1,3-DICHLOROBENZENE	UG/L : 3K

PLE NUMBER : D002894

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

LMPLE NUMBER : D002594

34461	PHENANTHRENE	UG/L	: 3K
[illegible]	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 5.6
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
[illegible]	VINYL CHLORIDE	UG/L	: 2K
[illegible]	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 12
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2.2

MPLE NUMBER : D002894

32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 3.6

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: 1,2-DIBROMO-TRANS-CYCLOHEXANE UG/L ; 15
: MISCELLEANEOUS COMPOUNDS UG/L ; 43

cnc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002395
AMPLING POINT DESC. : G150/MADISON/HARTFORD/CHEMETCO

UPPLYING SOURCE # : 1198010003 SITE # : ILD048643809
ATE COLLECTED : 000307 TIME COLLECTED : 1325 SAMPLING PROGRAM :

OLLECTED BY : D S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	0.01K
81284	TRIFLURALIN	UG/L	0.01K
39337	ALPHA-BHC	UG/L	0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	0.01K
39630	ATRAZINE	UG/L	0.1K
39410	HEPTACHLOR	UG/L	0.01K
39330	ALDRIN	UG/L	0.01K
77825	ALACHLOR	UG/L	0.02K
81408	METRIBUZIN	UG/L	0.05K
39356	METOLACHLOR	UG/L	0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L	0.01K
7[illegible]	PENDIMETHALIN	UG/L	0.05K
39[illegible]0	GAMMA-CHLORDANE	UG/L	0.01K
39348	ALPHA-CHLORDANE	UG/L	0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	0.1K
39380	DIELDRIN	UG/L	0.01K
39640	CAPTAN	UG/L	0.05K
81757	CYANAZINE	UG/L	0.1K
39390	ENDRIN	UG/L	0.01K
39320	P,P'-DDE	UG/L	0.01K
39310	P,P'-DDD	UG/L	0.01K
39300	P,P'-DDT	UG/L	0.01K
39370	TOTAL DDT	UG/L	0.1K
39480	METHOXYCHLOR	UG/L	0.05K
39516	TOTAL PCBS	UG/L	0.1K
34694	PHENOL	UG/L	3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	3K
34586	2-CHLOROPHENOL	UG/L	3K
34566	1,3-DICHLOROBENZENE	UG/L	3K

MPLE NUMBER : 0002895

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34423	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

PLE NUMBER : D002695

34461	PHENANTHRENE	UG/L	: 3K
[illegible]	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3.6
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
[illegible]	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

MPLE NUMBER : D002395

78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
75113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002896
AMPLING POINT DESC. : G153/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000307 TIME COLLECTED : 1335 SAMPLING PROGRAM :

OLLECTED BY : D S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
51234	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79[illegible]	PENDIMETHALIN	UG/L	: 0.05K
39310	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

.VPLE NUMBER : 0002896

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34531	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
51302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34331	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

PLE NUMBER : D002896

34[illegible]1	PHENANTHRENE	UG/L	: 3K
34[illegible]	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34[illegible]	METHYLENE CHLORIDE	UG/L	: 5K
81[illegible]	ACETONE	UG/L	: 10K
34483	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
86491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
4511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

MPLE NUMBER : 0002896

73124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

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: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: OTHER ORGANIC COMPOUNDS UG/L; 5.8

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : 0002897
AMPLING POINT DESC. : G149/MADISON/HARTFORD/CHEMETCO

UE TTING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000307 TIME COLLECTED : 1445 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : 0002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
41408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79[illegible]	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

PLE NUMBER : 0002397

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34203	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

ABLE NUMBER : D002897

34461	PHENANTHRENE	UG/L : 3K
[illegible]	ANTHRACENE	UG/L : 3K
39110	DI-N-BUTYLPHTHLATE	UG/L : 3K
34376	FLUORANTHENE	UG/L : 3K
34469	PYRENE	UG/L : 3K
34292	BUTYL BENZYL PHTHALATE	UG/L : 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L : 6K
34526	BENZO(A)ANTHRACENE	UG/L : 3K
34320	CHRYSENE	UG/L : 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L : 3K
34596	DI-N-OCTYLPHTHALATE	UG/L : 3K
34230	BENZO(B)FLUORANTHENE	UG/L : 3K
34242	BENZO(K)FLUORANTHENE	UG/L : 3K
34247	BENZO(A)PYRENE	UG/L : 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L : 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L : 3K
34521	BENZO(GHI)PERYLENE	UG/L : 3K
34418	CHLOROMETHANE	UG/L : 2K
34413	BROMOMETHANE	UG/L : 2K
39175	VINYL CHLORIDE	UG/L : 2K
34311	CHLOROETHANE	UG/L : 2K
[illegible]	METHYLENE CHLORIDE	UG/L : 5K
[illegible]	ACETONE	UG/L : 10K
34488	TRICHLOROFLUOROMETHANE	UG/L : 2K
77277	BROMOCHLOROMETHANE	UG/L : 2K
77041	CARBON DISULFIDE	UG/L : 2K
34501	1,1-DICHLOROETHYLENE	UG/L : 2K
34496	1,1-DICHLOROETHANE	UG/L : 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L : 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L : 2K
32106	CHLOROFORM	UG/L : 2K
34531	1,2-DICHLOROETHANE	UG/L : 2K
81595	2-BUTANONE(MEK)	UG/L : 2K
34506	1,1,1-TRICHLOROETHANE	UG/L : 2K
32102	CARBON TETRACHLORIDE	UG/L : 2K
46491	METHYL TERT-BUTYL ETHER	UG/L : 2K
32101	DICHLOROBROMOMETHANE	UG/L : 2K
34541	1,2-DICHLOROPROPANE	UG/L : 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L : 2K
39180	TRICHLOROETHYLENE	UG/L : 2K
21105	CHLORODIBROMOMETHANE	UG/L : 2K
34511	1,1,2-TRICHLOROETHANE	UG/L : 2K

PLE NUMBER : 0002897

78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MEK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002895
AMPLING POINT DESC. : 3126/MADISON/HARTFORD/CHEMETCO

J[illegible]TING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000307 TIME COLLECTED : 1520 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1017 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L : 0.01K
-1284	TRIFLURALIN	UG/L : 0.01K
39337	ALPHA-BHC	UG/L : 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L : 0.01K
39630	ATRAZINE	UG/L : 0.1K
39410	HEPTACHLOR	UG/L : 0.01K
39330	ALDRIN	UG/L : 0.01K
77825	ALACHLOR	UG/L : 0.02K
31408	METRIBUZIN	UG/L : 0.05K
39356	METOLACHLOR	UG/L : 0.1K
39[illegible]	HEPTACHLOR EPOXIDE	UG/L : 0.01K
79[illegible]	PENDIMETHALIN	UG/L : 0.05K
39[illegible]	GAMMA-CHLORDANE	UG/L : 0.01K
39348	ALPHA-CHLORDANE	UG/L : 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L : 0.1K
39380	DIELDRIN	UG/L : 0.02
39640	CAPTAN	UG/L : 0.05K
1757	CYANAZINE	UG/L : 0.1K
9390	ENDRIN	UG/L : 0.01K
9320	P,P'-DDE	UG/L : 0.01K
9310	P,P'-DDD	UG/L : 0.01K
9300	P,P'-DDT	UG/L : 0.01K
9370	TOTAL DDT	UG/L : 0.1K
9480	METHOXYCHLOR	UG/L : 0.05K
9516	TOTAL PCBS	UG/L : 0.1K
4694	PHENOL	UG/L : 3K
4273	BIS(2-CHLOROETHYL)ETHER	UG/L : 3K
4586	2-CHLOROPHENOL	UG/L : 3K
4566	1,3-DICHLOROBENZENE	UG/L : 3K

PLE NUMBER : D002898

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34385	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 6K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 6K
34646	4-NITROPHENOL	UG/L	: 6K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 6K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 6K

SAMPLE NUMBER : D002893

34461	PHENANTHRENE	UG/L : 3K
[illegible]	ANTHRACENE	UG/L : 3K
39110	DI-N-BUTYLPHTHLATE	UG/L : 3K
34376	FLUORANTHENE	UG/L : 3K
34469	PYRENE	UG/L : 3K
34292	BUTYL BENZYL PHTHALATE	UG/L : 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L : 6K
34526	BENZO(A)ANTHRACENE	UG/L : 3K
34320	CHRYSENE	UG/L : 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L : 3K
34596	DI-N-OCTYLPHTHALATE	UG/L : 3K
34230	BENZO(B)FLUORANTHENE	UG/L : 3K
34242	BENZO(K)FLUORANTHENE	UG/L : 3K
34247	BENZO(A)PYRENE	UG/L : 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L : 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L : 3K
34521	BENZO(GHI)PERYLENE	UG/L : 3K
34418	CHLOROMETHANE	UG/L : 2K
34413	BROMOMETHANE	UG/L : 2K
39175	VINYL CHLORIDE	UG/L : 2K
34311	CHLOROETHANE	UG/L : 2K
34[illegible]	METHYLENE CHLORIDE	UG/L : 5K
81[illegible]	ACETONE	UG/L : 10K
34[illegible]	TRICHLOROFLUOROMETHANE	UG/L : 2K
77277	BROMOCHLOROMETHANE	UG/L : 2K
77041	CARBON DISULFIDE	UG/L : 2K
34501	1,1-DICHLOROETHYLENE	UG/L : 2K
34496	1,1-DICHLOROETHANE	UG/L : 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L : 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L : 2K
32106	CHLOROFORM	UG/L : 2K
34531	1,2-DICHLOROETHANE	UG/L : 2K
81595	2-BUTANONE(MEK)	UG/L : 2K
34506	1,1,1-TRICHLOROETHANE	UG/L : 2K
32102	CARBON TETRACHLORIDE	UG/L : 2K
46491	METHYL TERT-BUTYL ETHER	UG/L : 2K
32101	DICHLOROBROMOMETHANE	UG/L : 2K
34541	1,2-DICHLOROPROPANE	UG/L : 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L : 2K
39180	TRICHLOROETHYLENE	UG/L : 2K
2105	CHLORODIBROMOMETHANE	UG/L : 2K
4511	1,1,2-TRICHLOROETHANE	UG/L : 2K

PLE NUMBER : D002898

78124	BENZENE	UG/L : 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L : 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L : 2K
32104	BROMOFORM	UG/L : 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 2K
77103	2-HEXANONE(MBK)	UG/L : 2K
34475	TETRACHLOROETHYLENE	UG/L : 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L : 2K
78131	TOLUENE	UG/L : 2K
34301	CHLOROBENZENE	UG/L : 2K
78113	ETHYLBENZENE	UG/L : 2K
77128	STYRENE	UG/L : 2K
81551	XYLENE	UG/L : 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: MISCELLANEOUS COMPOUNDS UG/L ; 15

Illinois Environmental Protection Agency
DLPC/FOS Chain of Custody Document
(Analysis Request and Receipt for Samples)
Page 1 of 1

Name [10]	LPC # [17]	County	Locality
LP41	1198010003	Madison	Hartford
Section [18]	USEPA ID#	Site Name [19]	
	ILD048843809	Chemetco	

Project Manager's Name/Address/Phone #:
Gina Search
3009 Mall St
Collinsville, IL 62236
(618) 346-5120

IEPA Laboratory (circle one)
2125 S. 1st Street
Champaign, IL 61820, 217/333-6907
825 N. Rutledge Street
Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #

Delivered by [23]

Case # (if applicable)

Parameter Group [03] & Other Analytes [15]

Collection Information

Lab Sample # [01]	CWTOT							Field Sample #	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	[24] Collector or Laboratory Comments	Seal Intact? (y/n)
B003369	X							G147R	N	Y	5		3/8/00	9:00	922	GS		
B003370	X							G136R	N	Y	5		3/8/00	1050	1155	GS		
B003371	X							G137R	N	Y	5		3/8/00	1130	1150	GS		
B003372	X							G138R	N	Y	5		3/8/00	1240	1244	GS		
B003373	X							G139R	N	Y	5		3/8/00	1305	1330	GS		
B003374	X							G148R	N	Y	5		3/8/00	1350	1409	GS		
B003375	X							G132R	N	Y	~~3~~ 5		3/8/00	1435	1540	GS		
B003376	X							G133R	N	Y	3		3/8/00	1500	1542	GS	No Cyanide or Phenol	
B003377	X							G101	N	Y	4		3/8/00	1530	1545	GS	No Cyanide bottle	

RECEIVED IEPA AUG 03 2000 COLLINSVILLE OFFICE

Receipt for Samples: Collection of the above-listed sample(s) at the indicated site is hereby acknowledged. Split(s) Offered? (y) / n Accepted? (y) / n

Signature/Title of Facility Representative, Date: Environmental Manager 3/8/00

Samplers (printed names and signatures): Gina Search, Gina Search

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials: Gina Search GS Date: 3/8/00 Time (24 hr clk): 1755

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by (Sealer)	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
Gina Search	3/9/00	0800			

☒ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times and stored in a secured area.

Printed Name, Signature, and Initials [07]: Pat Dixon MAR 10 2000 Time [06] (24 hr clk): 9A Supervisor releasing results (signature): Date: 3/31/00

IL 532-2311
LPC 525
REV. 2/99

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003369
SAMPLING POINT DESC. : CHEMETCO G147R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 0900 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 7.6	P00095	CONDUCTIVITY	UM/CM	: 750
P70300	(ROE) TDS @ 180C	MG/L	: 593	P00410	ALKALINITY,TOTAL	MG/L	: 279.
P00951	FLUORIDE,TOTAL	MG/L	: 0.230	P00940	CHLORIDE,TOTAL	MG/L	: 46.5
P00945	SULFATE,TOTAL	MG/L	: 133.	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.01K
P00610	AMMONIA-N,TOTAL	MG/L	: 0.21	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.43	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 120
P00927	MAGNESIUM,T SW846	MG/L	: 30	P00929	SODIUM,T SW846	MG/L	: 38
P00937	POTASSIUM,T SW846	MG/L	: 5.4	P01105	ALUMIMUM,T SW846	UG/L	: 320
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 18
P01007	BARIUM,T SW846	UG/L	: 140	P01022	BORON,T SW846	UG/L	: 410
P01012	BERYLLIUM,T SW846	UG/L	: 1K	P01027	CADMIUM,T SW846	UG/L	: 5K
P01034	CHROMIUM,T SW846	UG/L	: 6.2	P01042	COPPER,T SW846	UG/L	: 25
P01037	COBALT,T SW846	UG/L	: 5K	P01045	IRON,T SW846	UG/L	: 9600
P01051	LEAD,T SW846	UG/L	: 38	P01055	MANGANESE,T SW846	UG/L	: 400
P01067	NICKEL,T SW846	UG/L	: 9.1	P01147	SELENIUM,T SW846	UG/L	: 10K
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 320
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 10
P01092	ZINC,T SW846	UG/L	: 300				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003370
SAMPLING POINT DESC. : CHEMETCO G136R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1050 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : D REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	7.5	P00095	CONDUCTIVITY	UM/CM :	1160
P70300	(ROE) TDS @ 180C	MG/L :	1020	P00410	ALKALINITY,TOTAL	MG/L :	223.
P00951	FLUORIDE,TOTAL	MG/L :	0.110	P00940	CHLORIDE,TOTAL	MG/L :	200.
P00945	SULFATE,TOTAL	MG/L :	244.	P00630	NITRATE&NO2-NTOTAL	MG/L :	0.01K
P00610	AMMONIA-N,TOTAL	MG/L :	0.43	P32730	PHENOLS,TOTAL	UG/L :	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L :	0.20	P00720	CYANIDE,T SW846	UG/L :	0.01K
P71900	MERCURY,T SW846	UG/L :	0.50K	P01059	THALLIUM,T SW846	UG/L :	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L :	150
P00927	MAGNESIUM,T SW846	MG/L :	39	P00929	SODIUM,T SW846	MG/L :	110
P00937	POTASSIUM,T SW846	MG/L :	4.8	P01105	ALUMIMUM,T SW846	UG/L :	490
P[illegible]7	ANTIMONY,T SW846	UG/L :	6K	P01002	ARSENIC,T SW846	UG/L :	10K
P0[illegible]07	BARIUM,T SW846	UG/L :	110	P01022	BORON,T SW846	UG/L :	240
P01012	BERYLLIUM,T SW846	UG/L :	1K	P01027	CADMIUM,T SW846	UG/L :	5K
P01034	CHROMIUM,T SW846	UG/L :	5K	P01042	COPPER,T SW846	UG/L :	11
P01037	COBALT,T SW846	UG/L :	5K	P01045	IRON,T SW846	UG/L :	6500
P01051	LEAD,T SW846	UG/L :	6.1	P01055	MANGANESE,T SW846	UG/L :	790
P01067	NICKEL,T SW846	UG/L :	5K	P01147	SELENIUM,T SW846	UG/L :	10K
P01077	SILVER,T SW846	UG/L :	5K	P01082	STRONTIUM,T SW846	UG/L :	240
P01059	THALLIUM,T SW846	UG/L :	10K	P01087	VANADIUM,T SW846	UG/L :	5K
P01092	ZINC,T SW846	UG/L :	100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003371
SAMPLING POINT DESC. : CHEMETCO G137R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1130 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	7.4	P00095	CONDUCTIVITY	UM/CM	1600
P70300	(ROE) TDS @ 180C	MG/L	1820	P00410	ALKALINITY,TOTAL	MG/L	215.
P00951	FLUORIDE,TOTAL	MG/L	0.570	P00940	CHLORIDE,TOTAL	MG/L	366.
P00945	SULFATE,TOTAL	MG/L	416.	P00630	NITRATE&NO2-NTOTAL	MG/L	0.10
P00610	AMMONIA-N,TOTAL	MG/L	0.39	P32730	PHENOLS,TOTAL	UG/L	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	0.18	P00720	CYANIDE,T SW846	UG/L	0.01K
P71900	MERCURY,T SW846	UG/L	0.50K	P01059	THALLIUM,T SW846	UG/L	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	360
P00927	MAGNESIUM,T SW846	MG/L	86	P00929	SODIUM,T SW846	MG/L	94
P00937	POTASSIUM,T SW846	MG/L	5.7	P01105	ALUMIMUM,T SW846	UG/L	110
P01097	ANTIMONY,T SW846	UG/L	6K	P01002	ARSENIC,T SW846	UG/L	10K
P01007	BARIUM,T SW846	UG/L	61	P01022	BORON,T SW846	UG/L	2000
P01012	BERYLLIUM,T SW846	UG/L	1K	P01027	CADMIUM,T SW846	UG/L	5.2
P01034	CHROMIUM,T SW846	UG/L	5K	P01042	COPPER,T SW846	UG/L	61
P01037	COBALT,T SW846	UG/L	7.8	P01045	IRON,T SW846	UG/L	2300
P01051	LEAD,T SW846	UG/L	18	P01055	MANGANESE,T SW846	UG/L	2400
P01067	NICKEL,T SW846	UG/L	11	P01147	SELENIUM,T SW846	UG/L	10K
P01077	SILVER,T SW846	UG/L	5K	P01082	STRONTIUM,T SW846	UG/L	940
P01059	THALLIUM,T SW846	UG/L	10K	P01087	VANADIUM,T SW846	UG/L	5K
P01092	ZINC,T SW846	UG/L	110				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003372
SAMPLING POINT DESC. : CHEMETCO G138R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1240 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	7.4	P00095	CONDUCTIVITY	UM/CM :	840
P70300	(ROE) TDS @ 180C	MG/L :	717	P00410	ALKALINITY,TOTAL	MG/L :	289.
P00951	FLUORIDE,TOTAL	MG/L :	0.270	P00940	CHLORIDE,TOTAL	MG/L :	76.1
P00945	SULFATE,TOTAL	MG/L :	123.	P00630	NITRATE&NO2-NTOTAL	MG/L :	0.01K
P00610	AMMONIA-N,TOTAL	MG/L :	0.52	P32730	PHENOLS,TOTAL	UG/L :	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L :	0.33	P00720	CYANIDE,T SW846	UG/L :	0.01K
P71900	MERCURY,T SW846	UG/L :	0.50K	P01059	THALLIUM,T SW846	UG/L :	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L :	150
P00927	MAGNESIUM,T SW846	MG/L :	34	P00929	SODIUM,T SW846	MG/L :	22
P00937	POTASSIUM,T SW846	MG/L :	4.2	P01105	ALUMIMUM,T SW846	UG/L :	1700
P01097	ANTIMONY,T SW846	UG/L :	6K	P01002	ARSENIC,T SW846	UG/L :	10K
P01007	BARIUM,T SW846	UG/L :	850	P01022	BORON,T SW846	UG/L :	110
P01012	BERYLLIUM,T SW846	UG/L :	1K	P01027	CADMIUM,T SW846	UG/L :	5K
P01034	CHROMIUM,T SW846	UG/L :	5K	P01042	COPPER,T SW846	UG/L :	52
P01037	COBALT,T SW846	UG/L :	5K	P01045	IRON,T SW846	UG/L :	9700
P01051	LEAD,T SW846	UG/L :	30	P01055	MANGANESE,T SW846	UG/L :	550
P01067	NICKEL,T SW846	UG/L :	5.9	P01147	SELENIUM,T SW846	UG/L :	10K
P01077	SILVER,T SW846	UG/L :	5K	P01082	STRONTIUM,T SW846	UG/L :	400
P01059	THALLIUM,T SW846	UG/L :	10K	P01087	VANADIUM,T SW846	UG/L :	5K
P01092	ZINC,T SW846	UG/L :	100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003373
SAMPLING POINT DESC. : CHEMETCO G139R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 0305 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	7.2	P00095	CONDUCTIVITY	UM/CM :	1700
P70300	(ROE) TDS @ 180C	MG/L :	1690	P00410	ALKALINITY,TOTAL	MG/L :	272.
P00951	FLUORIDE,TOTAL	MG/L :	0.170	P00940	CHLORIDE,TOTAL	MG/L :	349.
P00945	SULFATE,TOTAL	MG/L :	171		: SAMPLE EXCEEDED HOLDING TIME		
P00630	NITRATE&NO2-NTOTAL	MG/L :	0.01K	P00610	AMMONIA-N,TOTAL	MG/L :	0.65
P32730	PHENOLS,TOTAL	UG/L :	10K	P00665	PHOSPHORUS-P,TOTAL	MG/L :	0.33
P00720	CYANIDE,T SW846	UG/L :	0.01K	P71900	MERCURY,T SW846	UG/L :	0.69
P01059	THALLIUM,T SW846	UG/L :	10K		: SAMPLE RAN BY ICP-AES.		
P00916	CALCIUM,T SW846	MG/L :	240	P00927	MAGNESIUM,T SW846	MG/L :	54
P00929	SODIUM,T SW846	MG/L :	220	P00937	POTASSIUM,T SW846	MG/L :	5.8
P01105	ALUMIMUM,T SW846	UG/L :	320	P01097	ANTIMONY,T SW846	UG/L :	6K
P01002	ARSENIC,T SW846	UG/L :	10K	P01007	BARIUM,T SW846	UG/L :	110
P01022	BORON,T SW846	UG/L :	880	P01012	BERYLLIUM,T SW846	UG/L :	1K
P01027	CADMIUM,T SW846	UG/L :	5K	P01034	CHROMIUM,T SW846	UG/L :	5K
P01042	COPPER,T SW846	UG/L :	36.	P01037	COBALT,T SW846	UG/L :	5K
P01045	IRON,T SW846	UG/L :	19000	P01051	LEAD,T SW846	UG/L :	22
P01055	MANGANESE,T SW846	UG/L :	1400	P01067	NICKEL,T SW846	UG/L :	15
P01147	SELENIUM,T SW846	UG/L :	10K	P01077	SILVER,T SW846	UG/L :	5K
P01082	STRONTIUM,T SW846	UG/L :	450	P01059	THALLIUM,T SW846	UG/L :	10K
P01087	VANADIUM,T SW846	UG/L :	5K	P01092	ZINC,T SW846	UG/L :	100K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003374
SAMPLING POINT DESC. : CHEMETCO G148R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1350 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : B TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	7.4	P00095	CONDUCTIVITY	UM/CM :	1170
P70300	(ROE) TDS @ 180C	MG/L :	988	P00410	ALKALINITY,TOTAL	MG/L :	243.
P00951	FLUORIDE,TOTAL	MG/L :	0.240	P00940	CHLORIDE,TOTAL	MG/L :	181.
P00945	SULFATE,TOTAL	MG/L :	241.	P00630	NITRATE&NO2-NTOTAL	MG/L :	0.28
P00610	AMMONIA-N,TOTAL	MG/L :	0.15	P32730	PHENOLS,TOTAL	UG/L :	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L :	0.51	P00720	CYANIDE,T SW846	UG/L :	0.01K
P71900	MERCURY,T SW846	UG/L :	0.50K	P01059	THALLIUM,T SW846	UG/L :	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L :	160
P00927	MAGNESIUM,T SW846	MG/L :	35	P00929	SODIUM,T SW846	MG/L :	110
P00937	POTASSIUM,T SW846	MG/L :	5.9	P01105	ALUMIMUM,T SW846	UG/L :	3700
P[illegible]7	ANTIMONY,T SW846	UG/L :	6K	P01002	ARSENIC,T SW846	UG/L :	14
P0[illegible]07	BARIUM,T SW846	UG/L :	140	P01022	BORON,T SW846	UG/L :	530
P01012	BERYLLIUM,T SW846	UG/L :	1K	P01027	CADMIUM,T SW846	UG/L :	5K
P01034	CHROMIUM,T SW846	UG/L :	5.7	P01042	COPPER,T SW846	UG/L :	71
P01037	COBALT,T SW846	UG/L :	5K	P01045	IRON,T SW846	UG/L :	16000
P01051	LEAD,T SW846	UG/L :	34	P01055	MANGANESE,T SW846	UG/L :	520
P01067	NICKEL,T SW846	UG/L :	12	P01147	SELENIUM,T SW846	UG/L :	10K
P01077	SILVER,T SW846	UG/L :	5K	P01082	STRONTIUM,T SW846	UG/L :	280
P01059	THALLIUM,T SW846	UG/L :	10K	P01087	VANADIUM,T SW846	UG/L :	10
P01092	ZINC,T SW846	UG/L :	140				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003375
SAMPLING POINT DESC. : CHEMETCO G132R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1435 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 6.6	P00095	CONDUCTIVITY	UM/CM	: 2230
P70300	(ROE) TDS @ 180C	MG/L	: 2830	P00410	ALKALINITY,TOTAL	MG/L	: 607.
P00951	FLUORIDE,TOTAL	MG/L	: 0.120	P00940	CHLORIDE,TOTAL	MG/L	: 334.
P00945	SULFATE,TOTAL	MG/L	: 896.	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.01K
P00610	AMMONIA-N,TOTAL	MG/L	: 0.01K	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.48	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 580
P00927	MAGNESIUM,T SW846	MG/L	: 120	P00929	SODIUM,T SW846	MG/L	: 170
P00937	POTASSIUM,T SW846	MG/L	: 8.9	P01105	ALUMIMUM,T SW846	UG/L	: 870
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 210	P01022	BORON,T SW846	UG/L	: 1400
P01012	BERYLLIUM,T SW846	UG/L	: 1.0	P01027	CADMIUM,T SW846	UG/L	: 7.4
P01034	CHROMIUM,T SW846	UG/L	: 15	P01042	COPPER,T SW846	UG/L	: 130
P01037	COBALT,T SW846	UG/L	: 88	P01045	IRON,T SW846	UG/L	: 13000
P01051	LEAD,T SW846	UG/L	: 94	P01055	MANGANESE,T SW846	UG/L	: 3200
P01067	NICKEL,T SW846	UG/L	: 110	P01147	SELENIUM,T SW846	UG/L	: 16
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 780
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 35
P01092	ZINC,T SW846	UG/L	: 240				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003376
SAMPLING POINT DESC. : CHEMETCO G133R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1500 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS : 8.9	P00095	CONDUCTIVITY	UM/CM : 13730
P70300	(ROE) TDS @ 180C	MG/L : 13000	P00410	ALKALINITY,TOTAL	MG/L : 845.
P00951	FLUORIDE,TOTAL	MG/L : 208.	P00940	CHLORIDE,TOTAL	MG/L : 1K
P00945	SULFATE,TOTAL	MG/L : 3720		: SAMPLE EXCEEDED HOLDING TIME	
P00630	NITRATE&NO2-NTOTAL	MG/L : 3.7	P00610	AMMONIA-N,TOTAL	MG/L : 3.9
P00665	PHOSPHORUS-P,TOTAL	MG/L : 25	P71900	MERCURY,T SW846	UG/L : 3.41
P01059	THALLIUM,T SW846	UG/L : 10K		: SAMPLE RAN BY ICP-AES.	
P00916	CALCIUM,T SW846	MG/L : 240	P00927	MAGNESIUM,T SW846	MG/L : 120
P00929	SODIUM,T SW846	MG/L : 4300	P00937	POTASSIUM,T SW846	MG/L : 32
P01105	ALUMIMUM,T SW846	UG/L : 28000	P01097	ANTIMONY,T SW846	UG/L : 6K
[illegible]02	ARSENIC,T SW846	UG/L : 220.	P01007	BARIUM,T SW846	UG/L : 340
[illegible]022	BORON,T SW846	UG/L : 14000	P01012	BERYLLIUM,T SW846	UG/L : 4.7
P01027	CADMIUM,T SW846	UG/L : 125	P01034	CHROMIUM,T SW846	UG/L : 39
P01042	COPPER,T SW846	UG/L : 2300	P01037	COBALT,T SW846	UG/L : 17
P01045	IRON,T SW846	UG/L : 43000	P01051	LEAD,T SW846	UG/L : 2200
P01055	MANGANESE,T SW846	UG/L : 1800	P01067	NICKEL,T SW846	UG/L : 170
P01147	SELENIUM,T SW846	UG/L : 240	P01077	SILVER,T SW846	UG/L : 5K
P01082	STRONTIUM,T SW846	UG/L : 690	P01059	THALLIUM,T SW846	UG/L : 10K
P01087	VANADIUM,T SW846	UG/L : 94	P01092	ZINC,T SW846	UG/L : 12000

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003377
SAMPLING POINT DESC. : CHEMETCO G101

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000308 TIME COLLECTED : 1520 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000310 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 5.7	P00095	CONDUCTIVITY	UM/CM	: 5880
P70300	(ROE) TDS @ 180C	MG/L	: 5560	P00410	ALKALINITY,TOTAL	MG/L	: 54.0
P00951	FLUORIDE,TOTAL	MG/L	: 2.90	P00940	CHLORIDE,TOTAL	MG/L	: 902.
P00945	SULFATE,TOTAL	MG/L	: 1610	: SAMPLE EXCEEDED HOLDING TIME			
P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.21	P00610	AMMONIA-N,TOTAL	MG/L	: 3.2
P32730	PHENOLS,TOTAL	UG/L	: 17	P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.02
P71900	MERCURY,T SW846	UG/L	: 1.34	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 490
P00927	MAGNESIUM,T SW846	MG/L	: 110	P00929	SODIUM,T SW846	MG/L	: 980
P00937	POTASSIUM,T SW846	MG/L	: 8.9	P01105	ALUMIMUM,T SW846	UG/L	: 460
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 14	P01022	BORON,T SW846	UG/L	: 3100
P01012	BERYLLIUM,T SW846	UG/L	: 9.4	P01027	CADMIUM,T SW846	UG/L	: 360
P01034	CHROMIUM,T SW846	UG/L	: 7.9	P01042	COPPER,T SW846	UG/L	: 43000
P01037	COBALT,T SW846	UG/L	: 340	P01045	IRON,T SW846	UG/L	: 18000
P01051	LEAD,T SW846	UG/L	: 150	P01055	MANGANESE,T SW846	UG/L	: 27000
P01067	NICKEL,T SW846	UG/L	: 70000	P01147	SELENIUM,T SW846	UG/L	: 34
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 790
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 5K
P01092	ZINC,T SW846	UG/L	: 16000	: DILUTION.			

Illinois Environmental Protection Agency
DLPC/FOS Chain of Custody Document
(Analysis Request and Receipt for Samples)
Page 1 of 1

Fund [10]: LP41	LPC # [12]: 1198010003	County: Madison	Locality: Hartford
Section [14]: F	USEPA ID#: ILD048843809	Site Name [19]: Chemetco	

Project Manager's Name/Address/Phone #: Gina Search, 2009 Mull St., Collinsville, IL 62234, 618/346-5120

IEPA Laboratory (circle one): 2125 S. 1st Street, Champaign, IL 61820, 217/333-6907 — 825 N. Rutledge Street, Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #:

Delivered by [23]:

Case # (if applicable):

Lab Sample # [01]	SVOC	PCB	Pest-Herb	VOC-MS			Field Sample # [15]	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	Date Collected & Sealed [20]	Time Collected (24 hr clk) [21]	Time Sealed (24 hr clk)	Sampler's Initials [22]	Collector or Laboratory Comments [24]	Seal Intact? (y/n)
002833	X	X	X	X			G127		Y	3		3/6/00	9:45	1426	GS		Y
002834	X	X	X	X			G116		Y	3		3/6/00	10:05	1430	GS		Y
002835	X	X	X	X			G128		Y	3		3/6/00	10:30	1437	GS		Y
002836	X	X	X	X			G129		Y	3		3/6/00	11:10	1440	GS		Y
002837	X	X	X	X			G119		Y	3		3/6/00	11:40	1455	GS		Y
002838	X	X	X	X			G144		Y	3		3/6/00	12:10	1446	GS		Y
002839	X	X	X	X			G156		Y	3		3/6/00	13:10	1415	GS		Y
002840	X	X	X	X			G155		Y	3		3/6/00	14:54	1506	GS		Y
002841	X	X	X	X			G125		Y	3		3/6/00	15:20	1527	GS		Y
002842	X	X	X	X			G144R		Y	3		3/6/00	1520	1646	GS		Y

Collection Information

Receipt for Samples: Collection of the above-listed sample(s) at the indicated site is hereby acknowledged.
Signature, Title of Facility Representative, Date: Heather [illegible] Environmental Manager 3/6/00

Split(s) Offered? (y) n Accepted? (y) n

Samplers (printed names and signatures): Gina Search, Gina Search, ~~Blank~~ 2nd 3-7-00

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials: Gina Search GS — Date: 3/7/2000 — Time (24 hr clk): 842

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
(Sealer) Gina Search	3/7/00	1344	[illegible]	3/7/00	1344
[illegible] Scott Barton	3/7/00	1553			

☐ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times or locked in a secured area.
Printed Name, Signature, and Initials [07]: Michelle Hoggard [illegible] Date [05] — Time [06] (24 hr clk): 15:53

Supervisor releasing results (signature): Date:

IL 532-2311
LPC 525
REV. 2/99

: Environmen[illegible] Protection Agency
/POS Unif[illegible]mple Document
tory: Champaign Springfield
2 of 2

Fund [10] LP52
Section [14] F
LFC # [17] 1198010003
USEPA # ILD048843809
County: Madison
Locality: Hartford
Site Name [19] Chemeto

Manager's Name and Mailing Address: Search
4 Mill St. Collinsville IL 62234
Section/Unit
IL 6

IEPA Laboratory Address and Phone Number (circle one)
2125 S. 1st Street, Champaign, IL 61820, 217/333-6907
(B25 N. Rutledge Street, Springfield, IL 62702, 217/782-9780)

Sample # [01] (if applicable)	Parameter Group [03] & Other Analyses: SVOC	PCB	Pesticides	VOC			[12] Split: "2" is yes	SAVE (y/n)	# Bottles	[15] Field Sample #	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	[24] Special Notations	Seal Intact (y/n)
02843	X	X	X	X			X		3	C131A	3-6-00	16:30	16:40	C.S.		Y
02844				X					2	T.B.	—	—	—	C.S.		Y

Samples were not accompanied w/ paperwork. Call Dina - for info & filled out.

MAR 07 2000

[illegible] indicated site is hereby acknowledged.

Delivered by [23]

Split(s) Offered? y / n Accepted? y / n

(printed names and signatures)

Sealer: I certify that the samples listed above were sealed by me and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials Date Time (24 hr clk)

I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

[illegible]shed by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
[illegible])					

☐ To Sealed Container for Shipment

[illegible]y Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same will be retained by laboratory personnel at all times or locked in a secured area.

[illegible]ame, Signature, and Initials [07] Date [05] Time [06] (24 hr clk)
Victoria Hogg, Michelle Hogg, MH MAR 07 2000 15:53

Supervisor releasing results (signature): Date:

MAR-20-00 MON 01:56 PM IL EPA*LABS FAX NO. 2175246376 P. 01

Illinois Environmental Protection Agency
DLPC/FOS Chain of Custody Document
(Analysis Request and Receipt for Samples)
Page 1 of 1

Fund [10]	LPC # [17]	County	Locality
LP41	1198010003	Madison	Hartford
Section [14]	USEPA ID#	Site Name [19]	
F	ILD048843809	Chemetco	

Groundwater

Project Manager's Name/Address/Phone #:
Gina Search
2009 Mall St.
Collinsville, IL 62234
618 346-5120

IEPA Laboratory (circle one)
2125 S. 1st Street
Champaign, IL 61820, 217/333-6907
825 N. Rutledge Street
Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #

Delivered by [23]

Case # (if applicable)

Lab Sample # [01]	Parameter Group [03] & Other Analytes: SVOC	PCB	Pest-Kel	VOC				Field Sample # [15]	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	Collection Information: Date Collected & Sealed [20]	Time Collected (24 hr clk) [21]	Time Sealed (24 hr clk)	Sampler's Initials [22]	Collector or Laboratory Comments [24]	Seal Intact? (y/n)
002899	X	X	X	X				G147R	N	y	3		3/8/00	9:00	9:22	GS		y
002900	X	X	X	X				G134R ~~G148~~	N	y	3		3/8/00	1050	1155	GS		y
002901	X	X	X	X				G137R	N	y	3		3/8/00	1130	1150	GS	RECEIVED	y
002902	X	X	X	X				G138R	N	y	3		3/8/00	1240	1244	GS	APR 17 2000	y
002903				X				G139R	N	y	2		3/8/00	1305	1330	GS	IEPA-DLPC	y
002904	X	X	X	X				G148R	N	y	3		3/8/00	1358	1409	GS	RECEIVED	y
002905	X	X	X	X				G132R	N	y	3		3/8/00	1435	1540	GS	IEPA APR 19 2000	y
002906				X				G133R	N	y	2		3/8/00	1500	1542	GS	COLLINSVILLE OFFICE	y
002907	X	X	X	X				G101	N	y	3		3/8/00	1520	1727	GS		y
002908								Trip Blanks					3/8/00					y

Receipt for Samples: Collection of the above-listed sample(s) at the indicated site is hereby acknowledged.
Signature/Title of Facility Representative, Date: Environmental Manager, 3/8/00
Split(s) Offered? (y) n Accepted? (y) n

Samplers (printed names and signatures): Gina Search, Gina Search

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials: Gina Search GS
Date: 3/8/00
Time (24 hr clk): 1755

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
(Sealer) Gina Search	3/9/00	1018			

☐ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the [illegible]). After being received, this/these same sample(s) will be retained by laboratory personnel at all times [illegible]ed in a secured area.
Printed Name, Signature, and Initials [07]: Stan Lowe [illegible]
Da[illegible]: 3-9-00
Time [06] (24 hr clk): 1018

Supervisor releasing results (signature): [illegible]
Date: APR 17 2000

IL 532-2311
LPC 525
REV. 2/99

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002399
AMPLING POINT DESC. : G147R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000308 TIME COLLECTED : 0900 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

PLE NUMBER : D002899

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
7	BENZYL ALCOHOL	UG/L	: 3K
36	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
1	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
7	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34351	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 10K

MPLE NUMBER : D002899

34461	PHENANTHRENE	UG/L : 3K
34220	ANTHRACENE	UG/L : 3K
39110	DI-N-BUTYLPHTHLATE	UG/L : 3K
34376	FLUORANTHENE	UG/L : 3K
34469	PYRENE	UG/L : 3K
34292	BUTYL BENZYL PHTHALATE	UG/L : 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L : 10K
34526	BENZO(A)ANTHRACENE	UG/L : 3K
34320	CHRYSENE	UG/L : 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L : 3K
34596	DI-N-OCTYLPHTHALATE	UG/L : 5K
34230	BENZO(B)FLUORANTHENE	UG/L : 3K
34242	BENZO(K)FLUORANTHENE	UG/L : 3K
34247	BENZO(A)PYRENE	UG/L : 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L : 5K
34556	DIBENZO(AH)ANTHRACENE	UG/L : 5K
34521	BENZO(GHI)PERYLENE	UG/L : 3K

: .
: .
: .
: .

34418	CHLOROMETHANE	UG/L : 2K
34413	BROMOMETHANE	UG/L : 2K
39175	VINYL CHLORIDE	UG/L : 2K
34311	CHLOROETHANE	UG/L : 2K
34423	METHYLENE CHLORIDE	UG/L : 5K
81552	ACETONE	UG/L : 10K
34488	TRICHLOROFLUOROMETHANE	UG/L : 2K
77277	BROMOCHLOROMETHANE	UG/L : 2K
77041	CARBON DISULFIDE	UG/L : 2K
34501	1,1-DICHLOROETHYLENE	UG/L : 2K
34496	1,1-DICHLOROETHANE	UG/L : 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L : 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L : 2K
32106	CHLOROFORM	UG/L : 2K
34531	1,2-DICHLOROETHANE	UG/L : 2K
81595	2-BUTANONE(MEK)	UG/L : 2K
34506	1,1,1-TRICHLOROETHANE	UG/L : 2K
32102	CARBON TETRACHLORIDE	UG/L : 2K
46491	METHYL TERT-BUTYL ETHER	UG/L : 2K
32101	DICHLOROBROMOMETHANE	UG/L : 2K
34541	1,2-DICHLOROPROPANE	UG/L : 2K

MPLE NUMBER : D002899

34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
[illegible]	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: SULFUR # UG/L; 3.8

: # TENTATIVE IDENTIFICATION

KTM
cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002900
AMPLING POINT DESC. : G136R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILD048343809
ATE COLLECTED : 000308 TIME COLLECTED : 1050 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39330	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : 0002900

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
7[illegible]7	BENZYL ALCOHOL	UG/L	: 3K
34[illegible]56	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
343[illegible]6	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
3[illegible]	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77[illegible]	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
31302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39[illegible]	PENTACHLOROPHENOL	UG/L	: 10K

MPLE NUMBER : 0002900

34461	PHENANTHRENE	UG/L	: 3K
34220	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 10K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 5K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 5K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 5K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

PLE NUMBER : 0002900

7[illegible]4	BENZENE	UG/L	: 2K
3[illegible]9	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34[illegible]5	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
75113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: OTHER ORGANIC COMPOUNDS UG/L; 5.7

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D002901
SAMPLING POINT DESC. : G137R/MADISON/HARTFORD/CHEMETCO

SUBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
DATE COLLECTED : 000308 TIME COLLECTED : 1130 SAMPLING PROGRAM :

COLLECTED BY : G S DELIVERED BY : GINA
COMMENTS : VOC/SVOC/PEST-ECD/PCB
FUNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
LAB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
SUPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81234	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : 0002901

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
[illegible]7	BENZYL ALCOHOL	UG/L	: 3K
34[illegible]36	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
3[illegible]	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
7[illegible]	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 10K

MPLE NUMBER : 0002901

34461	PHENANTHRENE	UG/L	: 3K
34220	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 10K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 5K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 5K
34556	DIBENZO(AH)ANTHPACENE	UG/L	: 5K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

: .
: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT
: .

34416	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K

MPLE NUMBER : D002901

3[illegible]4	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
1[illegible]0	TRICHLOROETHYLENE	UG/L	: 2K
32[illegible]03	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: OTHER ORGANIC COMPOUNDS UG/L; 66

Pth cnc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002902
AMPLING POINT DESC. : G138R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1193010003 SITE # : ILD048843809
ATE COLLECTED : 000308 TIME COLLECTED : 1240 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39430	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.12
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : 0002902

3[illegible]71	1,4-DICHLOROBENZENE	UG/L	: 3K
7[illegible]7	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34423	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34[illegible]36	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
3[illegible]	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77[illegible]7	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39[illegible]	PENTACHLOROPHENOL	UG/L	: 10K

PLE NUMBER : D002902

34461	PHENANTHRENE	UG/L	: 3K
34220	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 10K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 16
34596	DI-N-OCTYLPHTHALATE	UG/L	: 5K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 5K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 5K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 6.2
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

MPLE NUMBER : D002902

7[illegible]24	BENZENE	UG/L	: 2K
3[illegible]9	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
3[illegible]76	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : 0002903
AMPLING POINT DESC. : G139R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILD048543809
ATE COLLECTED : 000308 TIME COLLECTED : 1305 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOCS
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 2-40ML VOCS TRIP BL SAM# : 0002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

34413	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 68
34496	1,1-DICHLOROETHANE	UG/L	: 150
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K

MPLE NUMBER : 0002903

7[illegible]3	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
7[illegible]3	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
73113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

620A Chem Code
wells
G148R
G132R
G133R
G101
Blank

AMPLE NUMBER : D002904
AMPLING POINT DESC. : G148R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1193010003 SITE # : ILD
ATE COLLECTED : 000308 TIME COLLECTED : 1358 SAMPLI

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S.L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

APLE NUMBER : D002904

3[illegible]1	1,4-DICHLOROBENZENE	UG/L	: 3K
7[illegible]7	BENZYL ALCOHOL	UG/L	: 3K
34[illegible]36	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34273	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34[illegible]86	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
3[illegible]	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
7[illegible]7	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39[illegible]	PENTACHLOROPHENOL	UG/L	: 10K

MPLE NUMBER : D002904

34461	PHENANTHRENE	UG/L : 3K
34220	ANTHRACENE	UG/L : 3K
39110	DI-N-BUTYLPHTHLATE	UG/L : 3K
34376	FLUORANTHENE	UG/L : 3K
34469	PYRENE	UG/L : 3K
34292	BUTYL BENZYL PHTHALATE	UG/L : 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L : 10K
34526	BENZO(A)ANTHRACENE	UG/L : 3K
34320	CHRYSENE	UG/L : 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L : 3K
34596	DI-N-OCTYLPHTHALATE	UG/L : 5K
34230	BENZO(B)FLUORANTHENE	UG/L : 3K
34242	BENZO(K)FLUORANTHENE	UG/L : 3K
34247	BENZO(A)PYRENE	UG/L : 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L : 5K
34556	DIBENZO(AH)ANTHRACENE	UG/L : 5K
34521	BENZO(GHI)PERYLENE	UG/L : 3K
34418	CHLOROMETHANE	UG/L : 2K
34413	BROMOMETHANE	UG/L : 2K
39175	VINYL CHLORIDE	UG/L : 2K
34311	CHLOROETHANE	UG/L : 2K
34423	METHYLENE CHLORIDE	UG/L : 5K
81552	ACETONE	UG/L : 10K
34488	TRICHLOROFLUOROMETHANE	UG/L : 2K
77277	BROMOCHLOROMETHANE	UG/L : 2K
77041	CARBON DISULFIDE	UG/L : 2K
34501	1,1-DICHLOROETHYLENE	UG/L : 2K
34496	1,1-DICHLOROETHANE	UG/L : 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L : 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L : 2K
32106	CHLOROFORM	UG/L : 2K
34531	1,2-DICHLOROETHANE	UG/L : 2K
81595	2-BUTANONE(MEK)	UG/L : 2K
34506	1,1,1-TRICHLOROETHANE	UG/L : 2K
32102	CARBON TETRACHLORIDE	UG/L : 2K
46491	METHYL TERT-BUTYL ETHER	UG/L : 2K
32101	DICHLOROBROMOMETHANE	UG/L : 2K
34541	1,2-DICHLOROPROPANE	UG/L : 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L : 2K
39180	TRICHLOROETHYLENE	UG/L : 2K
32105	CHLORODIBROMOMETHANE	UG/L : 2K
34511	1,1,2-TRICHLOROETHANE	UG/L : 2K

PLE NUMBER : D002904

7[illegible]4	BENZENE	UG/L : 2K
3[illegible]9	TRANS-1,3-DICHLOROPROPENE	UG/L : 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L : 2K
32104	BROMOFORM	UG/L : 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 2K
77103	2-HEXANONE(MBK)	UG/L : 2K
34475	TETRACHLOROETHYLENE	UG/L : 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L : 2K
78131	TOLUENE	UG/L : 2K
34301	CHLOROBENZENE	UG/L : 2K
78113	ETHYLBENZENE	UG/L : 2K
77128	STYRENE	UG/L : 2K
81551	XYLENE	UG/L : 2K

RTM
CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : 0002905
AMPLING POINT DESC. : G132R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000308 TIME COLLECTED : 1435 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : 0002906
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39310	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : 0002905

[illegible]1	1,4-DICHLOROBENZENE	UG/L	: 3K
[illegible]7	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34[illegible]6	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
3[illegible]	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77[illegible]7	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34331	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39[illegible]	PENTACHLOROPHENOL	UG/L	: 10K

MPLE NUMBER : 0002905

34461	PHENANTHRENE	UG/L	: 3K
34220	ANTHRACENE	UG/L	: 3K
39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
34376	FLUORANTHENE	UG/L	: 3K
34469	PYRENE	UG/L	: 3K
34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L	: 10K
34526	BENZO(A)ANTHRACENE	UG/L	: 3K
34320	CHRYSENE	UG/L	: 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
34596	DI-N-OCTYLPHTHALATE	UG/L	: 5K
34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 5K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 5K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K
34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 5.9
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

[illegible]PLE NUMBER : B003238
[illegible]LING POINT DESC. : CHEMETCO G127

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 0945 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 6.9	P00095	CONDUCTIVITY	UM/CM	: 14000
P70300	(ROE) TDS @ 180C	MG/L	: 14000	P00410	ALKALINITY,TOTAL	MG/L	: 370.
P00951	FLUORIDE,TOTAL	MG/L	: 4.67	P00940	CHLORIDE,TOTAL	MG/L	: 1K
P00945	SULFATE,TOTAL	MG/L	: 4720	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.20
P00610	AMMONIA-N,TOTAL	MG/L	: 5.9	P32730	PHENOLS,TOTAL	UG/L	: 250
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.07	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 1.94	P01059	THALLIUM,T SW846	UG/L	: 50K
: SAMPLE RAN BY ICP-AES.				: DILUTION.			
P00916	CALCIUM,T SW846	MG/L	: 590	P00927	MAGNESIUM,T SW846	MG/L	: 210
P[illegible]29	SODIUM,T SW846	MG/L	: 3500	P00937	POTASSIUM,T SW846	MG/L	: 21
P[illegible]05	ALUMIMUM,T SW846	UG/L	: 1200	P01097	ANTIMONY,T SW846	UG/L	: 30K
P01002	ARSENIC,T SW846	UG/L	: 50K	P01007	BARIUM,T SW846	UG/L	: 46
P01022	BORON,T SW846	UG/L	: 8300	P01012	BERYLLIUM,T SW846	UG/L	: 5K
P01027	CADMIUM,T SW846	UG/L	: 1100	P01034	CHROMIUM,T SW846	UG/L	: 25K
P01042	COPPER,T SW846	UG/L	: 25K	P01037	COBALT,T SW846	UG/L	: 330
P01045	IRON,T SW846	UG/L	: 980	P01051	LEAD,T SW846	UG/L	: 25K
P01055	MANGANESE,T SW846	UG/L	: 79000	P01067	NICKEL,T SW846	UG/L	: 76000
P01147	SELENIUM,T SW846	UG/L	: 50K	P01077	SILVER,T SW846	UG/L	: 25K
P01082	STRONTIUM,T SW846	UG/L	: 1600	P01059	THALLIUM,T SW846	UG/L	: 50K
P01087	VANADIUM,T SW846	UG/L	: 25K	P01092	ZINC,T SW846	UG/L	: 7500

: DILUTION TO RED- : UCE ANY INTERFERENCE EFFECTS.
: PRE-DIGESTION SPIKE FAILED FOR BA,CD : POST SPIKE FAILED FOR CD.

Illinois Environmental Protection Agency
DLPC/FOS [illegible]n of Custody Document
(Analysis R[illegible]st and Receipt for Samples)
Page 1 of 1

Fund [18]	LPC # [17]	County	Locality
LP41	11980[illegible]03	Madison	Hartford
Section [14]	USEPA ID#	Site Name [19]	
F	ILD048843809	Chemetco	

Project Manager's Name/Address/Phone #:
Gina Search
2009 Mall St.
Collinsville, IL 62234
618/346-5120

Case # (if applicable)

IEPA Laboratory (circle one)
2125 S. 1st Street, Champaign, IL 61820, 217/333-6907
825 N. Rutledge Street, Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #

Delivered by [23]

Parameter Group [03] & Other Analytes [15]

Collection Information

Lab Sample # [01]	SW7010							Field Sample #	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	[24] Collector or Laboratory Comments	Seal Intact? (y/n)
B003238	X							G127	N	Y	5	82	3/6/00	9:45	1426	[illegible]		
B003239	X							G116	N	Y	4	74 ~~82~~	3/6/00	1005	1430	[illegible]	No cyanide bottle	
B003240	X							G128	N	Y	5	82	3/6/00	1030	1437	[illegible]		
B003241	X							G129	N	Y	5	82	3/6/00	1110	1440	[illegible]		
B003242	X							G119	N	Y	5	82	3/6/00	1140	1455	[illegible]		
B003243	X							G141	N	Y	5	82	3/6/00	1210	1446	[illegible]		
B003244	X							G156	N	Y	5	82	3/6/00	1310	1415	[illegible]		
B003245	X							G155	N	Y	5	82	3/6/00	1454	1506	[illegible]		
B003246	X							G125	N	Y	5	82	3/6/00	1520	1527	[illegible]		
B003247	X							G141R	N	Y	5	82	3/6/00	1557	1646	[illegible]		

RECEIVED IEPA AUG 03 2000 COLLINSVILLE OFFICE

Receipt for Samples: Collection of the above-listed sample(s) at the indicated site is hereby acknowledged.
Signature/Title of Facility Representative, Date: [illegible] Environmental Manager, 3/6/00
Split(s) Offered? y n Accepted? y n

Samplers (printed names and signatures): Gina Search / Gina Search

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials: Gina Search
Date: 3/7/2000
Time (24 hr clk): 730

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
(Sealer) Gina Search	3/7/2000	730		MAR 08. 2000	

☒ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times or locked in a secured area.
Printed Name, Signature, and Initials [07]: Pat Dukes pd
Date [05]: MAR 08 2000
Time [06] (24 hr clk): [illegible]
Supervisor releasing results (signature): [illegible]
Date: 7/31/00

IL 532-2311
LPC 525
REV. 2/99

MPLE NUMBER : 0002903

76133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : D002908
[illegible]ING POINT DESC. : BLANK/D002892-907

UBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000308 TIME COLLECTED : 0000 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : BLANK/D002892-907
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : 8 REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 2-40ML VOC BLANKS TRIP BL SAM# :
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
3[illegible]1	1,1-DICHLOROETHYLENE	UG/L	: 2K
3[illegible]	1,1-DICHLOROETHANE	UG/L	: 2K
34[illegible]6	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K

MPLE NUMBER : D002907

34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 29
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 7.2

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: 1,2-DIBROMO-TRANS-CYCLOHEXANE # UG/L; 8.2

: 1,2-ACENAPHTHYLENEDIONE # UG/L; 3.6
: OTHER ORGANIC COMPOUNDS UG/L; 510
: # TENTATIVE IDENTIFICATION

RHM
CMC

MPLE NUMBER : D002907

[illegible]1	PHENANTHRENE	UG/L : 3K
34220	ANTHRACENE	UG/L : 3K
39110	DI-N-BUTYLPHTHLATE	UG/L : 3K
34376	FLUORANTHENE	UG/L : 3K
34469	PYRENE	UG/L : 3K
34292	BUTYL BENZYL PHTHALATE	UG/L : 3K
34631	3,3'-DICHLOROBENZIDINE	UG/L : 10K
34526	BENZO(A)ANTHRACENE	UG/L : 3K
34320	CHRYSENE	UG/L : 3K
39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L : 3K
34596	DI-N-OCTYLPHTHALATE	UG/L : 5K
34230	BENZO(B)FLUORANTHENE	UG/L : 3K
34242	BENZO(K)FLUORANTHENE	UG/L : 3K
34247	BENZO(A)PYRENE	UG/L : 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L : 5K
34556	DIBENZO(AH)ANTHRACENE	UG/L : 5K
34521	BENZO(GHI)PERYLENE	UG/L : 3K

: .
: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT
: .

3[illegible]8	CHLOROMETHANE	UG/L : 2K
34413	BROMOMETHANE	UG/L : 2K
39175	VINYL CHLORIDE	UG/L : 2K
34311	CHLOROETHANE	UG/L : 2K
34423	METHYLENE CHLORIDE	UG/L : 5K
81552	ACETONE	UG/L : 10K
34488	TRICHLOROFLUOROMETHANE	UG/L : 2K
77277	BROMOCHLOROMETHANE	UG/L : 2K
77041	CARBON DISULFIDE	UG/L : 2K
34501	1,1-DICHLOROETHYLENE	UG/L : 2K
34496	1,1-DICHLOROETHANE	UG/L : 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L : 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L : 5.0
32106	CHLOROFORM	UG/L : 2K
34531	1,2-DICHLOROETHANE	UG/L : 2K
81595	2-BUTANONE(MEK)	UG/L : 2K
34506	1,1,1-TRICHLOROETHANE	UG/L : 2K
32102	CARBON TETRACHLORIDE	UG/L : 2K
46491	METHYL TERT-BUTYL ETHER	UG/L : 2.9
32101	DICHLOROBROMOMETHANE	UG/L : 2K
34[illegible]	1,2-DICHLOROPROPANE	UG/L : 2K

MPLE NUMBER : 0002907

34571	1,4-DICHLOROBENZENE	UG/L	: 3K
77147	BENZYL ALCOHOL	UG/L	: 3K
34536	1,2-DICHLOROBENZENE	UG/L	: 3K
00000	2-METHYLPHENOL	UG/L	: 3K
34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 5K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
77687	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
34531	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 3K
34341	DIMETHYLPHTHALATE	UG/L	: 3K
34200	ACENAPHTHYLENE	UG/L	: 3K
34626	2,6-DINITROTOLUENE	UG/L	: 3K
78300	3-NITROANILINE	UG/L	: 3K
34205	ACENAPHTHENE	UG/L	: 3K
34616	2,4-DINITROPHENOL	UG/L	: 20K
34646	4-NITROPHENOL	UG/L	: 10K
81302	DIBENZOFURAN	UG/L	: 3K
34611	2,4-DINITROTOLUENE	UG/L	: 3K
34336	DIETHYLPHTHALATE	UG/L	: 3K
34641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
34381	FLUORENE	UG/L	: 3K
00000	4-NITROANILINE	UG/L	: 3K
00000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 20K
34636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
39700	HEXACHLOROBENZENE	UG/L	: 3K
39032	PENTACHLOROPHENOL	UG/L	: 10K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

AMPLE NUMBER : 0002907
ING POINT DESC. : G101/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILDC48843809
ATE COLLECTED : 000308 TIME COLLECTED : 1520 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOC/SVOC/PEST-ECD/PCB
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : B

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : 0002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
3[illegible]6	METOLACHLOR	UG/L	: 0.1K
3[illegible]0	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
34694	PHENOL	UG/L	: 3K
34273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
34586	2-CHLOROPHENOL	UG/L	: 3K
34566	1,3-DICHLOROBENZENE	UG/L	: 3K

MPLE NUMBER : D002906

78133	4-METHYL-2-PENTANONE(MIBK)	UG/L : 2K
77103	2-HEXANONE(MBK)	UG/L : 2K
34475	TETRACHLOROETHYLENE	UG/L : 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L : 2K
78131	TOLUENE	UG/L : 2K
34301	CHLOROBENZENE	UG/L : 2K
78113	ETHYLBENZENE	UG/L : 2K
77128	STYRENE	UG/L : 2K
81551	XYLENE	UG/L : 2K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D002906
ING POINT DESC. : G133R/MADISON/HARTFORD/CHEMETCO

UBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
ATE COLLECTED : 000308 TIME COLLECTED : 1500 SAMPLING PROGRAM :

OLLECTED BY : G S DELIVERED BY : GINA
OMMENTS : VOCS
UNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
AM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : S

ATE RECEIVED : 000309 TIME RECEIVED : 1018 RECEIVED BY : S L
AB OBSERVATIONS : 2-40ML VOCS TRIP BL SAMP : D002908
UPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
[illegible]1	1,1-DICHLOROETHYLENE	UG/L	: 2K
[illegible]6	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
46491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
73124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K

MPLE NUMBER : D002905

78124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE
: OTHER ORGANIC COMPOUNDS UG/L; 3.1

JTM
cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003239
SAMPLING POINT DESC. : CHEMETCO G116

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1005 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 5.5	P00095	CONDUCTIVITY	UM/CM	: 4500
P70300	(RDE) TDS @ 180C	MG/L	: 4100	P00410	ALKALINITY,TOTAL	MG/L	: 23.4
P00951	FLUORIDE,TOTAL	MG/L	: 1.61	P00940	CHLORIDE,TOTAL	MG/L	: 436.
P00945	SULFATE,TOTAL	MG/L	: 1850	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.01K
P00610	AMMONIA-N,TOTAL	MG/L	: 3.8	P32730	PHENOLS,TOTAL	UG/L	: 23
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.29	P71900	MERCURY,T SW846	UG/L	: 0.67
P01059	THALLIUM,T SW846	UG/L	: 50K		: SAMPLE RAN BY ICP-AES.		
	: DILUTION.			P00916	CALCIUM,T SW846	MG/L	: 460
P00927	MAGNESIUM,T SW846	MG/L	: 60	P00929	SODIUM,T SW846	MG/L	: 570
P00937	POTASSIUM,T SW846	MG/L	: 2.0	P01105	ALUMIMUM,T SW846	UG/L	: 4100
P01097	ANTIMONY,T SW846	UG/L	: 30K	P01002	ARSENIC,T SW846	UG/L	: 50K
P01007	BARIUM,T SW846	UG/L	: 25K	P01022	BORON,T SW846	UG/L	: 1950
P01012	BERYLLIUM,T SW846	UG/L	: 5K	P01027	CADMIUM,T SW846	UG/L	: 47
P01034	CHROMIUM,T SW846	UG/L	: 25K	P01042	COPPER,T SW846	UG/L	: 40000
P01037	COBALT,T SW846	UG/L	: 110	P01045	IRON,T SW846	UG/L	: 28000
P01051	LEAD,T SW846	UG/L	: 25K	P01055	MANGANESE,T SW846	UG/L	: 6800
P01067	NICKEL,T SW846	UG/L	: 38000	P01147	SELENIUM,T SW846	UG/L	: 50K
P01077	SILVER,T SW846	UG/L	: 25K	P01082	STRONTIUM,T SW846	UG/L	: 520
P01059	THALLIUM,T SW846	UG/L	: 50K	P01087	VANADIUM,T SW846	UG/L	: 25K
P01092	ZINC,T SW846	UG/L	: 16000		: DILUTION TO		

: REDUCE INTER-ELEMENTAL EFFECTS.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003240
SAMPLING POINT DESC. : CHEMETCO G128

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1030 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 6.8	P00095	CONDUCTIVITY	UM/CM	: 4910
P70300	(ROE) TDS @ 180C	MG/L	: 5880	P00410	ALKALINITY,TOTAL	MG/L	: 670.
P00951	FLUORIDE,TOTAL	MG/L	: 3.11	P00940	CHLORIDE,TOTAL	MG/L	: 253.
P00945	SULFATE,TOTAL	MG/L	: 2230	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.25
P00610	AMMONIA-N,TOTAL	MG/L	: 1.5	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.18	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 510
P00927	MAGNESIUM,T SW846	MG/L	: 580	P00929	SODIUM,T SW846	MG/L	: 220
P00937	POTASSIUM,T SW846	MG/L	: 5.2	P01105	ALUMIMUM,T SW846	UG/L	: 200
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 20	P01022	BORON,T SW846	UG/L	: 830
P01012	BERYLLIUM,T SW846	UG/L	: 1K	P01027	CADMIUM,T SW846	UG/L	: 38
P01034	CHROMIUM,T SW846	UG/L	: 5K	P01042	COPPER,T SW846	UG/L	: 630
P01037	COBALT,T SW846	UG/L	: 52	P01045	IRON,T SW846	UG/L	: 3400
P01051	LEAD,T SW846	UG/L	: 16	P01055	MANGANESE,T SW846	UG/L	: 28000
P01067	NICKEL,T SW846	UG/L	: 150000	P01147	SELENIUM,T SW846	UG/L	: 12
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 1700
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 5K
P01092	ZINC,T SW846	UG/L	: 3800	: DILUTION.			

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003241
SAMPLING POINT DESC. : CHEMETCO G129

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1110 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	7.4	P00095	CONDUCTIVITY	UM/CM :	1170
P70300	(ROE) TDS @ 180C	MG/L :	546	P00410	ALKALINITY,TOTAL	MG/L :	455.
P00951	FLUORIDE,TOTAL	MG/L :	0.160	P00940	CHLORIDE,TOTAL	MG/L :	23.3
P00945	SULFATE,TOTAL	MG/L :	10K	P00630	NITRATE&NO2-NTOTAL	MG/L :	0.01K
P00610	AMMONIA-N,TOTAL	MG/L :	7.7	P32730	PHENOLS,TOTAL	UG/L :	13
P00665	PHOSPHORUS-P,TOTAL	MG/L :	1.6	P00720	CYANIDE,T SW846	UG/L :	0.01K
P71900	MERCURY,T SW846	UG/L :	0.50K	P01059	THALLIUM,T SW846	UG/L :	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L :	120
P00927	MAGNESIUM,T SW846	MG/L :	47	P00929	SODIUM,T SW846	MG/L :	17
P00937	POTASSIUM,T SW846	MG/L :	5.7	P01105	ALUMIMUM,T SW846	UG/L :	1300
P01097	ANTIMONY,T SW846	UG/L :	6K	P01002	ARSENIC,T SW846	UG/L :	18
P01007	BARIUM,T SW846	UG/L :	520	P01022	BORON,T SW846	UG/L :	320
P01012	BERYLLIUM,T SW846	UG/L :	1K	P01027	CADMIUM,T SW846	UG/L :	5K
P01034	CHROMIUM,T SW846	UG/L :	5K	P01042	COPPER,T SW846	UG/L :	6.6
P01037	COBALT,T SW846	UG/L :	5K	P01045	IRON,T SW846	UG/L :	17000
P01051	LEAD,T SW846	UG/L :	10	P01055	MANGANESE,T SW846	UG/L :	730
P01067	NICKEL,T SW846	UG/L :	27	P01147	SELENIUM,T SW846	UG/L :	10K
P01077	SILVER,T SW846	UG/L :	5K	P01082	STRONTIUM,T SW846	UG/L :	850
P01059	THALLIUM,T SW846	UG/L :	10K	P01087	VANADIUM,T SW846	UG/L :	5K
P01092	ZINC,T SW846	UG/L :	100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003242
SAMPLING POINT DESC. : CHEMETCO G119

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1140 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	7.2	P00095	CONDUCTIVITY	UM/CM	2410
P70300	(ROE) TDS @ 180C	MG/L	2200	P00410	ALKALINITY,TOTAL	MG/L	385.
P00951	FLUORIDE,TOTAL	MG/L	0.160	P00940	CHLORIDE,TOTAL	MG/L	107.
P00945	SULFATE,TOTAL	MG/L	978.	P00630	NITRATE&NO2-NTOTAL	MG/L	1.30
P00610	AMMONIA-N,TOTAL	MG/L	0.04	P32730	PHENOLS,TOTAL	UG/L	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	0.24	P00720	CYANIDE,T SW846	UG/L	0.01K
P71900	MERCURY,T SW846	UG/L	0.50K	P01059	THALLIUM,T SW846	UG/L	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	370
P00927	MAGNESIUM,T SW846	MG/L	63	P00929	SODIUM,T SW846	MG/L	90
P00937	POTASSIUM,T SW846	MG/L	3.3	P01105	ALUMIMUM,T SW846	UG/L	630
P01097	ANTIMONY,T SW846	UG/L	6K	P01002	ARSENIC,T SW846	UG/L	10K
P01007	BARIUM,T SW846	UG/L	35	P01022	BORON,T SW846	UG/L	480
P01012	BERYLLIUM,T SW846	UG/L	1K	P01027	CADMIUM,T SW846	UG/L	5K
P01034	CHROMIUM,T SW846	UG/L	5K	P01042	COPPER,T SW846	UG/L	8.8
P01037	COBALT,T SW846	UG/L	5.7	P01045	IRON,T SW846	UG/L	2800
P01051	LEAD,T SW846	UG/L	9.1	P01055	MANGANESE,T SW846	UG/L	300
P01067	NICKEL,T SW846	UG/L	25	P01147	SELENIUM,T SW846	UG/L	27
P01077	SILVER,T SW846	UG/L	5K	P01082	STRONTIUM,T SW846	UG/L	510
P01059	THALLIUM,T SW846	UG/L	10K	P01087	VANADIUM,T SW846	UG/L	12
P01092	ZINC,T SW846	UG/L	100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003243
SAMPLING POINT DESC. : CHEMETCO G141

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1210 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 7.3	P00095	CONDUCTIVITY	UM/CM	: 2540
P70300	(ROE) TDS @ 180C	MG/L	: 2300	P00410	ALKALINITY,TOTAL	MG/L	: 538.
P00951	FLUORIDE,TOTAL	MG/L	: 0.160	P00940	CHLORIDE,TOTAL	MG/L	: 114.
P00945	SULFATE,TOTAL	MG/L	: 894.	P00630	NITRATE&NO2-NTOTAL	MG/L	: 7.2
P00610	AMMONIA-N,TOTAL	MG/L	: 0.01K	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 2.4	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 540
P00927	MAGNESIUM,T SW846	MG/L	: 120	P00929	SODIUM,T SW846	MG/L	: 110
P00937	POTASSIUM,T SW846	MG/L	: 5.7	P01105	ALUMIMUM,T SW846	UG/L	: 1800
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 61	P01022	BORON,T SW846	UG/L	: 610
P01012	BERYLLIUM,T SW846	UG/L	: 1K	P01027	CADMIUM,T SW846	UG/L	: 5K
P01034	CHROMIUM,T SW846	UG/L	: 5K	P01042	COPPER,T SW846	UG/L	: 19
P01037	COBALT,T SW846	UG/L	: 7.8	P01045	IRON,T SW846	UG/L	: 1200
P01051	LEAD,T SW846	UG/L	: 14	P01055	MANGANESE,T SW846	UG/L	: 1100
P01067	NICKEL,T SW846	UG/L	: 18	P01147	SELENIUM,T SW846	UG/L	: 15
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 720
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 9.3
P01092	ZINC,T SW846	UG/L	: 100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003244
SAMPLING POINT DESC. : CHEMETCO G156

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1310 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : DO UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : O REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS : 7.3	P00095	CONDUCTIVITY	UM/CM : 2640
P70300	(ROE) TDS @ 180C	MG/L : 2390	P00410	ALKALINITY,TOTAL	MG/L : 764.
P00951	FLUORIDE,TOTAL	MG/L : 0.140	P00940	CHLORIDE,TOTAL	MG/L : 38.7
P00945	SULFATE,TOTAL	MG/L : 967.	P00630	NITRATE&NO2-NTOTAL	MG/L : 0.47
P00610	AMMONIA-N,TOTAL	MG/L : 10	P32730	PHENOLS,TOTAL	UG/L : 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L : 3.5	P00720	CYANIDE,T SW846	UG/L : 0.01K
P71900	MERCURY,T SW846	UG/L : 0.86	P01059	THALLIUM,T SW846	UG/L : 10K
: SAMPLE RAN BY ICP-AES.			P00916	CALCIUM,T SW846	MG/L : 380
P00927	MAGNESIUM,T SW846	MG/L : 160	P00929	SODIUM,T SW846	MG/L : 140
P00937	POTASSIUM,T SW846	MG/L : 9.9	P01105	ALUMIMUM,T SW846	UG/L : 120
P01097	ANTIMONY,T SW846	UG/L : 6K	P01002	ARSENIC,T SW846	UG/L : 32
P01007	BARIUM,T SW846	UG/L : 31	P01022	BORON,T SW846	UG/L : 560
P01012	BERYLLIUM,T SW846	UG/L : 1K	P01027	CADMIUM,T SW846	UG/L : 5K
P01034	CHROMIUM,T SW846	UG/L : 5K	P01042	COPPER,T SW846	UG/L : 17
P01037	COBALT,T SW846	UG/L : 5K	P01045	IRON,T SW846	UG/L : 47000
P01051	LEAD,T SW846	UG/L : 8.0	P01055	MANGANESE,T SW846	UG/L : 4100
P01067	NICKEL,T SW846	UG/L : 5.8	P01147	SELENIUM,T SW846	UG/L : 10K
P01077	SILVER,T SW846	UG/L : 5K	P01082	STRONTIUM,T SW846	UG/L : 2600
P01059	THALLIUM,T SW846	UG/L : 10K	P01087	VANADIUM,T SW846	UG/L : 9.1
P01092	ZINC,T SW846	UG/L : 100K			

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003245
SAMPLING POINT DESC. : CHEMETCO G155

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1454 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	6.8	P00095	CONDUCTIVITY	UM/CM :	3580
P70300	(ROE) TDS @ 180C	MG/L :	3800	P00410	ALKALINITY,TOTAL	MG/L :	943.
P00951	FLUORIDE,TOTAL	MG/L :	0.140	P00940	CHLORIDE,TOTAL	MG/L :	286.
P00945	SULFATE,TOTAL	MG/L :	1320	P00630	NITRATE&NO2-NTOTAL	MG/L :	0.39
P00610	AMMONIA-N,TOTAL	MG/L :	0.21	P32730	PHENOLS,TOTAL	UG/L :	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L :	0.25	P00720	CYANIDE,T SW846	UG/L :	0.01K
P71900	MERCURY,T SW846	UG/L :	0.50K	P01059	THALLIUM,T SW846	UG/L :	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L :	820
P00927	MAGNESIUM,T SW846	MG/L :	190	P00929	SODIUM,T SW846	MG/L :	58
P00937	POTASSIUM,T SW846	MG/L :	7.8	P01105	ALUMIMUM,T SW846	UG/L :	1200
P01097	ANTIMONY,T SW846	UG/L :	6K	P01002	ARSENIC,T SW846	UG/L :	10K
P01007	BARIUM,T SW846	UG/L :	74	P01022	BORON,T SW846	UG/L :	61
P01012	BERYLLIUM,T SW846	UG/L :	1K	P01027	CADMIUM,T SW846	UG/L :	5K
P01034	CHROMIUM,T SW846	UG/L :	5K	P01042	COPPER,T SW846	UG/L :	5K
P01037	COBALT,T SW846	UG/L :	5K	P01045	IRON,T SW846	UG/L :	59000
P01051	LEAD,T SW846	UG/L :	5K	P01055	MANGANESE,T SW846	UG/L :	1900
P01067	NICKEL,T SW846	UG/L :	5K	P01147	SELENIUM,T SW846	UG/L :	11
P01077	SILVER,T SW846	UG/L :	5K	P01082	STRONTIUM,T SW846	UG/L :	1500
P01059	THALLIUM,T SW846	UG/L :	10K	P01087	VANADIUM,T SW846	UG/L :	5K
P01092	ZINC,T SW846	UG/L :	100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003246
SAMPLING POINT DESC. : CHEMETCO G125

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1520 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 7.0	P00095	CONDUCTIVITY	UM/CM	: 8680
P70300	(ROE) TDS @ 180C	MG/L	: 8660	P00410	ALKALINITY,TOTAL	MG/L	: 268.
P00951	FLUORIDE,TOTAL	MG/L	: 12.3	P00940	CHLORIDE,TOTAL	MG/L	: 1K
P00945	SULFATE,TOTAL	MG/L	: 2990	P00630	NITRATE&NO2-NTOTAL	MG/L	: 9.2
P00610	AMMONIA-N,TOTAL	MG/L	: 4.3	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.18	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 290
P00927	MAGNESIUM,T SW846	MG/L	: 66	P00929	SODIUM,T SW846	MG/L	: 2500
P00937	POTASSIUM,T SW846	MG/L	: 33	P01105	ALUMIMUM,T SW846	UG/L	: 330
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 400	P01022	BORON,T SW846	UG/L	: 7600
P01012	BERYLLIUM,T SW846	UG/L	: 1.2	P01027	CADMIUM,T SW846	UG/L	: 790
P01034	CHROMIUM,T SW846	UG/L	: 7.2	P01042	COPPER,T SW846	UG/L	: 11
P01037	COBALT,T SW846	UG/L	: 6.3	P01045	IRON,T SW846	UG/L	: 6600
P01051	LEAD,T SW846	UG/L	: 8.9	P01055	MANGANESE,T SW846	UG/L	: 12000
P01067	NICKEL,T SW846	UG/L	: 5400	P01147	SELENIUM,T SW846	UG/L	: 10K
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 1200
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 13
P01092	ZINC,T SW846	UG/L	: 5900	: DILUTION.			

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003247
SAMPLING POINT DESC. : CHEMETCO G144R

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1557 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000308 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	7.5	P00095	CONDUCTIVITY	UM/CM	5450
P70300	(ROE) TDS @ 180C	MG/L	4260	P00410	ALKALINITY,TOTAL	MG/L	326.
P00951	FLUORIDE,TOTAL	MG/L	3.86	P00940	CHLORIDE,TOTAL	MG/L	1K
P00945	SULFATE,TOTAL	MG/L	1050	P00630	NITRATE&NO2-NTOTAL	MG/L	0.25
P00610	AMMONIA-N,TOTAL	MG/L	0.01K	P32730	PHENOLS,TOTAL	UG/L	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	0.31	P00720	CYANIDE,T SW846	UG/L	0.01K
P71900	MERCURY,T SW846	UG/L	0.50K	P01059	THALLIUM,T SW846	UG/L	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	340
P00927	MAGNESIUM,T SW846	MG/L	70	P00929	SODIUM,T SW846	MG/L	1100
P00937	POTASSIUM,T SW846	MG/L	8.0	P01105	ALUMIMUM,T SW846	UG/L	4600
P01097	ANTIMONY,T SW846	UG/L	6K	P01002	ARSENIC,T SW846	UG/L	10K
P01007	BARIUM,T SW846	UG/L	110	P01022	BORON,T SW846	UG/L	7800
P01012	BERYLLIUM,T SW846	UG/L	1K	P01027	CADMIUM,T SW846	UG/L	5K
P01034	CHROMIUM,T SW846	UG/L	7.1	P01042	COPPER,T SW846	UG/L	7.8
P01037	COBALT,T SW846	UG/L	5K	P01045	IRON,T SW846	UG/L	4800
P01051	LEAD,T SW846	UG/L	5K	P01055	MANGANESE,T SW846	UG/L	110
P01067	NICKEL,T SW846	UG/L	19	P01147	SELENIUM,T SW846	UG/L	19
P01077	SILVER,T SW846	UG/L	5K	P01082	STRONTIUM,T SW846	UG/L	840
P01059	THALLIUM,T SW846	UG/L	10K	P01087	VANADIUM,T SW846	UG/L	13
P01092	ZINC,T SW846	UG/L	100K	: DILUTION.			

Illinois Environmental Protection Agency
DLPC/FOS Chain of Custody Document
(Analysis Request and Receipt for Samples)
Page 1 of 1

Site Code [12]: LP41
Site # [13]: 1198010003
County: Madison
Locality: Hartford
Section [14]:
USEPA ID#: ILD048843809
Site Name [19]: Chemetco

Project Manager's Name/Address/Phone #:
Gina Search
2009 Mall St.
Collinsville, IL 62234
618 346-5720

IEPA Laboratory (circle one)
2125 S. 1st Street
Champaign, IL 61820, 217/333-6907
825 N. Rutledge Street
Springfield, IL 62702, 217/782-9780

Other Laboratory Name, Address, and Phone #:

Delivered by [23]:

Case # (if applicable):

Collection Information

Lab Sample # [01]	GW/DW	Field Sample #	SAVE (y/n)	Split (y/n)	# Bottles	VOL (oz.)	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	[24] Collector or Laboratory Comments (unpreserved metal)	Seal Intact? (y/n)
B003339	X	G131A	N	Y	3		3/6/00	1630	1648	DS	Not enough sample to fill bottles	
B003340	X	G152	N	Y	5		3/7/00	1010	12:05	DS		
B003341	X	G151	N	Y	5		3/7/00	1100	12:01	SK DS		
~~B003342~~	X	~~G154~~	~~N~~	~~Y~~	~~2~~		~~3/7/00~~	~~1130~~	12:00	SK DS	Not enough sample to fill bottles & unpreserved metal	
B003343	X	G112	N	Y	2		3/7/00	1150	1425	SK DS	Please try to run pH and sample → metal	
B003344	X	G150	N	Y	5		3/7/00	1325	1410	SK DS		
B003345	X	G153	N	Y	5		3/7/00	1335	1414	SK DS		
B003346	X	G149	N	Y	5		3/7/00	1445	1458	DS		
B003347	X	G126	N	Y	5		3/7/00	1520	1550	DS		

RECEIVED IEPA AUG 03 2000 COLLINSVILLE OFFICE

Receipt of Samples/Collection of the above listed sample(s) at the indicated site is hereby acknowledged.
Signature/Title of Facility Representative, Date: Environmental Manager, 3/7/00
Split(s) Offered? y / n Accepted? y / n

Samplers (printed names and signatures):
Scott Kutmanov
Paula Stine
Gina Search

Sealer: I certify that I sealed the samples listed above and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials: Gina Search DS
Date: 3/8/2000
Time (24 hr clk): 0715

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
(Sealer) Gina Search	3/8/00	0715			

☒ To Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be returned by laboratory personnel at all times [illegible] stored in a secured area.
Printed Name, Signature, and Initials [07]: Rick Dixon RD
Time [06] (24 hr clk): MAR 09 2000 9A
Supervisor releasing results (signature): [illegible]
Date: 7/31/00

IL 532-2311
LPC 525
REV. 2/99

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003339
SAMPLING POINT DESC. : CHEMETCO G131A

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000306 TIME COLLECTED : 1630 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 3.9	P00095	CONDUCTIVITY	UM/CM	: 5990
P70300	(ROE) TDS @ 180C	MG/L	: 7340	P00410	ALKALINITY,TOTAL	MG/L	: 29.1
P00951	FLUORIDE,TOTAL	MG/L	: 0.030	P00940	CHLORIDE,TOTAL	MG/L	: 1K
P00945	SULFATE,TOTAL	MG/L	: 1600		: SAMPLE EXCEEDED HOLDING TIME		
P32730	PHENOLS,TOTAL	UG/L	: 10K	P71900	MERCURY,T SW846	UG/L	: 2.51
P01059	THALLIUM,T SW846	UG/L	: 10K		: SAMPLE RAN BY ICP-AES.		
P00916	CALCIUM,T SW846	MG/L	: 560	P00927	MAGNESIUM,T SW846	MG/L	: 41
P00929	SODIUM,T SW846	MG/L	: 1500	P00937	POTASSIUM,T SW846	MG/L	: 14
P01105	ALUMIMUM,T SW846	UG/L	: 14000	P01097	ANTIMONY,T SW846	UG/L	: 6K
P01002	ARSENIC,T SW846	UG/L	: 1400	P01007	BARIUM,T SW846	UG/L	: 180
P01022	BORON,T SW846	UG/L	: 3500	P01012	BERYLLIUM,T SW846	UG/L	: 3.0
P01027	CADMIUM,T SW846	UG/L	: 290	P01034	CHROMIUM,T SW846	UG/L	: 220
P01042	COPPER,T SW846	UG/L	: 24000	P01037	COBALT,T SW846	UG/L	: 160
P01045	IRON,T SW846	UG/L	: 36000	P01051	LEAD,T SW846	UG/L	: 360
P01055	MANGANESE,T SW846	UG/L	: 12000	P01067	NICKEL,T SW846	UG/L	: 32000
P01147	SELENIUM,T SW846	UG/L	: 98	P01077	SILVER,T SW846	UG/L	: 6.1
P01082	STRONTIUM,T SW846	UG/L	: 1600	P01059	THALLIUM,T SW846	UG/L	: 10K
P01087	VANADIUM,T SW846	UG/L	: 34	P01092	ZINC,T SW846	UG/L	: 10000

: DILUTION.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003340
SAMPLING POINT DESC. : CHEMETCO G152

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1010 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS : 7.3	P00095	CONDUCTIVITY	UM/CM : 450
P70300	(RDE) TDS @ 180C	MG/L : 454	P00410	ALKALINITY,TOTAL	MG/L : 175.
P00951	FLUORIDE,TOTAL	MG/L : 0.200	P00940	CHLORIDE,TOTAL	MG/L : 5.62
P00945	SULFATE,TOTAL	MG/L : 18.0	P00630	NITRATE&NO2-NTOTAL	MG/L : 0.11
P00610	AMMONIA-N,TOTAL	MG/L : 0.54	P32730	PHENOLS,TOTAL	UG/L : 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L : 0.48	P00720	CYANIDE,T SW846	UG/L : 0.01K
P71900	MERCURY,T SW846	UG/L : 0.50K	P01059	THALLIUM,T SW846	UG/L : 10K
: SAMPLE RAN BY ICP-AES.			P00916	CALCIUM,T SW846	MG/L : 61
P00927	MAGNESIUM,T SW846	MG/L : 15	P00929	SODIUM,T SW846	MG/L : 7.3
P00937	POTASSIUM,T SW846	MG/L : 1.2	P01105	ALUMIMUM,T SW846	UG/L : 100K
P01097	ANTIMONY,T SW846	UG/L : 6K	P01002	ARSENIC,T SW846	UG/L : 10K
P01007	BARIUM,T SW846	UG/L : 540	P01022	BORON,T SW846	UG/L : 50K
P01012	BERYLLIUM,T SW846	UG/L : 1K	P01027	CADMIUM,T SW846	UG/L : 5K
P01034	CHROMIUM,T SW846	UG/L : 5K	P01042	COPPER,T SW846	UG/L : 5K
P01037	COBALT,T SW846	UG/L : 5K	P01045	IRON,T SW846	UG/L : 7200
P01051	LEAD,T SW846	UG/L : 5K	P01055	MANGANESE,T SW846	UG/L : 640
P01067	NICKEL,T SW846	UG/L : 5K	P01147	SELENIUM,T SW846	UG/L : 10K
P01077	SILVER,T SW846	UG/L : 5K	P01082	STRONTIUM,T SW846	UG/L : 150
P01059	THALLIUM,T SW846	UG/L : 10K	P01087	VANADIUM,T SW846	UG/L : 5K
P01092	ZINC,T SW846	UG/L : 100K			

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003341
SAMPLING POINT DESC. : CHEMETCO G151

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1100 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 7.3	P00095	CONDUCTIVITY	UM/CM	: 1140
P70300	(ROE) TDS @ 180C	MG/L	: 883	P00410	ALKALINITY,TOTAL	MG/L	: 296.
P00951	FLUORIDE,TOTAL	MG/L	: 0.200	P00940	CHLORIDE,TOTAL	MG/L	: 172.
P00945	SULFATE,TOTAL	MG/L	: 42.8	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.05
P00610	AMMONIA-N,TOTAL	MG/L	: 0.48	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.37	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 190
P00927	MAGNESIUM,T SW846	MG/L	: 43	P00929	SODIUM,T SW846	MG/L	: 29
P00937	POTASSIUM,T SW846	MG/L	: 4.8	P01105	ALUMIMUM,T SW846	UG/L	: 830
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 720	P01022	BORON,T SW846	UG/L	: 100
P01012	BERYLLIUM,T SW846	UG/L	: 1K	P01027	CADMIUM,T SW846	UG/L	: 5K
P01034	CHROMIUM,T SW846	UG/L	: 11K	P01042	COPPER,T SW846	UG/L	: 15
P01037	COBALT,T SW846	UG/L	: 5.3	P01045	IRON,T SW846	UG/L	: 19000
P01051	LEAD,T SW846	UG/L	: 14	P01055	MANGANESE,T SW846	UG/L	: 660
P01067	NICKEL,T SW846	UG/L	: 16	P01147	SELENIUM,T SW846	UG/L	: 10K
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 270
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 26
P01092	ZINC,T SW346	UG/L	: 100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003342
SAMPLING POINT DESC. : CHEMETCO G154

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1130 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : B TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 3.4	P00095	CONDUCTIVITY	UM/CM	: 3710
P70300	(ROE) TDS @ 180C	MG/L	: 4860	P00410	ALKALINITY,TOTAL	MG/L	: 69.7
P00951	FLUORIDE,TOTAL	MG/L	: 0.030	P00940	CHLORIDE,TOTAL	MG/L	: 560.
P00945	SULFATE,TOTAL	MG/L	: 1720		: SAMPLE EXCEDED HOLDING TIME		
P71900	MERCURY,T SW846	UG/L	: 0.60	P01059	THALLIUM,T SW846	UG/L	: 10K
	: SAMPLE RAN BY ICP-AES.			P00916	CALCIUM,T SW846	MG/L	: 460
P00927	MAGNESIUM,T SW846	MG/L	: 81	P00929	SODIUM,T SW846	MG/L	: 520
P00937	POTASSIUM,T SW846	MG/L	: 6.0	P01105	ALUMIMUM,T SW846	UG/L	: 69000
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 71
P01007	BARIUM,T SW846	UG/L	: 44	P01022	BORON,T SW846	UG/L	: 2600
P01012	BERYLLIUM,T SW846	UG/L	: 11	P01027	CADMIUM,T SW846	UG/L	: 150
P01034	CHROMIUM,T SW846	UG/L	: 10	P01042	COPPER,T SW846	UG/L	: 92000
P01037	COBALT,T SW846	UG/L	: 240	P01045	IRON,T SW846	UG/L	: 68000
P01051	LEAD,T SW846	UG/L	: 9.8	P01055	MANGANESE,T SW846	UG/L	: 16000
P01067	NICKEL,T SW846	UG/L	: 92000	P01147	SELENIUM,T SW846	UG/L	: 23
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 560
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 100
P01092	ZINC,T SW846	UG/L	: 6300		: DILUTION.		

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003343
SAMPLING POINT DESC. : CHEMETCO G112

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1424 SAMPLING PROGRAM :

COLLECTED BY : SK DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : OPM
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS :	3.8	P00095	CONDUCTIVITY	UM/CM :	2620
P71900	MERCURY,T SW846	UG/L :	0.50K	P01059	THALLIUM,T SW846	UG/L :	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L :	490
P00927	MAGNESIUM,T SW846	MG/L :	40	P00929	SODIUM,T SW846	MG/L :	230
P00937	POTASSIUM,T SW846	MG/L :	2.2	P01105	ALUMIMUM,T SW846	UG/L :	17000
P01097	ANTIMONY,T SW846	UG/L :	6K	P01002	ARSENIC,T SW846	UG/L :	10K
P01007	BARIUM,T SW846	UG/L :	13	P01022	BORON,T SW846	UG/L :	3100
P01012	BERYLLIUM,T SW846	UG/L :	4.7	P01027	CADMIUM,T SW846	UG/L :	39
P01034	CHROMIUM,T SW846	UG/L :	8.4	P01042	COPPER,T SW846	UG/L :	21[illegible]
P01037	COBALT,T SW846	UG/L :	58	P01045	IRON,T SW846	UG/L :	1[illegible]
P01051	LEAD,T SW846	UG/L :	5K	P01055	MANGANESE,T SW846	UG/L :	46[illegible]
P01067	NICKEL,T SW846	UG/L :	19000	P01147	SELENIUM,T SW846	UG/L :	44
P01077	SILVER,T SW846	UG/L :	5K	P01082	STRONTIUM,T SW846	UG/L :	490
P01059	THALLIUM,T SW846	UG/L :	10K	P01087	VANADIUM,T SW846	UG/L :	23
P01092	ZINC,T SW846	UG/L :	1600				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003344
SAMPLING POINT DESC. : CHEMETCO G150

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1410 SAMPLING PROGRAM :

COLLECTED BY : SK DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	7.4	P00095	CONDUCTIVITY	UM/CM	560
P70300	(ROE) TDS @ 180C	MG/L	399	P00410	ALKALINITY,TOTAL	MG/L	256.
P00951	FLUORIDE,TOTAL	MG/L	0.240	P00940	CHLORIDE,TOTAL	MG/L	5.38
P00945	SULFATE,TOTAL	MG/L	31.8	P00630	NITRATE&NO2-NTOTAL	MG/L	0.02
P00610	AMMONIA-N,TOTAL	MG/L	0.54	P32730	PHENOLS,TOTAL	UG/L	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	0.48	P00720	CYANIDE,T SW846	UG/L	0.01K
P71900	MERCURY,T SW846	UG/L	738	P01059	THALLIUM,T SW846	UG/L	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	88
P00927	MAGNESIUM,T SW846	MG/L	21	P00929	SODIUM,T SW846	MG/L	11
P00937	POTASSIUM,T SW846	MG/L	3.9	P01105	ALUMIMUM,T SW846	UG/L	1800
P01097	ANTIMONY,T SW846	UG/L	6K	P01002	ARSENIC,T SW846	UG/L	10K
P01007	BARIUM,T SW846	UG/L	670	P01022	BORON,T SW846	UG/L	64
P01012	BERYLLIUM,T SW846	UG/L	1K	P01027	CADMIUM,T SW846	UG/L	5K
P01034	CHROMIUM,T SW846	UG/L	5K	P01042	COPPER,T SW846	UG/L	15
P01037	COBALT,T SW846	UG/L	5K	P01045	IRON,T SW846	UG/L	9000
P01051	LEAD,T SW846	UG/L	7.0	P01055	MANGANESE,T SW846	UG/L	270
P01067	NICKEL,T SW846	UG/L	7.9	P01147	SELENIUM,T SW846	UG/L	10K
P01077	SILVER,T SW846	UG/L	5K	P01082	STRONTIUM,T SW846	UG/L	260
P01059	THALLIUM,T SW846	UG/L	10K	P01087	VANADIUM,T SW846	UG/L	6.8
P01092	ZINC,T SW846	UG/L	62				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3303345
SAMPLING POINT DESC. : CHEMETCO G153

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1335 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 7.6	P00095	CONDUCTIVITY	UM/CM	: 560
P70300	(ROE) TDS @ 180C	MG/L	: 489	P00410	ALKALINITY,TOTAL	MG/L	: 231.
P00951	FLUORIDE,TOTAL	MG/L	: 0.130	P00940	CHLORIDE,TOTAL	MG/L	: 12.2
P00945	SULFATE,TOTAL	MG/L	: 38.2	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.03
P00610	AMMONIA-N,TOTAL	MG/L	: 0.24	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.23	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 0.50K	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 84
P00927	MAGNESIUM,T SW846	MG/L	: 22	P00929	SODIUM,T SW846	MG/L	: 10
P00937	POTASSIUM,T SW846	MG/L	: 1.8	P01105	ALUMIMUM,T SW846	UG/L	: 100
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 670	P01022	BORON,T SW846	UG/L	: 50K
P01012	BERYLLIUM,T SW846	UG/L	: 1K	P01027	CADMIUM,T SW846	UG/L	: 5K
P01034	CHROMIUM,T SW846	UG/L	: 5K	P01042	COPPER,T SW846	UG/L	: 5K
P01037	COBALT,T SW846	UG/L	: 5K	P01045	IRON,T SW846	UG/L	: 4000
P01051	LEAD,T SW846	UG/L	: 5K	P01055	MANGANESE,T SW846	UG/L	: 480
P01067	NICKEL,T SW846	UG/L	: 5K	P01147	SELENIUM,T SW846	UG/L	: 10K
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 210
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 5K
P01092	ZINC,T SW846	UG/L	: 100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B003346
SAMPLING POINT DESC. : CHEMETCO G149

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1445 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	7.5	P00095	CONDUCTIVITY	UM/CM	560
P70300	(ROE) TDS @ 180C	MG/L	404	P00410	ALKALINITY,TOTAL	MG/L	269.
P00951	FLUORIDE,TOTAL	MG/L	0.240	P00940	CHLORIDE,TOTAL	MG/L	5.17
P00945	SULFATE,TOTAL	MG/L	31.6	P00630	NITRATE&NO2-NTOTAL	MG/L	0.14
P00610	AMMONIA-N,TOTAL	MG/L	0.53	P32730	PHENOLS,TOTAL	UG/L	10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	0.48	P00720	CYANIDE,T SW846	UG/L	0.01K
P71900	MERCURY,T SW846	UG/L	0.50K	P01059	THALLIUM,T SW846	UG/L	10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	94
P00927	MAGNESIUM,T SW846	MG/L	22	P00929	SODIUM,T SW846	MG/L	11
P00937	POTASSIUM,T SW846	MG/L	4.0	P01105	ALUMIMUM,T SW846	UG/L	2100
P00977	ANTIMONY,T SW846	UG/L	6K	P01002	ARSENIC,T SW846	UG/L	10K
P01007	BARIUM,T SW846	UG/L	680	P01022	BORON,T SW846	UG/L	67
P01012	BERYLLIUM,T SW846	UG/L	1K	P01027	CADMIUM,T SW846	UG/L	5K
P01034	CHROMIUM,T SW846	UG/L	5K	P01042	COPPER,T SW846	UG/L	18
P01037	COBALT,T SW846	UG/L	5K	P01045	IRON,T SW846	UG/L	11000
P01051	LEAD,T SW846	UG/L	6.9	P01055	MANGANESE,T SW846	UG/L	400
P01067	NICKEL,T SW846	UG/L	5K	P01147	SELENIUM,T SW846	UG/L	10K
P01077	SILVER,T SW846	UG/L	5K	P01082	STRONTIUM,T SW846	UG/L	290
P01059	THALLIUM,T SW846	UG/L	10K	P01087	VANADIUM,T SW846	UG/L	7.3
P01092	ZINC,T SW846	UG/L	100K				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3003347
SAMPLING POINT DESC. : CHEMETCO G126

SUBMITTING SOURCE # : 1198010003 SITE # :
DATE COLLECTED : 000307 TIME COLLECTED : 1520 SAMPLING PROGRAM :

COLLECTED BY : GS DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 000309 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : SMM NOTE : K = LESS THAN VALUE

P00403	PH-LABORATORY	UNITS	: 7.5	P00095	CONDUCTIVITY	UM/CM	: 9450
P70300	(ROE) TDS @ 180C	MG/L	: 9000	P00410	ALKALINITY,TOTAL	MG/L	: 429.
P00951	FLUORIDE,TOTAL	MG/L	: 4.71	P00940	CHLORIDE,TOTAL	MG/L	: 1K
P00945	SULFATE,TOTAL	MG/L	: 672.	P00630	NITRATE&NO2-NTOTAL	MG/L	: 0.82
P00610	AMMONIA-N,TOTAL	MG/L	: 0.01K	P32730	PHENOLS,TOTAL	UG/L	: 10K
P00665	PHOSPHORUS-P,TOTAL	MG/L	: 0.05	P00720	CYANIDE,T SW846	UG/L	: 0.01K
P71900	MERCURY,T SW846	UG/L	: 1.08	P01059	THALLIUM,T SW846	UG/L	: 10K
: SAMPLE RAN BY ICP-AES.				P00916	CALCIUM,T SW846	MG/L	: 550
P00927	MAGNESIUM,T SW846	MG/L	: 110	P00929	SODIUM,T SW846	MG/L	: 230
P00937	POTASSIUM,T SW846	MG/L	: 12	P01105	ALUMIMUM,T SW846	UG/L	: 320
P01097	ANTIMONY,T SW846	UG/L	: 6K	P01002	ARSENIC,T SW846	UG/L	: 10K
P01007	BARIUM,T SW846	UG/L	: 47	P01022	BORON,T SW846	UG/L	: 9000
P01012	BERYLLIUM,T SW846	UG/L	: 1K	P01027	CADMIUM,T SW846	UG/L	: 5K
P01034	CHROMIUM,T SW846	UG/L	: 5K	P01042	COPPER,T SW846	UG/L	: 9.9
P01037	COBALT,T SW846	UG/L	: 5K	P01045	IRON,T SW846	UG/L	: 540
P01051	LEAD,T SW846	UG/L	: 9.5	P01055	MANGANESE,T SW846	UG/L	: 240
P01067	NICKEL,T SW846	UG/L	: 26	P01147	SELENIUM,T SW846	UG/L	: 11
P01077	SILVER,T SW846	UG/L	: 5K	P01082	STRONTIUM,T SW846	UG/L	: 1600
P01059	THALLIUM,T SW846	UG/L	: 10K	P01087	VANADIUM,T SW846	UG/L	: 5K
P01092	ZINC,T SW846	UG/L	: 110	: DILUTION.			

DLPC/FOS Unified Sample Document

Laboratory: Champaign Springfield

Page 2 of 2

LP542 | 1198010003 | County: Madison | Locality: Hartford

Section [14]: F | USEPA #: ILD048843809 | Site Name [19]: Chemeto

Project Manager's Name and Mailing Address: Cura Search, 200 4 Mall St. Collinsville IL 62236

Section/Unit: IL 6

IEPA Laboratory Address and Phone Number (circle one): 2125 S. 1st Street, Champaign, IL 61820, 217/333-6907 | 825 N. Rutledge Street, Springfield, IL 62702, 217/782-9780

Phone #: /

Case # (if applicable):

Parameter Group [03] & Other Analytes: SVOC, PCB, Pest/Herb, VOC

Lab Sample # [01]	SVOC	PCB	Pest/Herb	VOC	[12] Split: "2" is yes	SAVE (y/n)	# Bottles	[15] Field Sample #	[20] Date Collected & Sealed	[21] Time Collected (24 hr clk)	Time Sealed (24 hr clk)	[22] Sampler's Initials	[24] Special Notations	Seal Intac (y/n
002843	X	X	X	X	Y		3	C131A	3-6-00	16:30	16:40	C.S.		Y
002844				X			2	T.B.	—	—	—	C.S.		Y

Samples were not accompained w/ paperwork. Call Dina - for info and filled out.

MAR 07 2000

RECEIVED APR 12 2000 IEPA-DLPC

RECEIVED IEPA APR 17 2000 COLLINSVILLE OFFICE

The indicated site is hereby acknowledged.

Split(s) Offered? y / n Accepted? y /

Samplers (printed names and signatures)

Sealer: I certify that the samples listed above were sealed by me and I wrote my initials, the date, and the time on the seal(s).
Sealer's Signature & Initials | Date | Time (24 hr clk)

Carriers: I certify that I received the container(s) holding the above sample(s) with the seal(s) intact and the sealer's initials and sealing date written on the seal(s).

Relinquished by	Date	Time (24 hr clk)	Received by	Date	Time (24 hr clk)
(Sealer)					

☐ To Sealed Container for Shipment

Laboratory Custodian: I certify that I received the container holding the above sample(s) with the seal integrity as indicated above and the sealer's initials and the date written on the seal(s). After being received, this/these same sample(s) will be retained by laboratory personnel at all times or locked in a secured area.

Printed Name, Signature, and Initials [07]: Michelle Hoon-Middle Bless, MH | Date [05]: MAR 07 2000 | Time [06] (24 hr clk): 15:53

Supervisor releasing results (signature): | Date: APR 11 2000

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D002843
SAMPLING POINT DESC. : G131A/MADISON/HARTFORD/CHEMETCO

SUBMITTING SOURCE # : 1198010003 SITE # : ILD048843609
DATE COLLECTED : 000306 TIME COLLECTED : 1630 SAMPLING PROGRAM :

COLLECTED BY : GINA DELIVERED BY : DAVE
COMMENTS : SVOC/PCB/PEST-ECD
FUNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : F REPORTING INDICATOR : 3

DATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
LAB OBSERVATIONS : 1-80 OZ/2-40MLS TRIP BL SAM# : D002844
SUPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

39700	HEXACHLOROBENZENE	UG/L	: 0.01K
81284	TRIFLURALIN	UG/L	: 0.01K
39337	ALPHA-BHC	UG/L	: 0.01K
39340	GAMMA-BHC (LINDANE)	UG/L	: 0.01K
39630	ATRAZINE	UG/L	: 0.1K
39410	HEPTACHLOR	UG/L	: 0.01K
39330	ALDRIN	UG/L	: 0.01K
77825	ALACHLOR	UG/L	: 0.02K
81408	METRIBUZIN	UG/L	: 0.05K
39356	METOLACHLOR	UG/L	: 0.1K
39420	HEPTACHLOR EPOXIDE	UG/L	: 0.01K
79190	PENDIMETHALIN	UG/L	: 0.05K
39810	GAMMA-CHLORDANE	UG/L	: 0.01K
39348	ALPHA-CHLORDANE	UG/L	: 0.01K
39350	TOTAL ALPHA AND GAMMA CHLORDANE	UG/L	: 0.1K
39380	DIELDRIN	UG/L	: 0.01K
39640	CAPTAN	UG/L	: 0.05K
81757	CYANAZINE	UG/L	: 0.1K
39390	ENDRIN	UG/L	: 0.01K
39320	P,P'-DDE	UG/L	: 0.01K
39310	P,P'-DDD	UG/L	: 0.01K
39300	P,P'-DDT	UG/L	: 0.01K
39370	TOTAL DDT	UG/L	: 0.1K
39480	METHOXYCHLOR	UG/L	: 0.05K
39516	TOTAL PCBS	UG/L	: 0.1K
4694	PHENOL	UG/L	: 3K
4273	BIS(2-CHLOROETHYL)ETHER	UG/L	: 3K
4586	2-CHLOROPHENOL	UG/L	: 3K
4566	1,3-DICHLOROBENZENE	UG/L	: 3K

AMPLE NUMBER : 0002843

P34571	1,4-DICHLOROBENZENE	UG/L	: 3K
P77147	BENZYL ALCOHOL	UG/L	: 3K
P34[illegible]	1,2-DICHLOROBENZENE	UG/L	: 3K
00[illegible]	2-METHYLPHENOL	UG/L	: 3K
P34283	BIS(2-CHLOROISOPROPYL)ETHER	UG/L	: 3K
00000	4-METHYLPHENOL	UG/L	: 3K
P34428	N-NITROSO-DI-N-PROPYLAMINE	UG/L	: 3K
34396	HEXACHLOROETHANE	UG/L	: 3K
34447	NITROBENZENE	UG/L	: 3K
34408	ISOPHORONE	UG/L	: 3K
34591	2-NITROPHENOL	UG/L	: 3K
34606	2,4-DIMETHYLPHENOL	UG/L	: 3K
77247	BENZOIC ACID	UG/L	: 30K
34278	BIS(2-CHLOROETHOXY)METHANE	UG/L	: 3K
34601	2,4-DICHLOROPHENOL	UG/L	: 3K
34551	1,2,4-TRICHLOROBENZENE	UG/L	: 3K
34696	NAPHTHALENE	UG/L	: 3K
00000	4-CHLOROANILINE	UG/L	: 3K
34391	HEXACHLOROBUTADIENE	UG/L	: 3K
34452	4-CHLORO-3-METHYLPHENOL	UG/L	: 3K
77416	2-METHYLNAPHTHALENE	UG/L	: 3K
34386	HEXACHLOROCYCLOPENTADIENE	UG/L	: 3K
34621	2,4,6-TRICHLOROPHENOL	UG/L	: 3K
76[illegible]	2,4,5-TRICHLOROPHENOL	UG/L	: 3K
4581	2-CHLORONAPHTHALENE	UG/L	: 3K
00000	2-NITROANILINE	UG/L	: 6K
4341	DIMETHYLPHTHALATE	UG/L	: 3K
4200	ACENAPHTHYLENE	UG/L	: 3K
4626	2,6-DINITROTOLUENE	UG/L	: 3K
8300	3-NITROANILINE	UG/L	: 6K
4205	ACENAPHTHENE	UG/L	: 3K
4616	2,4-DINITROPHENOL	UG/L	: 6K
4646	4-NITROPHENOL	UG/L	: 6K
1302	DIBENZOFURAN	UG/L	: 3K
4611	2,4-DINITROTOLUENE	UG/L	: 3K
4336	DIETHYLPHTHALATE	UG/L	: 3K
4641	4-CHLOROPHENYL PHENYL ETHER	UG/L	: 3K
4381	FLUORENE	UG/L	: 3K
0000	4-NITROANILINE	UG/L	: 6K
0000	4,6-DINITRO-2-METHYLPHENOL	UG/L	: 6K
4636	4-BROMOPHENYL PHENYL ETHER	UG/L	: 3K
9700	HEXACHLOROBENZENE	UG/L	: 3K
9032	PENTACHLOROPHENOL	UG/L	: 6K

AMPLE NUMBER : 0002843

P34461	PHENANTHRENE	UG/L	: 3K
P34220	ANTHRACENE	UG/L	: 3K
P39110	DI-N-BUTYLPHTHLATE	UG/L	: 3K
P34376	FLUORANTHENE	UG/L	: 3K
P34469	PYRENE	UG/L	: 3K
P34292	BUTYL BENZYL PHTHALATE	UG/L	: 3K
P34631	3,3'-DICHLOROBENZIDINE	UG/L	: 6K
P34526	BENZO(A)ANTHRACENE	UG/L	: 3K
P34320	CHRYSENE	UG/L	: 3K
P39100	BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	: 3K
P34596	DI-N-OCTYLPHTHALATE	UG/L	: 3K
P34230	BENZO(B)FLUORANTHENE	UG/L	: 3K
P34242	BENZO(K)FLUORANTHENE	UG/L	: 3K
P34247	BENZO(A)PYRENE	UG/L	: 3K
34403	INDENO(1,2,3-CD)PYRENE	UG/L	: 3K
34556	DIBENZO(AH)ANTHRACENE	UG/L	: 3K
34521	BENZO(GHI)PERYLENE	UG/L	: 3K

: QUALITY CONTROL CRITERIA FOR SW846 METHOD
: 8270 NOT MET DUE TO POSSIBLE MATRIX EFFECT.

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
4531	1,2-DICHLOROETHANE	UG/L	: 2K
1595	2-BUTANONE(MEK)	UG/L	: 2K
4506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
2102	CARBON TETRACHLORIDE	UG/L	: 2K
6491	METHYL TERT-BUTYL ETHER	UG/L	: 3.0
2101	DICHLOROBROMOMETHANE	UG/L	: 2K
4541	1,2-DICHLOROPROPANE	UG/L	: 2K
4704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
9180	TRICHLOROETHYLENE	UG/L	: 2.0

MPLE NUMBER : D002843

32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
78[illegible]	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K
78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34475	TETRACHLOROETHYLENE	UG/L	: 2K
34516	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 3.5

: THE FOLLOWING QUANTITATIONS ARE APPROXIMATE

: DIBROMO-CYCLOHEXANES#	UG/L	; 54
: ALIPHATIC ALDEHYDES	UG/L	; 4.5
: ALIPHATIC KETONES	UG/L	; 5.5
: MISC. PHENOLS	UG/L	; 4.9
: MISCELLANEOUS COMPOUNDS	UG/L	; 930

cmc

TENTATIVE IDENTIFICATION

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D002844
SAMPLING POINT DESC. : BLANK/D002833-843

SUBMITTING SOURCE # : 1198010003 SITE # : ILD048843809
DATE COLLECTED : 000306 TIME COLLECTED : 0000 SAMPLING PROGRAM :

COLLECTED BY : GINA DELIVERED BY : DAVE
COMMENTS : BLANK/D002833-843
FUNDING CODE : LP41 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 8 REPORTING INDICATOR : 8

DATE RECEIVED : 000307 TIME RECEIVED : 1553 RECEIVED BY : MAH
LAB OBSERVATIONS : 2-40ML VOC BLANKS TRIP BL SAM# :
SUPERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

34418	CHLOROMETHANE	UG/L	: 2K
34413	BROMOMETHANE	UG/L	: 2K
39175	VINYL CHLORIDE	UG/L	: 2K
34311	CHLOROETHANE	UG/L	: 2K
34423	METHYLENE CHLORIDE	UG/L	: 5K
81552	ACETONE	UG/L	: 10K
34488	TRICHLOROFLUOROMETHANE	UG/L	: 2K
77277	BROMOCHLOROMETHANE	UG/L	: 2K
77041	CARBON DISULFIDE	UG/L	: 2K
34501	1,1-DICHLOROETHYLENE	UG/L	: 2K
34496	1,1-DICHLOROETHANE	UG/L	: 2K
34546	TRANS-1,2-DICHLOROETHYLENE	UG/L	: 2K
77093	CIS-1,2-DICHLOROETHYLENE	UG/L	: 2K
32106	CHLOROFORM	UG/L	: 2K
34531	1,2-DICHLOROETHANE	UG/L	: 2K
81595	2-BUTANONE(MEK)	UG/L	: 2K
34506	1,1,1-TRICHLOROETHANE	UG/L	: 2K
32102	CARBON TETRACHLORIDE	UG/L	: 2K
86491	METHYL TERT-BUTYL ETHER	UG/L	: 2K
32101	DICHLOROBROMOMETHANE	UG/L	: 2K
34541	1,2-DICHLOROPROPANE	UG/L	: 2K
34704	CIS-1,3-DICHLOROPROPENE	UG/L	: 2K
39180	TRICHLOROETHYLENE	UG/L	: 2K
32105	CHLORODIBROMOMETHANE	UG/L	: 2K
34511	1,1,2-TRICHLOROETHANE	UG/L	: 2K
81124	BENZENE	UG/L	: 2K
34699	TRANS-1,3-DICHLOROPROPENE	UG/L	: 2K
34576	2-CHLOROETHYLVINYL ETHER	UG/L	: 2K
32104	BROMOFORM	UG/L	: 2K

AMPLE NUMBER : D002844

78133	4-METHYL-2-PENTANONE(MIBK)	UG/L	: 2K
77103	2-HEXANONE(MBK)	UG/L	: 2K
34[illegible]	TETRACHLOROETHYLENE	UG/L	: 2K
34[illegible]	1,1,2,2-TETRACHLOROETHANE	UG/L	: 2K
78131	TOLUENE	UG/L	: 2K
34301	CHLOROBENZENE	UG/L	: 2K
78113	ETHYLBENZENE	UG/L	: 2K
77128	STYRENE	UG/L	: 2K
81551	XYLENE	UG/L	: 2K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809		IEPA ID #: 1198010003
Facility Name: Chemetco, Inc.		Phone #: 618/254-4381
Location: Chemetco Lane, Box 187		County: Madison
City: Hartford	State: Illinois	Zip Code: 62048
Region: Collinsville	Inspection Date: [illegible]	Time: 10:15 - 11:40 pm
Weather:		

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G-1/S/D

TYPE OF INSPECTION

CEI: CME/O&M: CSI: NRR: F/U to: / / CCI: PIF: CVI: CSE: CAO: Other: X

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11 / 17 / 80 (initial) / / (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08 / 15 / 80 Amended: 07 / 03 / 90 Withdrawn: / /

PART B PERMIT INFORMATION

B Submitted/Issued (circle one): 03 / 03 / 93 Post-Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: 02/24/97 IAGO: 10/14/97 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / /	CAFO: / /	Federal Court Order: / /
Consent Decree: / /	IPCB Order: / /	State Court Order: 06 / 30 / 88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1994 1995 1996
S03*	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83***	No	No	Yes	No	Yes	No	N / N / N
S03****	No	No	Yes	No	Yes	No	N / N / N
SO2*****	No	No	Yes	No	Yes	No	N / N / N
							/ /
							/ /
							/ /

OWNER		OPERATOR	
Name: Chemetco, Inc.		Name:	
Address: Hwy 3, Box 187		Address:	
Hartford		City:	
State: Illinois	Zip Code: 62048	State:	Zip Code:
Phone #: 618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Heather Young	Environmental Manager	618/254-4381 ext 268

INSPECTION PARTICIPANT(S)	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

PREPARED BY	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X
	12(d)	X
	21(a)	X
	21(d)(1)&(2)	X
	21(e)	X
	21(f)(1)&(2)	X
	21(p)(1)&(4)	X
DOR	703.121(a)	X
DOR	703.121(b)	X
DOR	703.151(a)	X
GGR	722.111	X
GGR	722.141(b)	X
DGS	724.114(a)	X
DGS	724.114(b)	X
DGS	724.114(c)	X
DGS	724.115(a)	X
DGS	724.115(b)	X

AREA	SECTION	X
DPP	724.131	X
DCP	724.151	X
DCP	724.156(a)	X
DCP	724.156(j)	X
DMR	724.173	X
DMR	724.174	X
DMR	724.175	X
DMR	724.177	X
DCL	724.212(a)	X
DFR	724.242	X
DFR	724.243	X
DFR	724.244	X
DFR	724.245	X
DSI	724.321(c)	X
DSI	724.321(g)	X
DSI	724.321(h)	X

AREA	SECTION	X
DSI	724.323(a)	X
DSI	724.326	X
DWP	724.351(a)	X
DWP	724.351(c)	X
DWP	724.351(d)	X
DWP	724.351(f)	X
DWP	724.354	X
DWP	724.358(a)	X
DWP	724.358(c)	X
GLB	728.107(a)	X
G/DLB	728.135	X
G/DLB	728.139	X
	807.201	X
	807.202	X
	808.121(a)	X
DTR	724.291(a)	X

x = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
DTR	724.294(a)	X						
	724.296	X						
DTR	724.296(d)	X						

x = Continuing Violation

* Zinc Oxide Bunker
Zinc Oxide Pits, floor wash impoundment and cooling water canals
Newly discovered zinc oxide disposal in surface impoundment (Long Lake release)
Refractory brick disposal area, refractory brick remediation waste and slag fine waste piles
***** Black acid storage tank

1198010003 – Madison County
Chemetco, Inc.
Date of Inspections: May 05, 2000 10:15 - 11:40
May 08, 2000 10:25 - 11:00
May 17, 2000 09:30 - 09:45
Prepared by: Chris Cahnovsky

NARRATIVE

On May 5, May 8, and May 17, 2000, I conducted inspections at Chemecto, Inc. in Hartford, Illinois. Present during these inspections was Heather Young, Chemetco's Environmental Manager. The purpose of these inspections was to monitor the removal of the two refractory brick waste piles.

During a September 18, 1996, Compliance Evaluation Inspection the IEPA found that Chemetco had land disposed of refractory brick, gunning material and other waste south of Oldenburg Road. This area is known as the refractory brick disposal area. The IEPA sampled this waste on April 21, 1997. The results showed that the refractory brick and the gunning material were characteristically hazardous for lead (D008). In August 1997, Chemetco began to remediate the refractory brick disposal area. They created one waste pile of refractory brick and one waste pile of excavated dirt, rock, slag and refractory brick. On September 30, 1997, Chemetco shipped the refractory brick waste pile to Chem-Met in Brownstown, Michigan. A total of 44.24 tons of refractory brick waste was shipped to Chem-Met. Also, in September 1997, Chemetco created a second excavated dirt, rock, slag and refractory brick from the remediation efforts. Chemetco's sampling showed that the two remediation piles were characteristically hazardous for lead (D008). They estimated that the two waste piles contained about 1000 tons of hazardous waste.

Between May 3 and May 11, 2000, Chemetco removed both waste piles from the site. Approximately 846 tons of lead contaminated soil, rocks, slag and refractory brick were sent to Peoria Disposal Company (PDC) in Peoria, Illinois. Chemetco shipped 39 loads of waste to PDC. Each load was accompanied by a waste manifest.

On May 8, 2000, I observed a PDC truck being loaded with hazardous waste. The truck was lined with plastic and covered with a tarp when loaded. I did not observe any fugitive dust emissions during the loading of this truck. On May 17, 2000, I observed that both waste piles had been remediated. I observed a several pieces of plastic traps around Fill Pile 1. These tarps were used to cover the fill pile. Further remediation may be needed to address any contamination associated with the soil on these tarps. I observe pieces of broken refractory brick around Fill Pile #1 and Fill Pile #2. It appears that further remediation is need to address the residues associated with this disposal area.

Chemetco has removed the two fill piles associated with the refractory brick disposal area. However, further remediation is needed to address the residues. According to Ms. Young, a closure plan with a sampling and analysis plan to address residuals will be submitted to the IEPA in July 2000.

Chem69.oth.brick.wpd

1100749

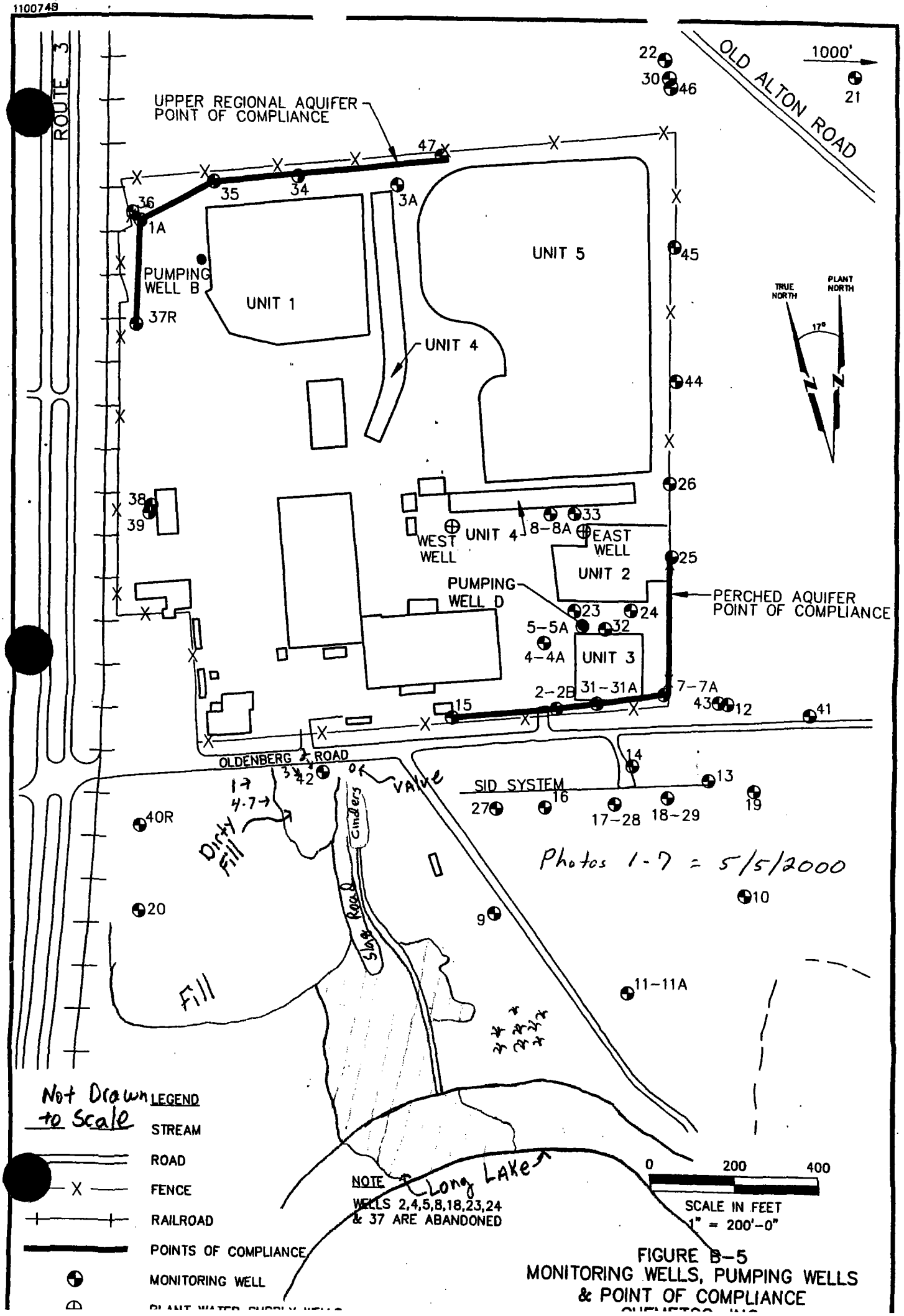

FIGURE B-5
MONITORING WELLS, PUMPING WELLS & POINT OF COMPLIANCE

LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: East
PHOTO by: Chris Cahnovsky
PHOTO FILE NAME:
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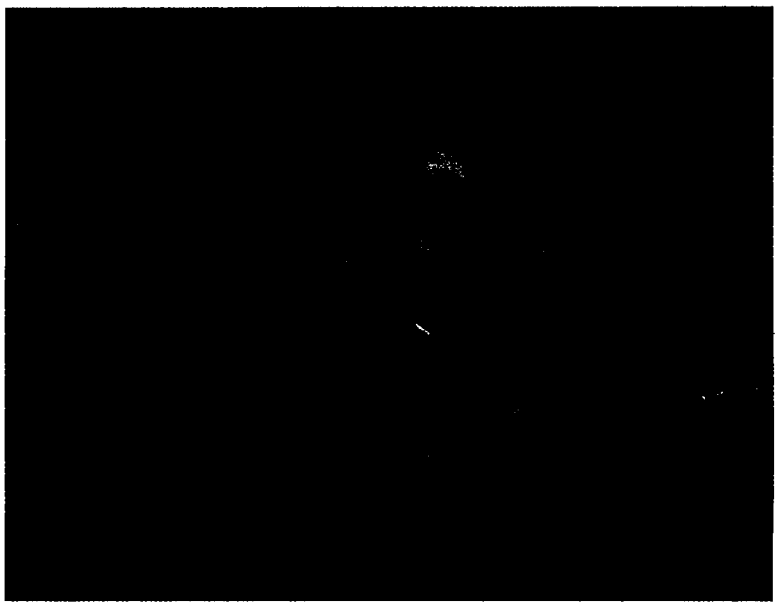

DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: Southeast
PHOTO by: Chris Cahnovsky
PHOTO FILE NAME:
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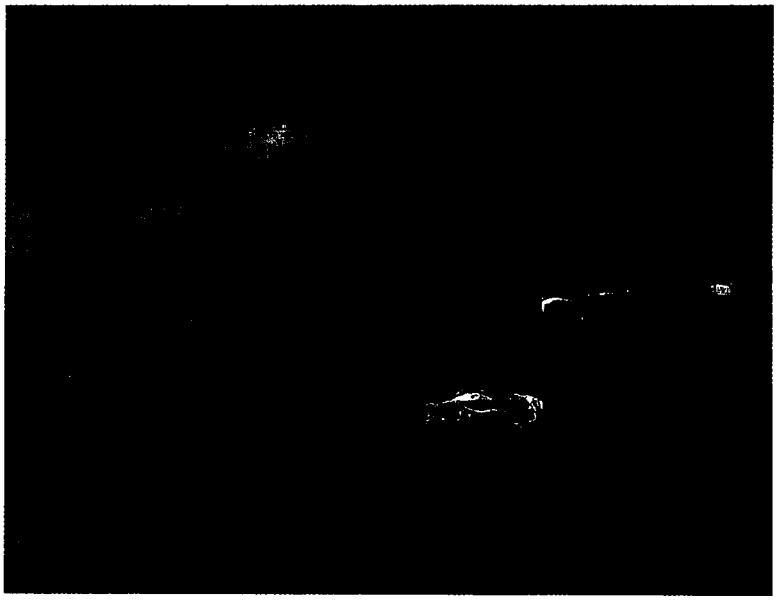
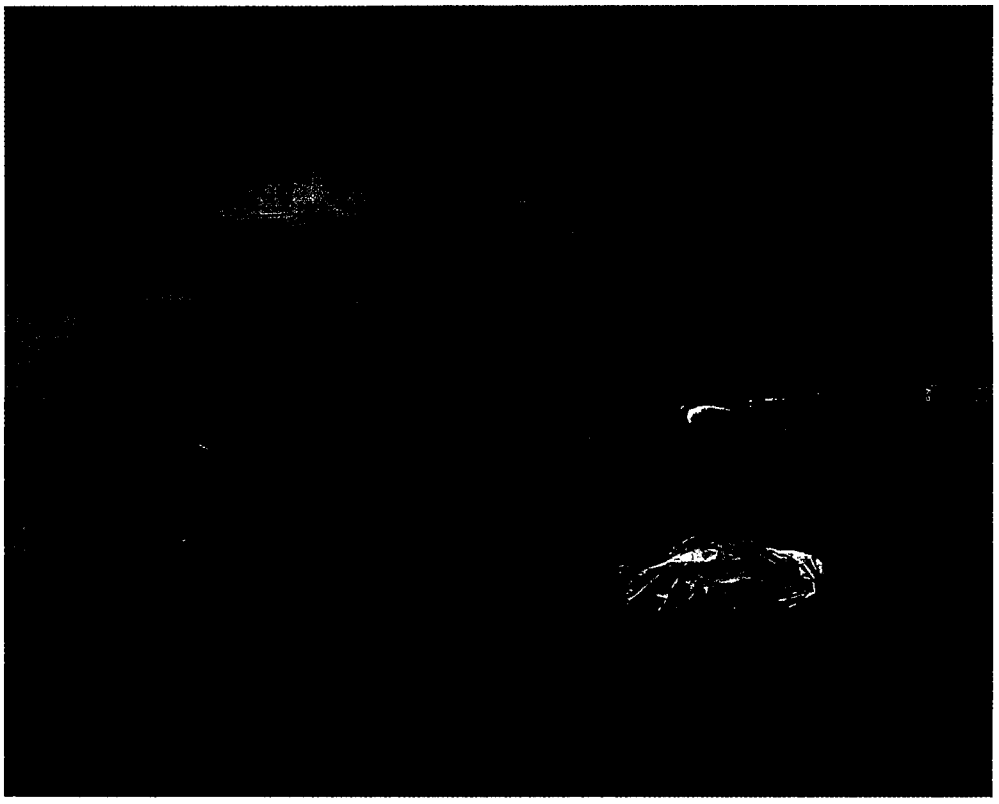


LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: Southeast
PHOTO by:C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-003



DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: East
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-004

LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: East
PHOTO by:C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-005

DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: East
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-006

LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 05, 2000
TIME: 10:15 – 11:40
DIRECTION: East
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-007

1100748

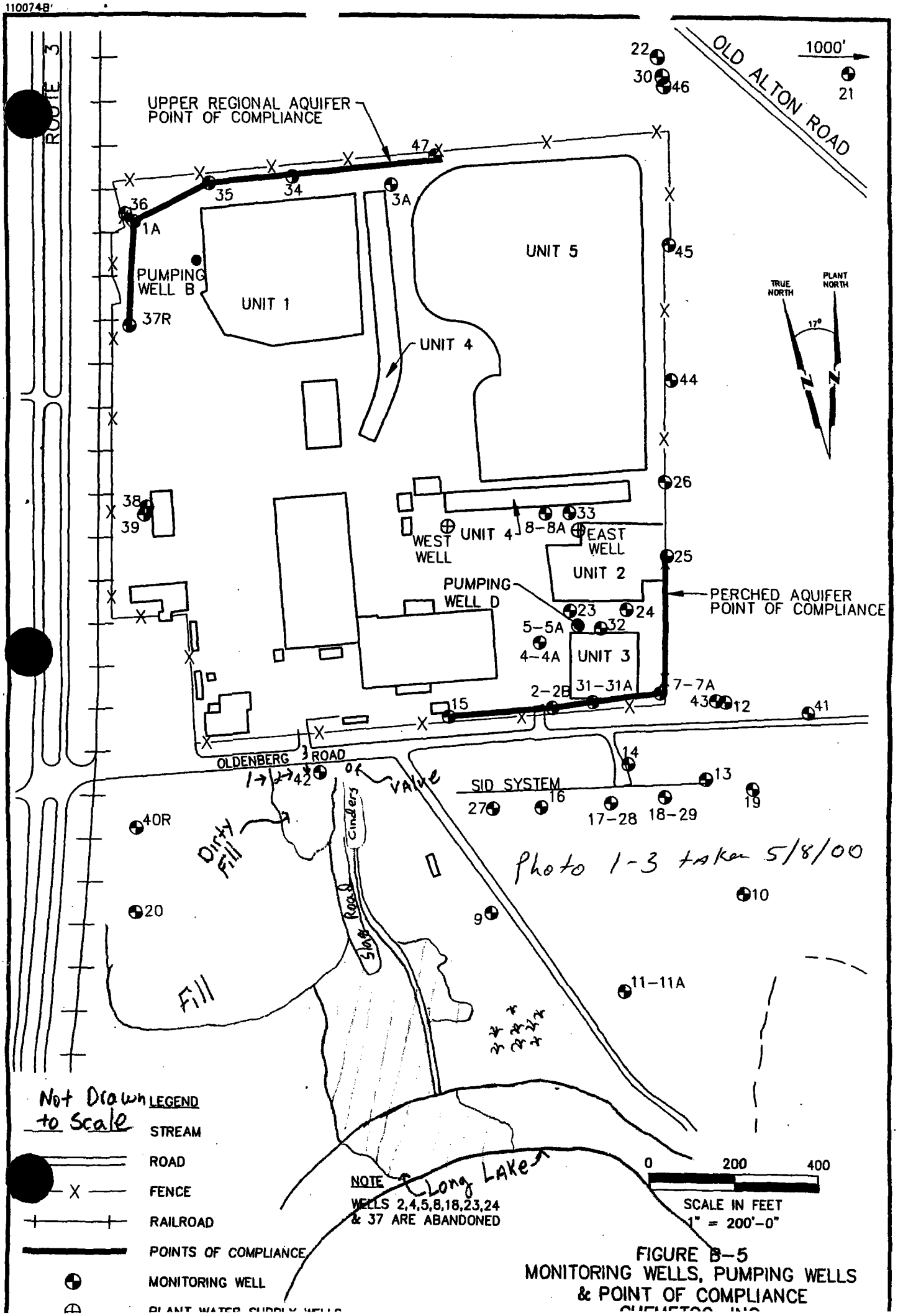


FIGURE B-5
MONITORING WELLS, PUMPING WELLS & POINT OF COMPLIANCE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809		IEPA ID #: 1198010003
Facility Name: Chemetco, Inc.		Phone #: 618/254-4381
Location: Chemetco Lane, Box 187		County: Madison
City: Hartford	State: Illinois	Zip Code: 62048
Region: Collinsville	Inspection Date: October 22, 1999	Time: 10:00 - 3:30 pm
Weather:		

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G-1/S/D

TYPE OF INSPECTION

CEI: X CME/O&M: CSI: NRR: F/U to: / / CCI: PIF: CVI: CSE: CAO: Other:

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11 / 17 / 80 (initial) / / (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08 / 15 / 80 Amended: 07 / 03 / 90 Withdrawn: / /

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03 / 03 / 93 Post-Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: 02/24/97 IAGO: 10/14/97 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / /	CAFO: / /	Federal Court Order: / /
Consent Decree: / /	IPCB Order: / /	State Court Order: 06 / 30 / 88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1994 1995 1996
S03*	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83***	No	No	Yes	No	Yes	No	N / N / N
S03****	No	No	Yes	No	Yes	No	N / N / N
SO2*****	No	No	Yes	No	Yes	No	N / N / N
							/ /
							/ /
							/ /

OWNER		OPERATOR	
Name: Chemetco, Inc.		Name:	
Address: Hwy 3, Box 187		Address:	
City: Hartford		City:	
State: Illinois	Zip Code: 62048	State:	Zip Code:
Phone #: 618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Heather Young	CSD Environmental/Chemetco, Inc.	618/254-4381 ext 268
Kim Fock	Maintenance and Engineering	618/254-4381 ext 372
Mike Wilkening	Plant Superintendent	618/254-4381 ext 269

INSPECTION PARTICIPANT(S)	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120
Jerry Kuhn	IEPA/BOL/Permits	217/524-3300
Kevin Lesko	IEPA/BOL/Permits	217/524-3300
Terri Myers	IEPA/BOL/Permits	217/524-3300

PREPARED BY	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
	12(d)	X	DPP	724.131	X	DSI	724.323(a)	X
	21(a)	X	DCP	724.151	X	DSI	724.326	X
	21(d)(1)&(2)	X	DCP	724.156(a)	X	DWP	724.351(a)	X
	21(e)	X	DCP	724.156(j)	X	DWP	724.351(c)	X
	21(f)(1)&(2)	X	DMR	724.173	X	DWP	724.351(d)	X
	21(p)(1)&(4)	X	DMR	724.174	X	DWP	724.351(f)	X
DOR	703.121(a)	X	DMR	724.175	X	DWP	724.354	X
DOR	703.121(b)	X	DMR	724.177	X	DWP	724.358(a)	X
DOR	703.151(a)	X	DCL	724.212(a)	X	DWP	724.358(c)	X
GGR	722.111	X	DFR	724.242	X	GLB	728.107(a)	X
GGR	722.141(b)	X	DFR	724.243	X	G/DLB	728.135	X
DGS	724.114(a)	X	DFR	724.244	X	G/DLB	728.139	X
DGS	724.114(b)	X	DFR	724.245	X		807.201	X
DGS	724.114(c)	X	DSI	724.321(c)	X		807.202	X
DGS	724.115(a)	X	DSI	724.321(g)	X		808.121(a)	X
DGS	724.115(b)	X	DSI	724.321(h)	X	DTR	724.291(a)	X

x = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
DTR	724.294(a)	X						
DTR	724.296	X						
DTR	724.296(d)	X						

x = Continuing Violation

* Zinc Oxide Bunker
** Zinc Oxide Pits, floor wash impoundment and cooling water canals
*** Newly discovered zinc oxide disposal in surface impoundment (Long Lake release)
**** Refractory brick disposal area, refractory brick remediation waste and slag fine waste piles
***** Black acid storage tank

1198010003 - Madison County
Chemetco, Inc.
Date of Inspection: October 22, 1999
Prepared by: Chris Cahnovsky

NARRATIVE

On October 22, 1999, I conducted a Compliance Evaluation Inspection at Chemecto, Inc. in Hartford, Illinois. Present during this inspection were Jerry Kuhn, Kevin Lesko and Terri Myers from the Illinois Environmental Protection Agency's Bureau of Land Permit Section. Representing Chemetco were Kim Kock, Mike Wilkening and Heather Young of CSD Environmental Services, Inc. Ms. Young is Chemetco's Environmental Manager. Chemetco, Inc. is a secondary copper smelter that operates four 70-ton top-blown rotary furnaces, which bronze, smelt and refine copper and other metal-bearing scrap. Chemetco produces anode copper, crude lead-tin solder, crude zinc oxide (ZnO) and slag.

Chemetco is regulated as an interim status facility undergoing closure of several RCRA units and as a large quantity generator of hazardous waste. Chemetco is also operating several unpermitted hazardous waste storage units. In March 1993, Chemetco submitted a Part B Closure/Post-Closure Permit Application for the "Dirty Closure" of the zinc oxide bunker (S03), floorwash water impoundment (D83), cooling water canals (D83) and the zinc oxide lagoons (D83). The Agency approved the closure for these units on January 29, 1993. The approval letter required that closure of these units be completed by November 1, 1994. Closure has not been completed.

On September 18, 1996, during a Compliance Evaluation Inspection (CEI), the Agency discovered that Chemetco was discharging zinc oxide into a wetland that flows into Long Lake. Consequently, the Agency alleged violations about the disposal of hazardous waste in an unpermitted surface impoundment (D83). During the September 1996 CEI, the Agency also discovered that Chemetco disposed of refractory brick, gunning material and other waste on the south side of Oldenberg Road. Chemetco excavated this area and created three hazardous waste piles (S03). The Agency has alleged violations concerning the disposal of hazardous refractory brick and gunning material and for the creation of three unpermitted hazardous waste piles.

At the Hartford plant, Chemetco generates hazardous waste, special waste and universal waste. The hazardous wastes include baghouse bags (D006 and D008), filter press cloths (D006 and D008), zinc oxide (D006 and D008), used oil and sand (D008), slag fines from the granulated slag and screening process (D008) and baghouse dust (D006 and D008). Other hazardous wastes include absorbent and oil (D008) and black pipe and hose (D008). The nonhazardous wastes include used oil, used oil and oily water and refractory brick. The universal wastes generated by Chemetco include spent flourescent light tubes and batteries.

During a September 9, 1997 inspection, the Agency alleged that Chemetco failed to make a hazardous waste determination of the refractory brick. The furnaces at Chemecto use both safety-liners and working liners. The safety liner consists of clay bricks and is placed in the furnace behind the working liner. The working liner is in constant contact with the metal in the furnaces. The safety liner can also have contact with metal through cracks or failures in the working liner. The copper content of the used brick can vary depending on the furnace and its utilization.

According to Mike Wilkening, Chemetco segregates the refractory into brick that has been in contact with metal and brick that have not been in contact. The brick that has sufficient metal content for recovery is charged to the furnace and the brick that has little metal content is landfilled. According to Chemetco's operating record " In light of the new foundry procedures, the brick contains fewer metals for reclamation.....Chemetco has reevaluated the refractory as a special waste or nonhazardous waste/debris that will be sent for disposal. Of course, if brick contains significant metallics due to operations, Chemetco will reclaim the brick." Chemetco sampled the refractory brick on August 18, 1999. The results showed that the brick was nonhazardous. Chemetco profiled the waste with Waste Management, Inc. on September 10, 1999. Between October 19, 1999 and October 21, 1999, Chemetco shipped about 178-yd^3, 12 loads, of refractory brick to Chain of Rocks Landfill in Granite City, Illinois. During past inspections, I have observed large piles of refractory brick on the south side of the zinc oxide bunker. During this inspection, I did not observe any refractory brick on the south side of the bunker. The brick returned to the furnace may only be exempt from regulation as a solid waste if it is not stored in a manner constituting disposal (i.e., waste pile) prior to be charged back to the furnace. The brick must be stored in either a tank, container or containment building.

The following is a summary of the plant tour.

Zinc Oxide Bunker

The ZnO bunker is approximately 365 feet by 310 feet and has a capacity of 3,000,000 gallons. The ZnO bunker contains speculatively accumulated crude zinc oxide, slag and remediation waste from the former zinc oxide pile, cooling canal and zinc oxide lagoons. The zinc oxide in the bunker is characteristically hazardous for lead (D008) and cadmium (D006). The zinc oxide bunker has a concrete containment wall and a system for run-off collection. The run-off from the pile is collected and piped back into the bunker.

On many occasions, I have observed the seams and cracks of the southeast corner of the bunker leaking water to the secondary containment. I have also observed seepage from the containment on the south side of the bunker. The south side of the bunker was also cracked in several places. Chemetco has sealed the areas where the leakage was occurring. I did not observe any seepage on the south side of the bunker and on the southeast corner. It appears that Chemetco has technically remediated the apparent violation of 35 Ill. Adm. Code 725.353(a) and 725.131.

Two methods are being used to control wind dispersion of the zinc oxide pile. One method is large pieces of slag have been placed on the west and north sides of the pile to reduce erosion and the other is the application of a surfactant called Coherex. According to Ms. Young, Chemetco is having Coherex applied to the pile annually. Information supplied by Ms. Young showed that 1,200-gallons of Coherex was applied to the pile on August 9, 1999 by CAM, LLC.

Granulated Slag Drying and Screening Plant (GSDSP)

In the GSDSP, water-cooled slag is dried and screened to make grit for shingle backing. On the east of the plant a conveyor dumps undersized slag fines onto a concrete slab. The Agency has sampled these fines and determined that they exhibit the toxic characteristic for lead. Chemetco has also determined that the slag fines exhibit one or more characteristics of a hazardous waste. These fines are stored in piles behind the granulation pad and on the west side of the water barge. The slag fines have been historically dumped at various locations on the air-cooled slag piles. The Agency has previously alleged violations about the unpermitted storage of slag fines waste piles.

According to a November 19, 1997 letter from Chemetco to the Agency, Chemetco states that about 60,000 tons of fines are generated per day. About 45,000 pounds of slag fines are added to the furnace via the DIS per day. Per Chemetco, the slag fines are used as a substitute for sand in the production process of copper. Slag fines are used to reduce the temperature of the metal bath.

The GSDSP has two baghouses. Several times the Agency has observed the baghouse dust collection hoppers leaking baghouse dust. The GSDSP was not operating during this inspection. At the time of this inspection, I did not observe dust emissions from these hoppers. Chemetco has implemented inspection procedures for the various baghouse dust collection boxes on-site. The inspection procedure states that daily inspections are to be conducted of each baghouse collection box. The procedure also states that the dust from the GSDSP baghouses and the #1 baghouse are to be taken to the fines building for injection in the DIS. Chemetco injects the baghouse dust to the furnaces to reduce the temperature of the bath, even out the consistency of the bath and to absorb moisture in the bath. The baghouse dust is used in the furnace as a substitute for sand.

Mr. Wilkening said that he had increased the silica content in the slag from 26-28% to 30-33½%. Portions of the slag are now passing TCLP for lead. According to Ms. Young the water cooled slag, shingle grit and the under sized slag fines now pass TCLP for lead. However, the water cooled pan size or the baghouse dust size from the GSDSP still fail TCLP for lead.

Cooling Canals

The cooling canals are unlined earthen ditches. The canals were used as a source of non-contact cooling water and were replaced with a cooling tower in 1985. According to the March 1998 Zinc Oxide Spill Remediation Plan, Chemetco states that the source of the discharge to Long Lake was a pump at the west end of the East stormwater retention canal (east cooling canal).

In July 1999, Sediment in the east canal was blocking the passage of water within the east canal and between the east and west canals. Chemetco pushed some sediments toward the side of the canals to allow water to flow more freely. Instead of pushing the material back into the canals, Chemetco placed the material in roll-off boxes and shipped it off-site as a hazardous waste. On August 6, 1999, Chemetco shipped about 39 yd^3 of ZnO, water and dirt to Chem-Met in Michigan for treatment and disposal.

I observed that the foot print of the east canal has been increased. The east end of the impoundment was dug out making the size of the impoundment larger. Ms. Young believed that this was done to increase the storage capacity if the cooling canal. The west canal has been nearly drained of water. I observed that the west canal contained large amounts of zinc oxide.

Hazardous Waste Accumulation Building

Chemetco accumulates containerized hazardous waste in the Hazardous Waste Accumulation Building. This building is location on the west side of the metals' yard. I observed one 55-gallon drum of floor dry (D008), four bags filter press cloths (D006 and D008), two boxes of black pipe and hose (D008) and ten 55-gallon drums of absorbent and oil (D008) in the building. It appears that Chemetco has properly labeled and dated all of the containers. The oldest container was dated August 26, 1999. One drum of absorbent and oil was observed open. The bung lids were missing. However, the drum was closed by the end of the inspection.

Zinc Oxide Filter Press

Zinc oxide slurry is generated by the venturi scrubber system. The scrubber system collects air emissions from the furnace. The scrubber water is then discharged to the polishing pits (an open concrete pit) where settling occurs. The solids from the polishing pits are further dewatered in a plate and frame filter press. The resulting dewatered material is what is referred to as zinc oxide. The current generation of zinc oxide is being sold to Elmet S.L. in Spain. Allegedly, the zinc oxide is mixed with copper/tin oxide purchased from another company. The zinc oxide/copper/tin oxide mix is loaded in trucks at the Fines Building and transported to the Phoenix Terminal located along the Mississippi River in Hartford, Illinois. According to records supplied to the Agency by Chemetco, the last shipments of zinc oxide to Spain were made between September 2, 1999 to September 24, 1999. About 223 tons of zinc oxide/copper tin oxides were shipped to Spain.

Number #2 Baghouse Dust Collection Trailer

A trailer is used to collect baghouse bust from the #2 Baghouse. Several times the Agency has observed dust leaking from this trailer. Chemetco has started daily trailer inspections. When the trailer is observed leaking, it is fixed. During this inspection, I did not observe any dust leakage from the trailer seal. It appears that Chemetco has addressed the trailer leakage problem.

The #2 Baghouse collects emissions from the roof over the furnaces. This baghouse dust, along with the baghouse dust from the #1 Baghouse is transported to the Fines Building where it is injected into the DIS. Chemetco injects this baghouse dust to the furnaces to reduce the temperature of the bath, even out the consistency of the bath and to absorb moisture in the bath. The baghouse dust is used in the furnace as a substitute for sand.

Used Oil Storage Tank

Chemetco stores used oil in a 1,200-gallon above ground storage tank. This tank is within secondary containment. The tank contained about 500 gallons of oil and was properly labeled. The used oil is picked up by Safety-Kleen as a nonhazardous waste. The secondary containment contained about two to three inched of oil and water. Safety-Kleen also picks up the oil/water mixture as a nonhazardous waste.

Chemetco generated used oil and absorbent and used oil and sand from the clean up of used oil from leaky machinery. Used oil and absorbent and used oil and sand is also generated from activities in the Mobile Shop. I saw one 55-gallon satellite accumulation drum of used oil and absorbent next to the Polishing Pond. Ms. Young said that this drum was from maintenance activities of a pump at the cooling canals. This drum was properly marked.

Refractory Brick Disposal Area

During the September 18, 1996 CEI, the Agency discovered that Chemetco had disposed of waste refractory brick, gunning material and other waste is an area south of Oldenberg Road. On April 21, 1997, the Agency sampled this waste and the results showed that the brick and gunning material were characteristically hazardous for lead (D008). Chemetco excavated the area and created three unpermitted waste piles of excavation waste. One waste pile consisted of hand-picked refractory brick and other waste. The other two piles consist of excavated soil, rock, refractory brick and other waste. The two piles of excavation waste were designated by Chemetco as Fill Pile #1 and Fill Pile #2. These two piles total about 1,000 tons of waste.

The refractory brick waste pile was sent to Chem-Met Service in Brownstown, Michigan. Fill Piles 1 and 2 remain on-site. The two piles have been covered with plastic. Chemetco has not submitted a RCRA closure plan for the brick disposal area or for the three waste piles. Letters alleging the apparent violation of 35 Ill. Adm. Code 724.212(a) for failing to submit RCRA closure plans for these waste piles was sent to Chemetco on October 7, 1997 and October 31, 1997.

Zinc Oxide Release Area

Chemetco has impounded the hazardous zinc oxide waste released into the wetland south of Oldenberg Road and released to Long Lake. The zinc oxide remediation area consisted of four impoundments. Zinc oxide waste has been consolidated into one impoundment. Chemetco submitted a plan called the Zinc Oxide Spill Remediation Plan, Phase I - Material Removal and Partial Closure in March 1998. This plan outlined Chemetco's plan to clean up the released zinc oxide. The Agency approved this plan with conditions on June 10, 1998. Chemetco is presently appealing the closure plan approval letter to the Illinois Pollution Control Board. I observed the zinc oxide release area during this inspection. It does not appear that any zinc oxide has been removed from the site for properly disposal. The pile of zinc oxide in Containment Area #1 is in contact with standing water and is subject to wind dispersion.

Black Acid Tank

On June 1, 1999, Ms. Young called the Collinsville office and informed the Agency that while trying to assess the use of a 15,000-gallon AST Chemetco discovered that the tank contained black acid left over from the old electrolytic refining operation. Ms. Young stated that the acid was sulfuric acid that contained nickel and copper.

Chemetco began operations at this site on or after 1970. Chemetco operated an electrolytic refining operation until November 1, 1984, when refining operations were ceased. The tank in question was used in the last step of the electrolytic process to contain black acid for reintroduction back into the process. This tank was last used in January 1985 when it received acid from the cells. Since the tank is no longer part of a process and the acid has been in the tank for more than 15 years, the acid is considered a waste. The tank and the acid are subject to regulation under the Resource Conservation Recovery Act. Chemetco submitted a RCRA closure plan (Log 813) for the Black Acid Tank on August 12, 1999. This plan in currently under review by the Agency.

The waste analysis of the acid shows that the acid is characteristically hazardous for corrosivity (D002), arsenic (D004), cadmium (D006) and chromium (D007). Between July 19, 1999 and August 3, 1999, Chemetco shipped 12,020 gallons of sulfuric acid to Waste Management Ohio, Inc. in Vickery, Ohio. Ms. Young estimates that the tank contains about 1,000-gallons of sediment and water.

The 15,000-gallon AST is in the cell house of the old electrolytic refining operation. The tank is a horizontal steel rubber lined tank resting on five concrete saddle braces. The tank is not located within secondary containment. The floor of the cell house is concrete. This concrete floor is severely cracked and in poor condition in some areas. The paint on the outside of the tank was peeling and flaking off and the tank was corroded. During a June 24, 1999 inspection of the tank, I observed a pile of acidic metal deposits on the floor on the east end of the tank. These deposits were from the belly valve of the tank. During the present inspection, Ms. Young said that the acidic metal deposits were placed back into the tank. I observed acidic metal deposit residues under the tank. It appeared that a flange on the north side of the tank had leaked. Buckets and absorbent pads have been placed under the belly valve to catch any further releases.

Stormwater Impoundment

Chemetco has constructed a 1-million gallon stormwater retention lagoon. The lagoon is lined with a high density polyethylene liner. According to Ms. Young, the impoundment receives only stormwater run-off. Chemetco has constructed a large concrete trench on the south side of the plant to collect any water that flows across Oldenberg Road. From the trench the water gravity flows through a hard piping to the impoundment. A hard pipe has been laid on part of the north side of the slag pile and the whole east side of the slag pile. This pipe is outside the fence line and is intended to catch any water run-off from the slag piles. The hard pipe ties into the hard pipe from trench system and flows to the impoundment. On February 11, 1999, Chemetco sampled the water in the impoundment to evaluate it for use as process make up water and dust control water. The results showed that the total lead value was 0.28 mg/L and the total cadmium level was 0.029 mg/L.

I completed a review of the facility's operating records during this inspection. I noted no discrepancies on the 1998 and 1999 Uniform Hazardous Waste Manifests, 1998 Hazardous Waste Reports, RCRA Contingency Plan and RCRA training program.

Violations concerning the zinc oxide discharge to Long Lake, the refractory brick disposal area and the refractory brick remediation waste piles remain unresolved at this time. Also, issues concerning the disposition of the slag fines and baghouse dust on the slag pile, along with other waste management violations, remain unresolved.

CNC/CHEM60.CEI

FacilityName:	Chemetco, Inc.	USEPA ID #:	ILD048843809
Inspection Date:	10/22/99	IEPA ID #:	1198010003

WASTE DISPOSITION FORM

Waste Name	Generating Process	Date of Last Analysis	USEPA HW #	On Notification? (8700-12)	On Part A Appl? (3510-3)	On Annual Report for Years: 1996 1997 1998	Amount On-Site	Rate of Generation	Last Manifested Shipment	Disposition of Waste
Bag house Bags	Bags from #2, #1 Slag Gran + DIS B.H.	11/12/97	D006 D008	Yes	No	No / Yes / Yes	0	VARIES	8/21/99	Chem-met
Filter press Clothes	Cloth from ZnO Filter Press	11/12/97	D006 D008	Yes	No	No / Yes / Yes	4 Bags	VARIES	8/21/99	Chem-met
USED oil and sand	Sand Absorbent from oil leaks	2/6/98	D008	Yes	No	No / Yes / Yes	0	VARIES	9/29/99	Chem-met
Absorbent and oil	Oil spills and machine leaks	6/97	D008	Yes	No	No / Yes / Yes	11 drums	~7 drums/month	9/29/99	Chem-met
Black pipe and Fire hose	Hose from pumps and pipe from street sweep	6/9/99	D008	Yes	No	No / No / Yes	2 Boxes	VARIES	9/29/99	Chem-met
Zinc Oxide, water and dirt	East Cooling Clean-out	7/26/99	D008 D006	Yes	(SO3) Yes	No / No / No	Not Deter.	During Cool Canal Excavation	8/6/99	Chem-met
Spent Sulfuric Acid	Clean-out of Black Acid Tank	6/2/99	D002 D004 D006 D007	Yes	No (SO3)	No / No / No	~1,000 gallons	Tank Clean-out	8/3/99	Waste Management Ohio, Inc. Vickery OH
USED oil	Mobile Equip. Repair	12/9/98	N.H.	N/A	N/A	N/A, N/A, N/A	~500 gal.	~1,000 gal/month	9/10/99	Safety-Kleen Caseyville
USED oil & water	Storm water from oil tank II° Cont.	12/9/98	N.H.	N/A	N/A	N/A, N/A, N/A	~400 gal	VARIES	9/10/99	Safety-Kleen Caseyville
Fluorescent Lamps	Light Changes	P.K.	univ. waste	N/A	N/A	N/A, N/A, N/A	0	VARIES	9/16/99	Advanced Env. Recycling Allentown, PA
Refractory Brick	Furnaces	8/18/99-9/10/99	N.H.	N/A	N/A	N/A, N/A, N/A	0	VARIES	10/21/99	Chain of Rocks Granite City
Refractory Brick waste	Waste Pile from R.B. excavation	9/17/97	D008	Yes	No (SO3)	No / No / No	~1,000 Tons	~1,000 Tones	9/30/97	Chem-met
Zinc Oxide	Scrubber Solids	12/26/88	D006 D008	Yes	Yes	No / No / No	N.D.	~100 tons/month	9/24/99 11/9/93	Elmet S.L. - Spain Horsehead
Zinc Oxide waste	ZnO Bunker	12/26/98	D006 D008	Yes	(SO3) Yes	Yes / Yes / Yes	~6,500 Tons	ZnO Bunker	ZnO Bunker	Stored in ZnO Bunker
Bag house Dust ZnO & Slag fines	#1, #2, Slag Gran DIS and BH Dust	5/26-29/98 **	D008 D006	Yes	No (SO3)	No / No / No	N.D.	N.D.	None	Stored in Slag Pile
Gran. Slag Slag fines	Slag fines from Slag Gran.	4/9/97	D008	Yes	No (SO3)	No / No / No	N.D.	N.D.	None	Stored on Slag Pile

FacilityName:	Chemetco, Inc	USEPA ID #:	ILD048843809
Inspection Date:	10/22/99	IEPA ID #:	1198010003

WASTE DISPOSITION FORM

Waste Name	Generating Process	Date of Last Analysis	USEPA HW #	On Notification? (8700-12)	On Part A Appl? (3510-3)	On Annual Report for Years: 19 96 19 97 19 98	Amount On-Site	Rate of Generation	Last Manifested Shipment	Disposition of Waste
ZnO waste	ZnO discharge to Long Lake	9/18/96	D006 D008	Yes	No (D83)	No / No / Yes	3,784 Tons	Remediation waste	None	Stored on-site
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MEMORANDUM

Date: October 6, 1999
To: Operating Record
From: Heather Young, CSD Environmental Services, Inc.
RE: Waste determination on Brick

Background
The furnaces at Chemetco utilize both safety liners and working liners. The safety liners consist of clay bricks and are placed in the furnace first with a working liner to follow. The working liner consistently has contact with the metal in the furnaces. The safety liner can also have contact with metal through cracks or failures occur in the working liner. Due to a breech in a working liner, metal could flow behind the working liner and become impregnated into the safety liner. Copper content of the used brick can vary depending on the furnace and its utilization.

Analytical
Six samples were collected from the refractory brick pile along the southeast side of the zinc oxide bunker by USEPA in May 1998. A sixth sample was a composite of smaller brick pieces in the pile. Four of the five samples did not exceed TCLP. The composite sample only slightly exceeded TCLP for lead and cadmium. If the material was to be disposed of, it may need to be handled as a hazardous waste or debris based on the failure of the aforementioned analytical results. Materials with high lead concentrations are acceptable recycleable materials for Chemetco since they produce a lead /tin solder in addition to the copper anodes. Raw materials with higher lead values than copper values are already purchased.

Summary of Regulatory Analysis
Since the brick is put into the furnace to recover copper and other metals which it contains, pursuant to 40 CFR 261.1(4) (35 IAC 721), a material is reclaimed if it is processed to recover a useable product. The examples given include recovery of lead values from spent batteries. Thus, the brick meets the definition of "reclamation" and best fits in the by-product category. According to Appendix Z, Table to Section 721.102, TCLP characteristic by-products are not solid wastes and therefore, are not considered hazardous wastes when reclaimed.

In other words, if the brick were to fail TCLP, then the brick is a characteristically hazardous by-product that is reclaimed. Therefore, it is not defined and regulated as a solid waste (and thus hazardous waste) under the RCRA regulations, unless speculatively accumulated.

Question of Speculative Accumulation
Chris Cahnovsky, Illinois EPA RCRA inspector, has on several occasions mentioned that the brick pile appears to remain the same. It was explained that material is added and taken away constantly and that the brick in the pile is not always the same. When this was mentioned to me in 1998, I requested that Chemetco not add additional brick to the pile. Such tracking would insure that speculative accumulation would not become an issue. Instead of the addition and subtraction to the brick at the southeast corner of the zinc oxide bunker, the brick would be tracked on the computer and include the following information:

- The location of the brick in the raw material storage area;
- The approximate weight/amount of brick; and,
- The date of placement in the yard.

Also, the older brick in the pile at the southeast corner should be used first.

Reevaluation of Brick
To date, the refractory brick has been reclaimed. Recently, samples of the safety and working liners were sent to Waste Management for analysis and acceptance for disposal. Both samples, safety and working liner material, met the criteria for special waste or nonhazardous waste.

Recently and under the direction of new management, the newly produced and segregated refractory brick has been reevaluated both chemically and economically. In light of the new foundry procedures, the brick contains fewer metals for reclamation. Furnaces are shut down in a more orderly manner so as to remove

nearly all residue. Low grade slag, which passes TCLP, or refined copper will be the last material in contact with the lining. The longer the metal is held, the greater the chance that material may either adhere to the surface, become impregnated in the metal and/or become injected into cracks or failures. In light of these circumstances, Chemetco has reevaluated the refractory brick as a special waste or nonhazardous waste/debris that will be sent out for disposal. Of course, if brick contains significant metallics due to operations, Chemetco will reclaim the brick. Such brick would be tracked as described above. Samples of both the working and safety liners were submitted to Waste Management for approval (analytical results are attached).

Kiesel Environmental Laboratories Phone: 314/351-5500 Fax: 314/351-0694

Laboratory Report No.: 99-9-8962 September 10,1999

Ms. Janine M. Kennedy
Waste Management, Inc.
601 Madison Road
E. St. Louis, Il. 62201

Project: Chemetco/Refractory Brick
Total number of samples submitted: 1
Date sample collected: August 18, 1999
Date sample submitted: August 18, 1999
Date of sample analysis: August 18, 1999-September 10, 1999

ANALYTICAL RESULTS

Sample Identification: Chemetco/ Refractory Brick
Lab No: 18197 & 18296
Sample Matrix: Brick

Physical Appearance:	Dark Solid
Water Reactivity:	none
Ignitability:	
Flash point (C.O.C.), °F:	>212°
Corrosivity:	
pH, 10% solution:	8.8
Paint Filter Liquids Test, pass/fail:	pass
Reactivity:	
Cyanide, ppm:	<5
Sulfide, ppm:	<10

Kiesel Environmental Laboratories Phone: 314/351-5500 Fax: 314/351-0894

Laboratory Report No.: 99-9-8962 September 10,1999

Total Phenolics, ppm: <5

T.C.L.P. Metals,mg/l:

Arsenic	<0.10
Barium	0.90
Cadmium	0.20
Chromium	<0.05
Lead	1.98
Mercury	<0.001
Selenium	<0.20
Silver	<0.05

T.C.L.P. Volatile Organics, mg/l:

Methyl Ethyl Ketone	<2.0
Chloroform	<0.10
1,1-Dichloroethene	<0.10
Vinyl Chloride	<0.05
Chlorobenzene	<0.10
Tetrachloroethene	<0.10
Benzene	<0.10
Carbon Tetrachloride	<0.10
1,2-Dichloroethane	<0.10
Trichloroethene	<0.10

T.C.L.P. Semi Volatiles, mg/l:

1,4-Dichlorobenzene	<0.10
o-Cresol	<0.10
m/p-Cresol	<0.20
Hexachloroethane	<0.10
Nitrobenzene	<0.10
Hexachlorobutadiene	<0.10
2,4,6-Trichlorophenol	<0.10
2,4,5-Trichlorophenol	<0.10
Hexachlorobenzene	<0.05
Pentachlorophenol	<0.10
2,4-Dinitrotoluene	<0.05
Pyridine	<0.10

Kiesel Environmental Laboratories Phone: 914/351-5500 Fax: 914/351-0894

Laboratory Report No.: 99-9-8962 September 10,1999

Total Solids, %:	99.8
Ash @ 600° C, %:	99.7
E.O.X., as chloride, ppm:	<200

METHODS REFERENCE:
- -USEPA SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Volume 1A, 3rd Ed., Nov. 1986
- -USEPA SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Volume 1B, 3rd Ed., Nov. 1986
- -USEPA SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Volume 1C, 3rd Ed., Nov. 1986
- -"Toxicity Characteristic Leaching Procedure (TCLP)", SW-846 Method 1311 as revised by the EPA June 29, 1990 (55 FR 26986)

KIESEL ENVIRONMENTAL LABORATORIES

Robert J. Winkler
Laboratory Supervisor

Lab No(s).: 18197 & 18296
CD/RB/RW/cd

Kiesel Environmental Laboratories Phone: 314/351-5500 Fax: 314/351-0894

271-0221
$110.00

Laboratory Report No.: 99-9-8993 October 4, 1999

Ms. Janine M. Kennedy
Waste Management, Inc.
601 Madison Road
E. St. Louis, Il. 62201

Project: Chemetco / Refractory Liner
Total number of samples submitted: 1
Date sample collected: September 21, 1999
Date sample submitted: September 21, 1999
Date of sample analysis: September 21, 1999-October 4, 1999

ANALYTICAL RESULTS

Sample Identification: Refractory Liner
Lab No: 18349
Sample Matrix: Refrectory Liner

T.C.L.P. Metals,mg/l:

Arsenic	<0.10
Barium	0.44
Cadmium	<0.01
Chromium	<0.05
Lead	<0.05
Mercury	<0.001
Selenium	<0.20
Silver	<0.05

Methods Reference:
-USEPA SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Volume 1A, 3rd Ed., Nov. 1986
-"Toxicity Characteristic Leaching Procedure (TCLP)", SW-846 Method 131 as revised by the EPA June 29, 1990 (55 FR 26986).

KIESEL ENVIRONMENTAL LABORATORIES

Robert J. Winkler
Laboratory Supervisor

Lab No(s).: 18349
RB/cd

MEMORANDUM

Date: August 12, 1999
To: Operating Record
From: Heather Young, CSD Environmental Services, Inc.
RE: Removal and disposal of sludge from East Canal

Some of the sediment in the east canal was blocking the passage of water within the east canal and between the east and west canals. The material was pushed toward the sides/banks to allow water to flow more freely. Some of the material was set up on the north bank. Rather than pushing this material back into the canal, the material was removed and placed into lined roll offs pursuant to the Maintenance Procedure for Sediment Removal in the Stormwater canals. This plan will have to be utilized until the canals complete closure under RCRA. Meylan Enterprises Inc. was hired to place the material into the roll offs. All of those participating were 40 hour OSHA trained. A copies of the Maintenance Plan and the Worksite Safety and Job Training Report are attached.

A sample of the material was subjected to TCLP for the 8 RCRA metals. The material was to be disposed of, failed for lead and was therefore a D008 characteristically hazardous waste, and was being taken from a RCRA unit which has not yet closed. The analysis is attached. The material was accepted by ChemMet in Michigan for treatment and disposal.

Two (2) roll off containers were filled, covered, labeled, and inspected as required for on-site storage of hazardous waste for less than 90 days. The roll off containers were picked up by Midwest Sanitary on Friday, August 6, 1999. It was later determined that one of the containers was slightly overweight. 40 hour trained personnel at Midwest transferred the material into labeled supersacks and the manifests were adjusted and initialed to reflect the reduction of 5 cubic yards from one roll off and the addition of the 5 cubic yard to supersacks. Copies of the manifests are also attached.

Certificate of Analysis

Prairie Analytical Systems, INCORPORATED
1205 Capital Airport Drive
Springfield, IL 62707-8490
Phone: 217-753-1140
Facsimile: 217-753-1152
E-Mail: IL100323@aol.com

Chemetco
P.O. Box 187
Alton, IL 62002

Client Project: E. Canal Sludge
Date Received: 26-Jul-99
PAS Project Code: CSD-392
Date Reported: 29-Jul-99

Sample Description:	ECS72299	—	—	—	—
PAS Sample Number:	9907266653	—	—	—	—
Date Sampled:	22-Jul-99	—	—	—	—
Date Analyzed:	28-Jul-99	—	—	—	—

TCLP Element(s) Analysis - ICPMS

Element(s)	RL mg/l	Result mg/l	Result mg/l	Result mg/l	Regulatory Limit mg/l	STORET Number	EPA Method
Arsenic(^{75}As), TCLP	0.001	0.004	—	—	5.00	99012	200.8
Barium(^{137}Ba), TCLP	0.001	0.261	—	—	100.0	99014	200.8
Cadmium(^{111}Cd), TCLP	0.001	9.82	—	—	1.00	99016	200.8
Chromium(^{53}Cr), TCLP	0.001	0.002	—	—	5.00	99018	200.8
Lead(^{208}Pb), TCLP	0.001	419	—	—	5.00	99020	200.8
Mercury(^{202}Hg), TCLP	0.0001	0.003	—	—	0.20	99022	200.8
Selenium(^{82}Se), TCLP	0.001	0.052	—	—	1.00	99024	200.8
Silver(^{107}Ag), TCLP	0.001	<0.001	—	—	5.00	99026	200.8

Stephen R. Johnson, Laboratory Director

TO 3465155

** TOTAL PAGE.03 **

Chemetco

P.O. BOX 197 • ALTON, ILLINOIS 62002

CHAIN OF CUSTODY RECORD

TODAY'S DATE: 7/22/99

SAMPLES SENT TO: Prairie

PROJECT NO. / PROJECT NAME: E. Canal Sludge

SAMPLERS: (Signature): H. Young

STATION NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	TCLP, RCRA Metals	REMARKS
ECS7299	7/22			X	Hoppers	1		

Please fax results as soon as possible to Heather 618/254-0138. Need to get this waste out ASAP. Thanks! Heather

9907264

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY:	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY:
[signature]	7/22/99						
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY:	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY:
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY:	DATE	TIME	REMARKS	
			Man to Rob [illegible]	[illegible]	0900		

DISTRIBUTION: Original to Lab, Copy 1 to Field Files, Copy 2 to Project Manager

CSD 392

OCT 29 '99 10:37 FR

JUL 26 99

1100748

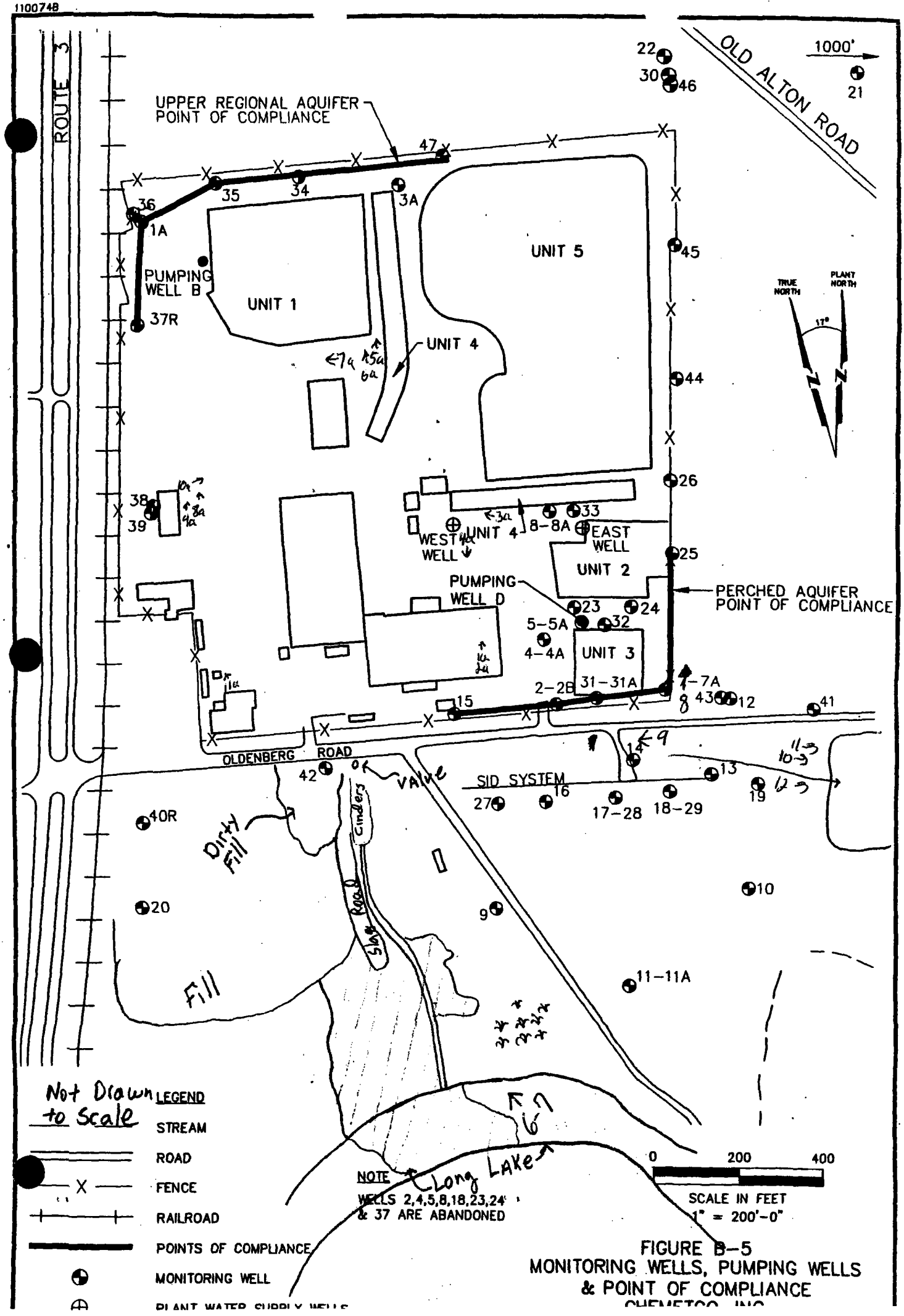


FIGURE B-5
MONITORING WELLS, PUMPING WELLS & POINT OF COMPLIANCE
CHEMETCO, INC.

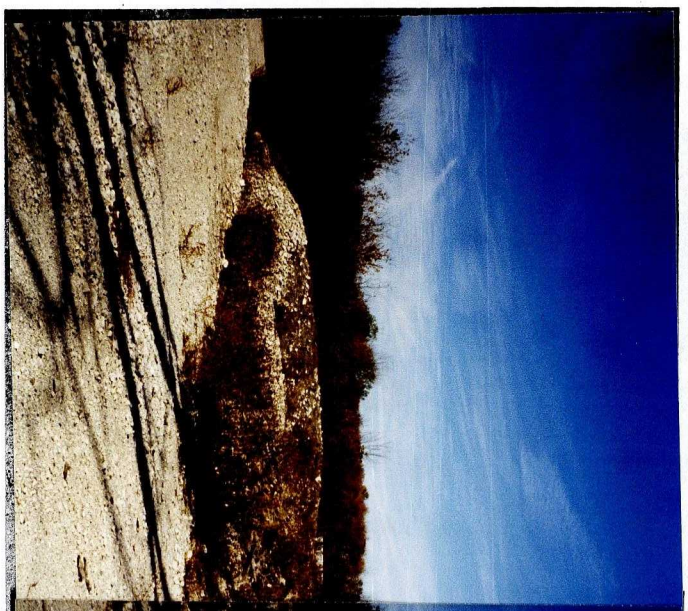
INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3537 | **PHOTO#:** 6



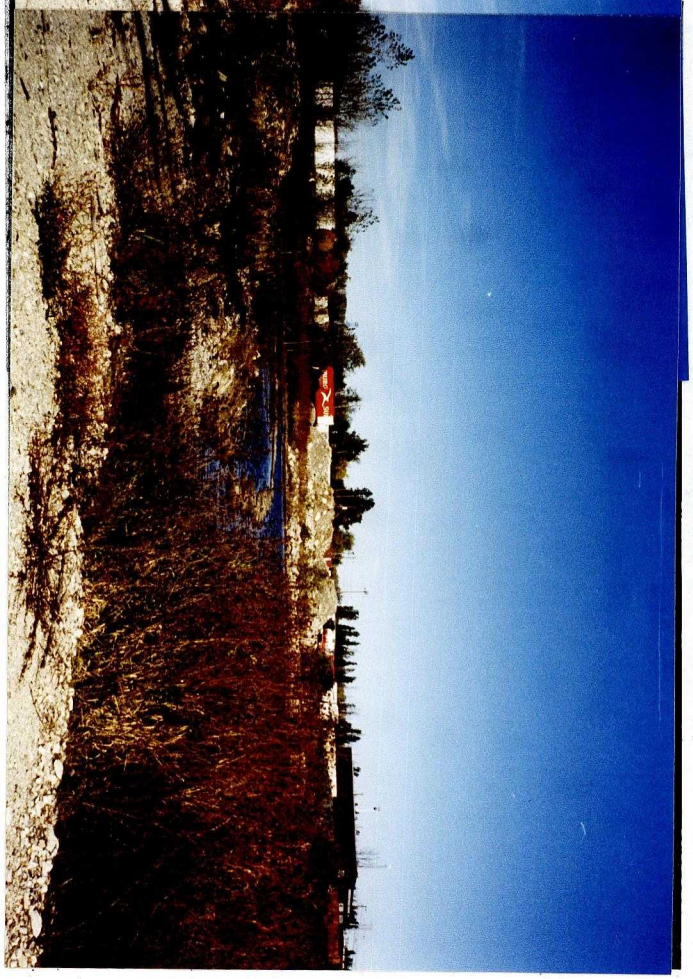
DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3537 | **PHOTO#:** 7



CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3537 **PHOTO#:** 8

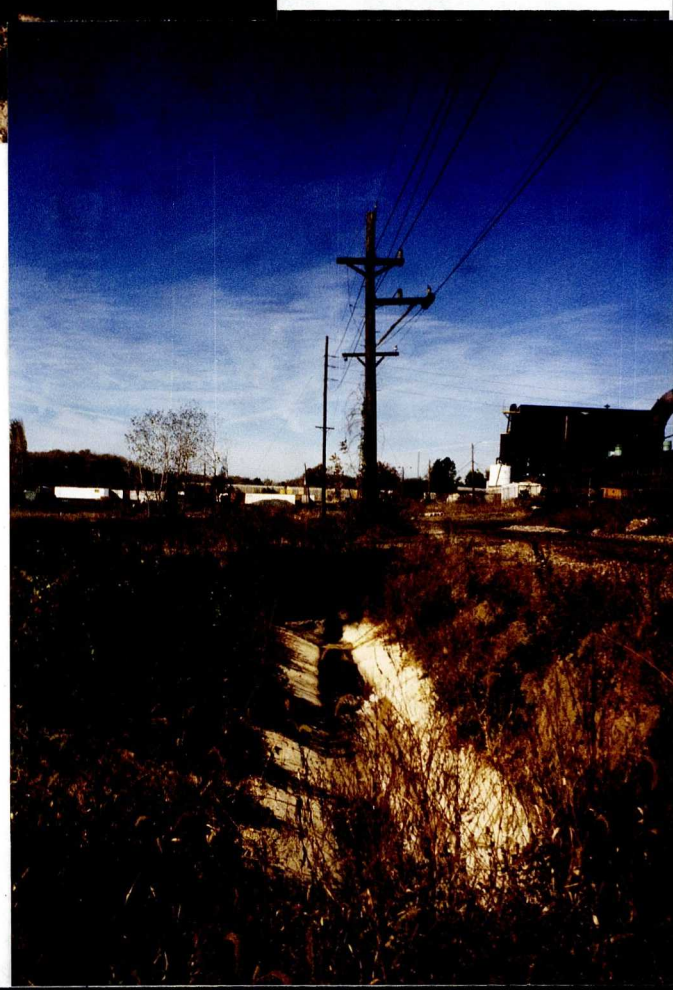
DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: West

ROLL#: 3537 **PHOTO#:** 9



CNC:jlb

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: East

ROLL#: 3537 **PHOTO#:** 10

DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: East

ROLL#: 3537 **PHOTO#:** 11

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southeast

ROLL#: 3537	**PHOTO#:** 12

DATE:	
TIME:	
PHOTOGRAPH TAKEN BY:	
COMMENTS: Pictures taken toward:	
ROLL#:	**PHOTO#:**

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3538 **PHOTO#:** 1a

DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3538 **PHOTO#:** 2a

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3538 **PHOTO#:** 3a

DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3538 **PHOTO#:** 4a

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3538 **PHOTO#:** 6a

DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3538 **PHOTO#:** 5a

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: West

ROLL#: 3538 **PHOTO#:** 7a

DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3538 **PHOTO#:** 8a

CNC:jlb

FOS

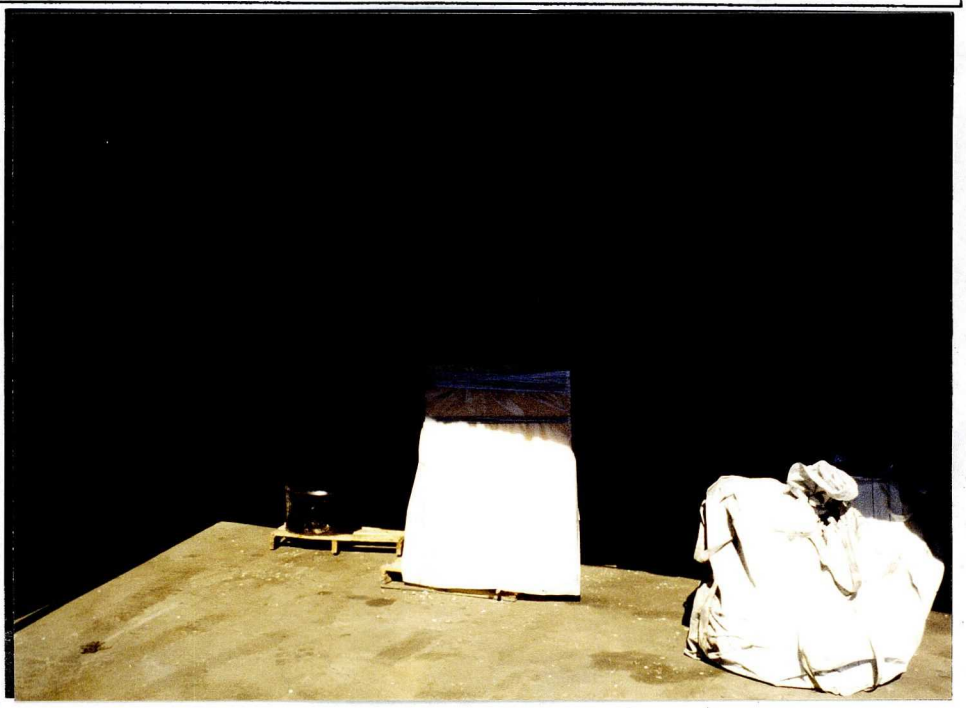
INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3538 **PHOTO#:** 9a



DATE: 10/22/99

TIME: 10:00-3:30

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northeast

ROLL#: 3538 **PHOTO#:**10a

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/99	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 10:00-3:30	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Gahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3538 | **PHOTO#:** 11a

DATE:	
TIME:	
PHOTOGRAPH TAKEN BY:	
COMMENTS: Pictures taken toward:	
ROLL#:	**PHOTO#:**

CNC:jlb

FOS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809 IEPA ID #: 1198010003

Facility Name: Chemetco, Inc. Phone #: 618/254-4381

Location: Chemetco Lane, Box 187 County: Madison

City: Hartford State: Illinois Zip Code: 62048

Region: Collinsville Inspection Date: October 22, 1998 Time: 09:10-13:15

Weather: Sunny and Dry

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

CEI: X CME/O&M: CSI: NRR: F/U to: / / CCI: PIF: CVI: CSE: CAO: Other:

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11 / 17 / 80 (initial) / / (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08 / 15 / 80 Amended: 07 / 03 / 90 Withdrawn: / /

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03 / 03 / 93 Post-Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: 02/24/97 IAGO: 10/14/97 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / / CAFO: / / Federal Court Order: / /

Consent Decree: / / IPCB Order: / / State Court Order: 06 / 30 / 88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1994 1995 1996
S03*	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83***	No	No	Yes	No	Yes	No	N / N / N
S03****	No	No	Yes	No	Yes	No	N / N / N
* Zinc Oxide	Bunker						/ /
** Zinc Oxide	Pits, Floor	wash impounds	Cooling water	canals			/ /
*** Newly	Discovered	Zinc Oxide	disposal in S.I.				/ /
**** Refractory	Brick waste	pile & Slag fine	waste pile.	and brick	clean up piles		/ /

OWNER			OPERATOR	
Name:	Chemetco, Inc.		Name:	
Address:	Hwy 3, Box 187		Address:	
City:	Hartford		City:	
State:	Illinois	Zip Code: 62048	State:	Zip Code:
Phone #:	618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Heather Young	CSD Environmental/Chemetco, Inc.	618/254-4381 ext 268
Bruce Hendrickson	General Manager	618/254-4381

INSPECTION PARTICIPANT(S)	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

PREPARED BY	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/BOL	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X
	12(d)	X
	21(a)	X
	21(d)(1)&(2)	X
	21(e)	X
	21(f)(1)&(2)	X
	21(p)(1)&(4)	X
DOR	703.121(a)	X
DOR	703.121(b)	X
DOR	703.151(a)	X
GGR	**722.111**	**X**
GGR	722.141(b)	X
DGS	724.114(a)	X
DGS	724.114(b)	X
DGS	724.114(c)	X
DGS	724.115(a)	X
DGS	724.115(b)	X

AREA	SECTION	X
DPP	**724.131**	**X**
DCP	724.151	X
DCP	724.156(a)	X
DCP	724.156(j)	X
DMR	724.173	X
DMR	724.174	X
DMR	724.175	X
DMR	724.177	X
DCL	724.212(a)	X
DFR	724.242	X
DFR	724.243	X
DFR	724.244	X
DFR	724.245	X
DSI	724.321(c)	X
DSI	724.321(g)	X
DSI	724.321(h)	X

AREA	SECTION	X
DSI	724.323(a)	X
DSI	724.326	X
DWP	724.351(a)	X
DWP	724.351(c)	X
DWP	724.351(d)	X
DWP	724.351(f)	X
DWP	724.354	X
DWP	724.358(a)	X
DWP	724.358(c)	X
DWP	725.353(a)	X
DPP	725.131	X
GLB	728.107(a)	X
G/DLB	728.135	X
G/DLB	728.139	X
	807.201	X
	807.202	X

x = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X
	808.121(a)	X
R	739.122(c)	X
GPT	722.134(a)	
	725.135	
	725.273(b)	

AREA	SECTION	X

AREA	SECTION	X

x = Continuing Violation

1198010003 - Madison County
Chemetco, Inc.
Date of Inspection: October 22, 1998
Prepared by: Chris Cahnovsky

NARRATIVE

On October 22, 1998, I conducted a Compliance Evaluation Inspection at Chemecto, Inc. in Hartford, Illinois. Present during this inspection were Ms. Heather Young of CSD Environmental Services, Inc. and Bruce Hendrickson, General Manager. Ms. Young is Chemetco's Environmental Manager. Chemetco, Inc. is a secondary copper smelter that operates four 70-ton top-blown rotary furnaces, which bronze, smelt and refine copper and other metal-bearing scrap. Chemetco produces anode copper, crude lead-tin solder, crude zinc oxide (ZnO) and slag.

Chemetco is regulated as an interim status facility undergoing closure of several RCRA units and as a large quantity generator of hazardous waste. Chemetco is also operating several unpermitted hazardous waste storage units. In March 1993, Chemetco submitted a Part B Closure/Post-Closure Permit Application for the "Dirty Closure" of the zinc oxide bunker (S03), floorwash water impoundment (D83), cooling water canals (D83) and the zinc oxide lagoons (D83). The Agency approved the closure for these units on January 29, 1993. The approval letter required that closure of these units be completed by November 1, 1994. Closure has not been completed.

On September 18, 1996, during a Compliance Evaluation Inspection (CEI), the Agency discovered that Chemetco was discharging zinc oxide into a wetland that flows into Long Lake. Consequently, the Agency alleged violations about the disposal of hazardous waste in an unpermitted surface impoundment (D83). During the September 1996 CEI, the Agency also discovered that Chemetco disposed of refractory brick, gunning material and other waste on the south side of Oldenberg Road. Chemetco excavated this area and created three hazardous waste piles (S03). The Agency has alleged violations concerning the disposal of hazardous refractory brick and gunning material and for the creation of three unpermitted hazardous waste piles.

At the Hartford plant, Chemetco generates hazardous waste, special waste and universal waste. The hazardous wastes include baghouse bags (D006 and D008), filter press cloths (D006 and D008), zinc oxide (D006 and D008), used oil and sand (D008), slag fines from the granulated slag and screening process (D008) and baghouse dust (D006 and D008). The nonhazardous wastes include used oil/corn cob absorbent, used oil and oily water. The universal wastes generated by Chemetco include spent flourescent light tubes and batteries.

The following is a summary of the plant tour.

Zinc Oxide Bunker

The ZnO bunker is approximately 365 feet by 310 feet and has a capacity of 3,000,000 gallons. The ZnO bunker contains speculatively accumulated crude zinc oxide, slag and remediation waste from the former zinc oxide pile, cooling canal and zinc oxide lagoons. The zinc oxide in the bunker is characteristically hazardous for lead (D008) and cadmium (D006). The zinc oxide bunker has a concrete containment wall and a system for run-off collection. The run-off from the pile is collected and piped back into the bunker. According to an August 4, 1998 weekly inspection report for the bunker, the run-off collection system on the southwest corner of the bunker spilled over the side wall and over the secondary containment. The water was pumped back into the bunker.

During the inspection of the zinc oxide bunker, I observed that seams and cracks in the containment wall on the southeast side, next to the run-off collection system, were leaking water to the secondary containment. I also observed seepage from the containment on the south side of the bunker. The south side of the bunker was also cracked in several places. Chemetco must make a determination whether the water from the ZnO Bunker exhibits any characteristics of a hazardous waste. This determination will determine if 35 Ill. Adm. Code 735.353(a) apply to the bunker. For this reason, the apparent violation of 35 Ill. Adm. Code 722.111 will be alleged.

Two methods are being used to control wind dispersion of the zinc oxide pile. One method is large pieces of slag have been placed on the west and north sides of the pile to reduce erosion and the other is the application of a surfactant called Coherex. According to Ms. Young, Chemetco is having Coherex applied to the pile annually. Information supplied by Ms. Young showed that 1,200-gallons of Coherex was applied to the pile on June 1, 1998 by CAM, LLC. An October 7, 1998, inspection record indicted that erosion had occurred on the northwest corner of the bunker. Apparently, slag had slid off the pile. The slag was placed back on the pile.

Chemetco filed a petition for an Adjusted Standard (AS 97-2) on August 9, 1996 with the Illinois Pollution Control Board (IPCB). Chemetco was asking the IPCB to determine that the zinc oxide stored in the bunker was not a solid waste when Chemetco removes it from the bunker for recycling. Chemetco intended to send the bunker zinc oxide to Spain. On March 19, 1998, the IPCB denied Chemetco's request for an Adjusted Standard.

Granulated Slag Drying and Screening Plant (GSDSP)

In the GSDSP, water-cooled slag is dried and screened to make grit for shingle backing. On the east of the plant a conveyor dumps undersized slag fines onto a concrete slab. The Agency has sampled these fines and determined that they exhibit the toxic characteristic for lead. Chemetco has also determined that the slag fines exhibit one or more characteristics of a hazardous waste. These fines are stored in piles behind the granulation pad and on the west side of the water barge. The slag fines have been historically dumped at various locations on the air-cooled slag piles. The Agency has previously alleged violations about the unpermitted storage of slag fines waste piles.

According to a November 19, 1997 letter from Chemetco to the Agency, Chemetco states that about 60,000 tons of fines are generated per day. About 45,000 pounds of slag fines are added to the furnace via the DIS per day. Per Chemetco, the slag fines are used as a substitute for sand in the production process of copper. Slag fines are used to reduce the temperature of the metal bath.

On October 30 and 31, 1997, Chemetco conducted a pilot test to determine the best treatment method for the slag fines. Three 25 yd^3 roll-off boxes of slag fines were treated with sodium silicate, lime and cement kiln ash. Before treatment this waste failed TCLP for lead. The treatment rendered the slag fines nonhazardous. The boxes were manifested to Roxana Landfill in Roxana, Illinois. Chemetco had developed and followed a waste analysis plan for this treatment pursuant to 35 Ill. Adm. Code 728.107(a)(5).

The GSDSP has two baghouses. Several times the Agency has observed the baghouse dust collection hoppers leaking baghouse dust. The GSDSP was not operating during this inspection. At the time of this inspection, I did not observe dust emissions from these hoppers. Chemetco has implemented inspection procedures for the various baghouse dust collection boxes on-site. The inspection procedure states that daily inspections are to be conducted of each baghouse collection box. The procedure also states that the dust from the GSDSP baghouses and the #1 baghouse are to be taken to the fines building for injection in the DIS. According to Ms. Young, Chemetco injects the baghouse dust to the furnaces to reduce the temperature of the bath, even out the consistency of the bath and to absorb moisture in the bath. Ms. Young stated that the baghouse dust is used in the furnace as a substitute for sand. The use of slag and baghouse dust as a substitute for sand is under review by the Agency.

Cooling Canals

The cooling canals are unlined earthen ditches. The canals were used as a source of non-contact cooling water and were replaced with a cooling tower in 1985. According to the March 1998 Zinc Oxide Spill Remediation Plan, Chemetco states that the cause of the discharge to Long Lake was a pump at the west end of the East stormwater retention canal (east cooling canal). During this inspection, I observed that the east cooling canal contained a large amount of a grey sludge lining the bank of the canal. Through the water, I could see grey sludge lining the side of the canal. This waste appears to be zinc oxide. The USEPA sampled the water and sediment in this canal on May 28, 1998. The results showed very high levels of lead and cadmium in the surface water and sludge in the canal. It appears that these unclosed surface impoundment are again managing hazardous waste.

Hazardous Waste Accumulation Trailer

Chemetco accumulates hazardous baghouse bags and hazardous filter press cloths in a red trailer near the southeast corner of the tank house. In this trailer, I observed 19 supersacks of baghouse bags and one supersack of filter cloths and baghouse bags. I could not inspect every supersack in this trailer because no aisle space was being maintained. This is an apparent violation of 722.134(a), specifically 725.135. Also, supersacks were observed piled on top of each other, on their sides and some were upside down. This is an apparent violation of 722.134(a), specifically 725.273(b). It appears that Chemetco has adequately addressed the hazardous waste and special waste determination issues [35 Ill. Adm. Code 722.111 and 808.121(a)] related to filter press cloths and baghouse bags.

Zinc Oxide Filter Press

Zinc oxide slurry is generated by the venturi scrubber system. The scrubber system collects air emissions from the furnace. The scrubber water is then discharged to the polishing pits (an open concrete pit) where settling occurs. The solids from the polishing pits are further dewatered in a plate and frame filter press. The resulting dewatered material is what is referred to as zinc oxide. According to Bruce Hendrickson, the current generation of zinc oxide is being sold to Elmet S.L. in Spain. Allegedly, the zinc oxide is mixed with copper/tin oxide purchased from another company. The zinc oxide/copper/tin oxide mix is loaded in trucks at the Fines Building and transported to the Phoenix Terminal located along the Mississippi River in Hartford, Illinois. According to records supplied to the Agency by Chemetco, the last shipment of zinc oxide to Spain was made on May 26, 1998.

Maintenance Shop

In the Maintenance Shop, Chemetco generates used oil and used oil absorbents. I observed two 55-gallon drums of used oil. Both drums were properly labeled used oil. Chemetco has started a flourescent bulb recycling program. Spent flourescent light bulbs are being managed as a universal waste. The Electrical Shop has been designated the central collection location for spent bulbs. In the compressor room, I observed one 55-gallon drum of absorbent waste. This drum was properly labeled used oil.

Number #2 Baghouse Dust Collection Trailer

A trailer is used to collect baghouse bust from the #2 Baghouse. Several times the Agency has observed dust leaking from this trailer. Chemetco has started daily trailer inspections. When the trailer is observed leaking, it is fixed. During this inspect, I did not observe any dust leakage from the trailer seal. It appears that Chemetco has addressed the trailer leakage problem.

The #2 Baghouse collects emissions from the roof over the furnaces. This baghouse dust, along with the baghouse dust from the #1 Baghouse is transported to the Fine Building where it is injected into the DIS. According to Ms. Young, Chemetco injects this baghouse dust to the furnaces to reduce the temperature of the bath, even out the consistency of the bath and to absorb moisture in the bath. Ms. Young stated that the baghouse dust is used in the furnace as a substitute for sand.

Used Oil Storage Tank

Chemetco stores used oil in a 1,200-gallon above ground storage tank. This tank is within secondary containment. The tank contained about 650 gallons of oil and was properly labeled. During the September 1996 CEI, I was told by Mr. Greg Cotter that the oil released to the secondary containment is picked up using absorbent and this used absorbent is charged in the furnace. Mr. Cotter also told me that any oily water from the secondary containment is poured over charges before they are placed in the furnace. For these reasons, the Agency alleged that Chemetco failed to make a hazardous and special waste determination of the oil dry and the oily water. Since then, Chemetco has arranged with Safety-Kleen to pick up the oily water from the secondary containment. The oil and oily water are manifested to Safety-Kleen's Caseyville, Illinois facility.

Two types of oil and absorbent waste are generated by Chemetco. Used oil and ground corn cobs is generated from cleaning up oil leaks and spills in the Mobil Shop. This waste failed TCLP for lead and cadmium. However, since Chemetco sends this waste for energy recovery, it can be managed as used oil pursuant to 35 Ill. Adm. Code 739.110(c)(2). The other used oil waste generated by Chemetco is used oil and sand. This waste is generated from plant personnel using sand to remediate oil leaks and spills. Waste sand and oil is managed as a characteristically hazardous waste for lead (D008). Hazardous sand and oil are shipped to Chem-Met Services. It appears that Chemetco has adequately addressed the hazardous waste and special waste determination issues [35 Ill. Adm. Code 722.111 and 808.121(a)] related to waste used oil absorbents and waste oily water from the secondary containment.

Refractory Brick Disposal Area

During the September 18, 1996 CEI, the Agency discovered that Chemetco had disposed of waste refractory brick, gunning material and other waste is an area south of Oldenberg Road. On April 21, 1997, the Agency sampled this waste and the results showed that the brick and gunning material were characteristically hazardous for lead (D008). Chemetco excavated the area and created three unpermitted waste piles of excavation waste. One waste pile consisted of hand-picked refractory brick and other waste. The other two piles consists of excavated soil, rock, refractory brick and other waste. The two piles of excavation waste were designated by Chemetco as Fill Pile #1 and Fill Pile #2. These two piles total about 1,000 tons of waste.

The refractory brick waste pile was sent to Chem-Met Service in Brownstown, Michigan. Fill Piles 1 and 2 remain on-site. The two piles have been covered with plastic. I observed large holes in the plastic tarp covering Fill Pile #1, exposing the waste. This is an apparent violation of 35 Ill. Adm. Code 724.131. Chemetco has not submitted a RCRA closure plan for the brick disposal area or for the three waste piles. Letters alleging the apparent violation of 35 Ill. Adm. Code 724.212(a) for failing to submit RCRA closure plans for these waste piles were sent to Chemetco on October 7, 1997 and October 31, 1997.

Zinc Oxide Release Area

Chemetco has impounded the hazardous zinc oxide waste released into the wetland south of Oldenberg Road and released to Long Lake. The zinc oxide remediation area consisted of four impoundments. Zinc oxide waste has been consolidated into one impoundment. Chemetco submitted a plan called the Zinc Oxide Spill Remediation Plan, Phase I - Material Removal and Partial Closure in March 1998. This plan outlined Chemetco's plan to clean up the released zinc oxide. The Agency approved this plan with conditions on June 10, 1998. Chemetco is presently appealing the closure plan approval letter to the Illinois Pollution Control Board. I observed the zinc oxide release area during this inspection. It does not appear that any zinc oxide has been removed from the site for properly disposal. The pile of zinc oxide in Containment Area #1 is in contact with standing water and is subject to wind dispersion.

Chemetco is in the process of constructing a 1-million gallon stormwater retention lagoon. According to Ms. Young, this impoundment is being constructed as part of a stormwater pollution prevent project. The lagoon is being constructed in a farm field on the southeast part of Chemetco's property. This lagoon will be lined with a high density polyethylene liner. Per Ms. Young, a large portion of the underground piping has already been put in place for the impoundment. The pipe will start at the east/west canal and collect water from the plant stormwater collection pumps. Ms. Young stated that no water currently in the east/west canal will be discharge to the new impoundment. During this inspection, I observed water flowing from the slag pile on the north side of the plant. Ms. Young stated that Chemetco is going to put in a trench on the north and east side of the slag pile to collect this run-off. The collected water will be directed toward the new impoundment.

According to Ms. Young, this lagoon is being constructed under Chemetco's stormwater NPDES permit to hold stormwater run-off from inside the plant and run-off from the slag pile. Chemetco presently uses the cooling canals as in-plant stormwater retention lagoons. The water in the east/west cooling canal was sampled by the IEPA on May 20, 1997 and the USEPA on May 28, 1998. Both sampling events showed lead levels in the cooling canal above the TCLP limit of 5.0 mg/l. Currently, it appears that large amounts of zinc oxide are present in these stormwater canals and Chemetco claims that the zinc oxide released to Long Lake is from the cooling canals. The Agency is concerned that this new lagoon will receive water and sediment that will fail TCLP for RCRA metals and thus be subject to regulations under RCRA.

A review of the facility's operating records was conducted during this inspection. No discrepancies were noted on the 1997 and 1998 Uniform Hazardous Waste Manifests, 1996 and 1997 Hazardous Waste Reports and RCRA training program. Chemetco has developed a hazardous waste continency plan that is relative to daily operations of the plant and not just to the SID system. This contingency plan appears to be adequate. However, the Agency recommends that information relating to responses to releases, erosion and wind dispersion from the zinc oxide bunker be added to the contingency plan.

As a result of this inspection, the following violations are being alleged:

1. 35 Ill. Adm. Code 722.111;
2. 35 Ill. Adm. Code 722.134(a), specifically 725.135 and 725.273(b); and
3. 35 Ill. Adm. Code 724.131.

NOTE: The apparent violations of 35 IAC 722.111 and 35 IAC 724.131 have been previously alleged for other reasons. Those violations have not been technically resolved.

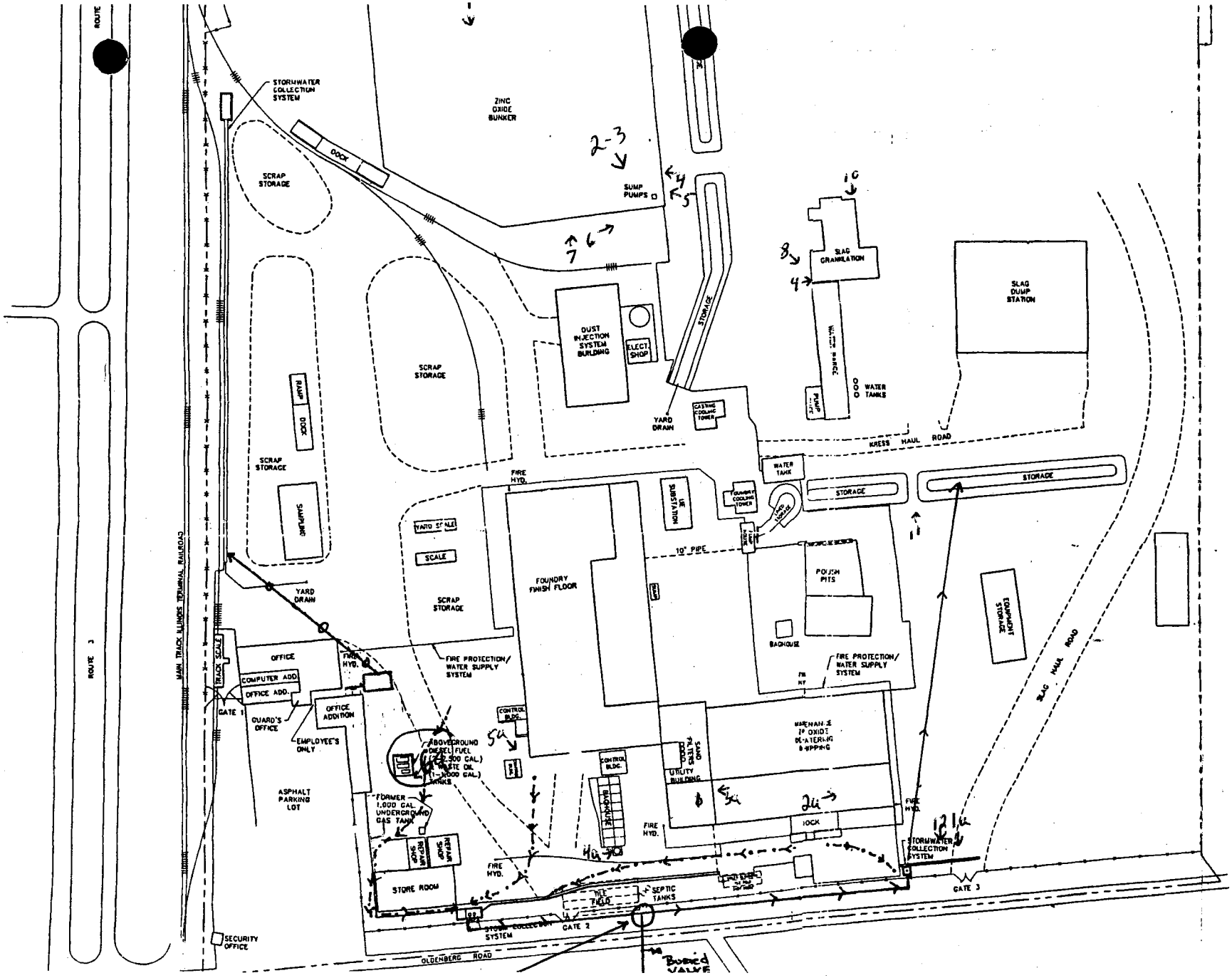
Violations concerning the zinc oxide discharge to Long Lake, the refractory brick disposal area and the refractory brick remediation waste piles remain unresolved at this time. Also, issues concerning the disposition of the slag fines and baghouse dust on the slag pile, along with other waste management violations, remain unresolved.

CNC/CHEM45.CEI

FacilityName:	Chemetco, Inc.	USEPA ID #:	ILD 048 843 809
Inspection Date	October 22, 1998	IEPA ID #:	1198010003

WASTE DISPOSITION FORM

Waste Name	Generating Process	Date of Last Analysis	USEPA HW #	On Notification? (8700-12)	On Part A Appl? (3510-3)	On Annual Report for Years: 1995 1996 1997	Amount On-Site	Rate of Generation	Last Manifested Shipment	Disposition of Waste
Bag house Bags	Bags from #2, #1, Slag Gran + Dis BH.	11/12/97	D006 D008	Yes	No	No, No, Yes	20 Supersacks	VARIES	10/20/98	Chem-Met
Filter Press Clothes	Cloth from ZnO Filter Press	11/12/97	D006 D008	Yes	No	No, No, Yes	½ super sack	VARIES	10/20/98	Chem-Met
USED oil And SAND	Sand Absorbent from oil leaks	12/31/97 2/6/98	D008	Yes	No	No, No, Yes	0	VARIES	7/8/98	Chem-Met
USED oil And Corn Cob	Corn Cob Absorbent from oil leaks	6/97	D008*	N/A	N/A	N/A, N/A, N/A	19 Drums	7 drums/ month	8/13/98	R.R.G.
Sika Sand w/ lead	Sand Bags from foundry	10/2/96	D008 D006	Yes	No	No, No, No	0	VARIES	10/20/98	Chem-Met
USED Oil	Plant Mobil Equipment	6/20/90	N.H.	N/A	N/A	N/A, N/A, N/A	~650 Gallons	~1,000 gal/ month	10/2/98	Safety-Kleen Cassyville
USED oil and water	water from II° Cont. of Oil + Fuel		N.H.	N/A	N/A	N/A, N/A, N/A	0	VARIES	10/2/98	Safety-Kleen
Flourescent bulbs	Light Changes	P.K.	Universal waste	N/A	N/A	N/A, N/A, N/A	0	~20#/ month	10/15/98	Advanced Env. Recycling Allentown, PA
treated Slag	Pilot test		N.H.	N/A	N/A	N/A, N/A, N/A	0	Pilot test	8/13/98	Roxana Landfill
Zinc Oxide	Scrubber solids	12/26/88	D008 D006	Yes	Yes	No, No, No	N.D.	~100 tons/ month	5-26-88 11-9-93	Elmet S.L. - Spain Horsehead R.D.
Zinc Oxide Waste	Zinc Oxide Bunker	12/26/98	D008 D006	Yes	(503) Yes	Yes, Yes, Yes	3784 tons	ZnO Bunker	ZnO Bunker	Stored in ZnO Bunker
Bag house Dust	#1, #2, Slag Gran + Dis B.H. Dust	5/28-24/88 **	D008 D006	Yes	No (503)	No, No, No	N.D.	N.D.	None	Stored on Slag pile + Injected into Dis
Slag Gran. Slag fine	Slag fines from Slag Granulator	4/9/97	D008	Yes	No (503)	No, No, No	N.D.	N.D.	None	Stored in Piles and injected into Dis
Refractory Brick waste	waste piles from R.B. excavation	9/17/97	D008	Yes	No (503)	N/A, N/A, No	~1000 tones	remediation waste	9/30/97	Chem-Met
Zinc Oxide waste	ZnO discharge to Long Lake	9/18/96	D008 D006	Yes	No (D83)	N/A, No, No		remediation waste	None	Stored on-site
* Managed as ** Sampled by	USED oil USEPA					/ /				



NOTE:
THE FENCELIN
MORE PROPE
IS AGRICULTU
SOUTH IS A
MORE FARML
TOTAL OWNE

Photo 1-12 = Roll 3345

Photo 1a-6a = Roll 3346

1100748

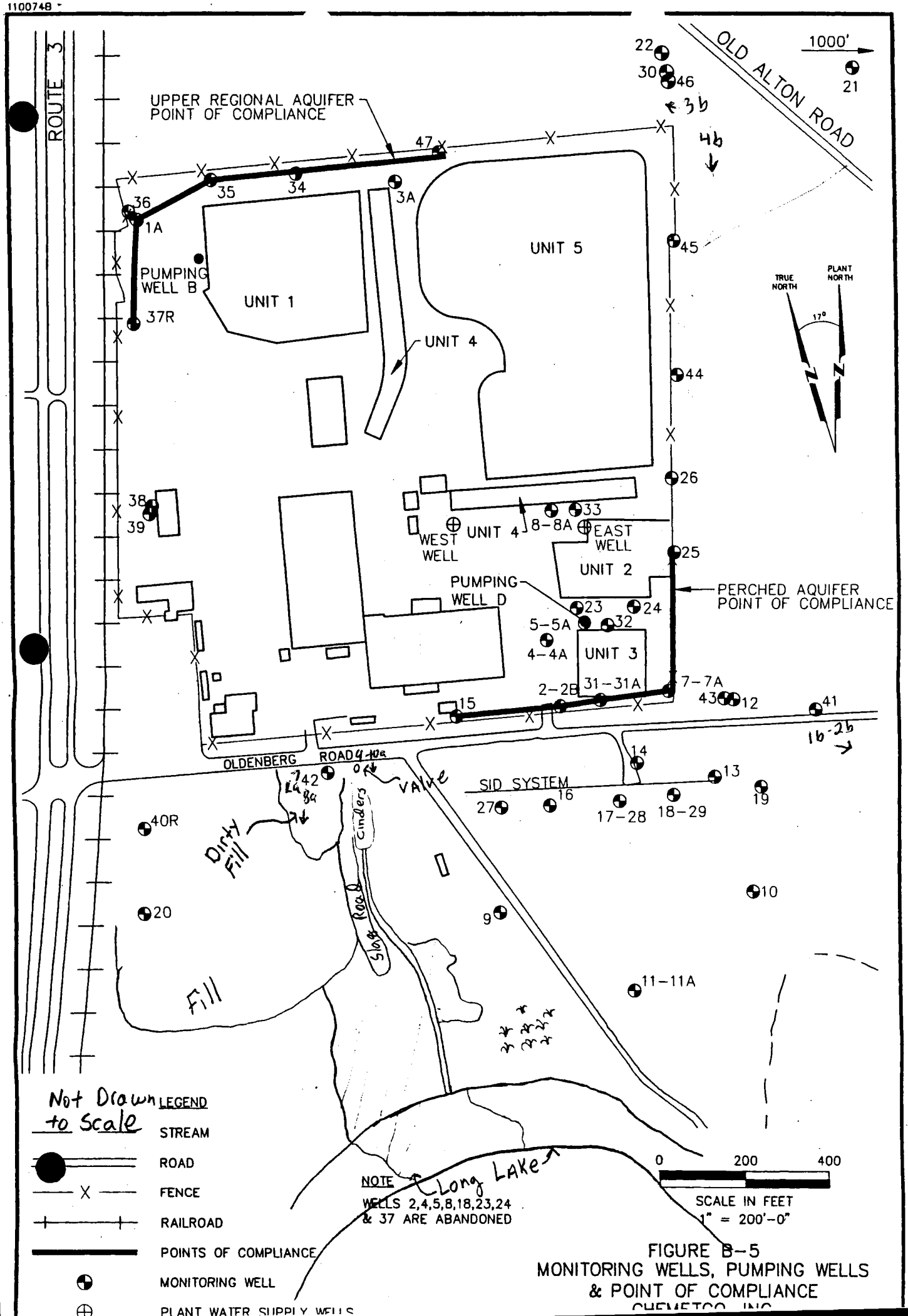


FIGURE B-5
MONITORING WELLS, PUMPING WELLS & POINT OF COMPLIANCE
CHEMETCO, INC.

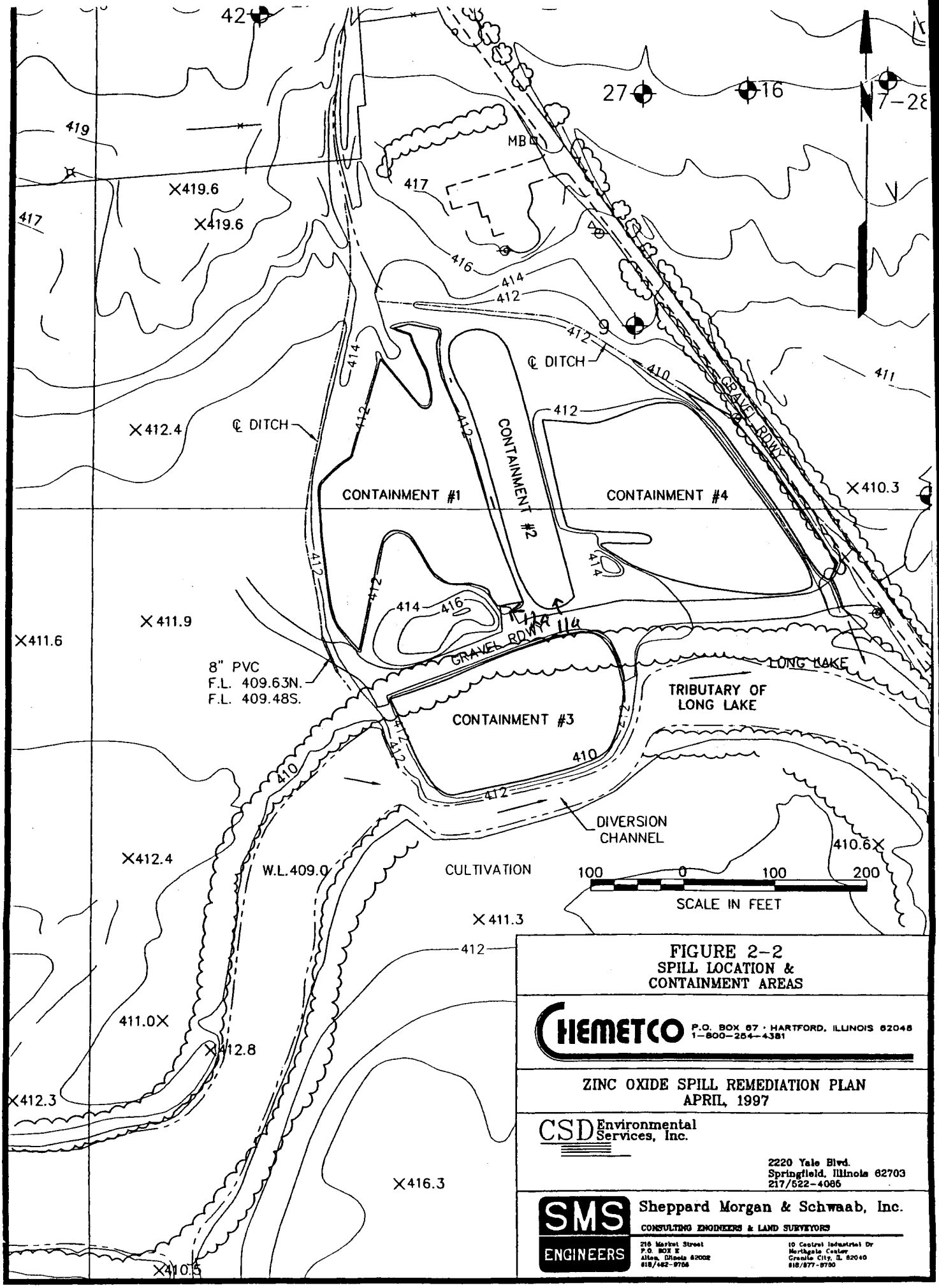


FIGURE 2-2
SPILL LOCATION &
CONTAINMENT AREAS

CHEMETCO P.O. BOX 67 · HARTFORD, ILLINOIS 62048
1-800-254-4381

ZINC OXIDE SPILL REMEDIATION PLAN
APRIL, 1997

CSD Environmental Services, Inc.
2220 Yale Blvd.
Springfield, Illinois 62703
217/522-4085

SMS ENGINEERS
Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS
216 Market Street
P.O. BOX X
Alton, Illinois 62002
618/462-9766
10 Central Industrial Dr
Northgate Center
Granite City, IL 62040
618/877-8790

4-13-98

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809 IEPA ID #: 1198010003

Facility Name: Chemetco, Inc. Phone #: 618/254-4381

Location: Hwy 3, Box 187 County: Madison

City: Hartford State: Illinois Zip Code: 62048

Region: Collinsville Inspection Date: :04/13,14&16/98 Time: 13th-12:30-3:35p. 14th-9:00-3:40p.

Weather: overcast, soil condictions-wet, ~70 F 16th-11:00-3:30p.

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

CEI: CME/O&M: CSI: X NRR: F/U to: / / CCI: PIF: CVI: CSE: CAO: Other:

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11 / 17 / 80 (initial) / / (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08 / 15 / 80 Amended: 07 / 03 / 90 Withdrawn: / /

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03 / 03 / 93 Post-Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: / / IAGO: 11 / 01 / 93 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / / CAFO: / / Federal Court Order: / /

Consent Decree: / / IPCB Order: / / State Court Order: 06 / 30 / 88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1994 1995 1996
S03*	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83***	No	No	Yes	No	Yes	No	N / N / N
S03****	No	No	Yes	No	Yes	No	N / N / N
* Zinc Oxide	Bunker						/ /
** Zinc Oxide	Pits, Floor	wash impounds	Cooling water	canals			/ /
*** Newly	Discovered	Zinc Oxide	disposal in S.I.				/ /
**** Refractory	Brick waste	pile & Slag fine	waste pile.	and brick	clean up piles		/ /

OWNER			OPERATOR	
Name:	Chemetco, Inc.		Name:	
Address:	Hwy 3, Box 187		Address:	
City:	Hartford		City:	
State:	Illinois	Zip Code: 62048	State:	Zip Code:
Phone #:	618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Heather Young	CSD Environmental/Chemetco, Inc.	618/254-4381 ext 268
Brian Gibson	Environmental Analysis	314-921-4488
Rick Whitney	Environmental Analysis	314-921-4488

INSPECTION PARTICIPANT(S)	AGENCY/DIVISION	PHONE #
Gina Search	IEPA/BOL	618/346-5120

PREPARED BY	AGENCY/DIVISION	PHONE #
Gina Search	IEPA/BOL	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
	12(d)	X	DPP	724.131	X	DSI	724.321(c)	X
	21(a)	X	DCP	724.151	X	DSI	724.321(g)	X
	21(d)(1)&(2)	X	DCP	724.156(a)	X	DSI	724.321(h)	X
	21(e)	X	DCP	724.156(j)	X	DSI	724.323(a)	X
	21(f)	X	DMR	724.173	X	DSI	724.326	X
	21(p)(1)&(4)	X	DMR	724.174	X	DWP	724.351(a)	X
DOR	703.121(a)	X	DMR	724.175	X	DWP	724.351(c)	X
DOR	703.121(b)	X	DMR	724.177	X	DWP	724.351(d)	X
DOR	703.151(a)	X	DGW	724.190(a)	X	DWP	724.351(f)	X
GGR	722.111	X	DGW	724.191(a)	X	DWP	724.354	X
GGR	722.141(b)	X	DGW	724.197(a)	X	DWP	724.358(a)	X
DGS	724.114(a)	X	DCL	724.212(a)	X	DWP	724.358(c)	X
DGS	724.114(b)	X	DFR	724.242	X	DGW	725.190(b)	X
DGS	724.114(c)	X	DFR	724.243	X	GWM	725.194(a)(2)	X
DGS	724.115(a)	X	DFR	724.244	X	DSI	725.326	X
DGS	724.115(b)	X	DFR	724.245	X	DPP	725.131	X

x = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
GLB	728.107(a)	X						
[illegible]LB	728.135	X						
G/DLB	728.139	X						
	807.201	X						
	807.202	X						
	808.121(a)	X						
DGS	725.115(c)	X						
	739.122(c)	X						
DGW	**12a**							
	620.115							
	620.301(a)							
	620.405							
	620.410(a)							
	620.410(d)							

x = Continuing Violation

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND

11908010003 - Madison County
Chemetco, Inc.
ILD048843800
Subpart F

On April 13, 14 & 16, 1998, a RCRA Groundwater Operation and Maintenance Inspection and Sampling Inspection was conducted at Chemetco Inc. in Hartford, Illinois by Gina Search, FOS-Collinsville. Present for the inspection were Heather Young with CSD and Brian Gibson, Environmental Specialist and Rick Whitney, Field Supervisor, both with Environmental Analysis, Inc.

The Chemetco facility is a secondary metal smelting facility. It was constructed in 1969 and began producing anode copper, cathode copper, crude lead-tin solder, zinc oxide and slag in 1970. Chemetco is an interim status RCRA facility going through "dirty closure" as a RCRA landfill. The groundwater monitoring program at the facility, as specified in the IEPA's April 19, 1991 Closure Plan approval letter meets the requirements of 35 Illinois Administrative Code, Part 724. They are conducting interim status sampling under Part 725, Subpart F.

Hazardous Wastes and Units

Chemetco has six RCRA waste management units. Closure and Post-Closure plans have been submitted for a zinc oxide pile and bunker (S03), zinc oxide lagoons (S04), a floor wash water impoundment (S04) and a zinc oxide discharge area (S04). The closure plan for the zinc oxide discharge area was approved with conditions, but the conditions were appealed by Chemetco.

The zinc oxide bunker is approximately 365 feet by 310 feet and has a capacity of 3,000,000 gallons. The former zinc oxide pile was located on the same site as the current bunker and was added to the bunker in 1984. The bunker contains zinc oxide, soils generated by the cleanup activities of the former pile, zinc oxide lagoons and a cooling canal, and a small amount of slag.

The zinc oxide lagoons, unlined earthen impoundments, encompassed an area approximately 150 ft by 220 ft by 15 ft deep. Until 1984 these units were used as settling units for slurry produced from the zinc oxide production system.

The cooling water canal, an unlined earthen ditch, measured 3600 feet long by 30 feet wide by 10 feet deep. The canal was used as a source of non-contact cooling water and was replaced with a cooling tower in 1985. Zinc oxide was allowed to spill into the south leg of the canal.

It is believed that operation of the floor wash water impoundment ceased in 1981. Sulfuric acid

from the copper refining process including spills, drips and rinses were flushed into the unlined slag/earthen impoundments. Hydrochloric and hydrobromic acid, copper, nickel, zinc, calcium, lead and cadmium were also present in the floor washings.

Material was removed from the zinc oxide lagoons and the former cooling canal in 1985, but a written plan was not submitted to the Agency for approval of this work. These units have not been closed or received certified clean closure status from the Agency. Chemetco has not shown these units were closed in accordance with all applicable closure requirements. Final approval of closure and post-closure plans was given by the Agency in a letter dated January 29, 1993. The closure and post-closure plan addressed three hazardous waste surface impoundments (D83), one hazardous waste pile (S03), one hazardous waste tank (T01) and one hazardous waste filter press (T04). Chemetco has not met the conditions of these plans.

Compliance History/Permit Status

Beginning in 1981, Chemetco installed groundwater monitoring wells up and downgradient from the Floor Wash Water Impoundment. A groundwater assessment plan was submitted in September 1986 for this unit. Chemetco reports they have sampled groundwater on a monthly schedule from January 1983 to March 1987 and limited sampling in 1987, 1988 and 1989. The monitoring requirements for April 1991 through May 1992 were not met, but quarterly data including groundwater elevation data and groundwater sampling data has been submitted since the second quarter of 1992. Sampling of the monitoring wells screened in the lower zone of the regional aquifer began in June 1992.

In response to detecting elevated metals concentrations in the perched aquifer, Chemetco began investigating the extent of the contamination. Arsenic, cadmium, copper, nickel, zinc and lead have been detected in the quarterly groundwater. Organic compounds had been previously detected. In early 1984 an acid recovery trench was installed south of the facility. This trench recovered contaminated groundwater. In mid-1984 the subsurface interceptor drainage system (SIDS) was installed. The SID system was designed to capture contaminated groundwater from the perched aquifer. The gravity flow SID system consists of six inch diameter PVE pipe and spans approximately 600 feet in length and varies in elevation from 412 feet at the ends and 410 feet at the center. It is not able to recover the groundwater downgradient of the system. Since October of 1992, the SID system is sampled and analyzed quarterly for arsenic, cadmium, chromium, copper, iron, nickel, lead, tin, zinc and pH.

In June 1988 a consent decree was filed which required Chemetco to include all "dirty closed" units in the plant's Post Closure Care Part B permit. Groundwater monitoring was to be included in the permit application. The zinc oxide lagoon, former acid pit and cooling water canals were all to be closed in accordance with RCRA requirements for surface impoundments.

Chemetco submitted a RCRA Part B Post-Closure Permit Application dated March 1993. The Groundwater Monitoring Program contained within this document is the plan currently in

use by the facility. Chemetco submitted a Revised Groundwater Monitoring Plan dated October 1997. This plan included the several improvements and upgrades made to Chemetco's groundwater monitoring system. Upon approval, Chemetco's Part B Permit Application will be revised to include the changes proposed to the Groundwater Monitoring Program.

The January 29, 1993 Closure and Post-Closure Plan Approval Letter conditions and modifications include quarterly monitoring requirements for the following parameters: lead, cadmium, zinc, arsenic, chromium, copper, tin, pH, specific conductance, TOC and TOX. There were also fourth quarter requirements for Appendix I metals and semi-volatiles for wells 31A, 28, 34, 44 and 47. The corrective action program condition includes tracking the rate of water removed from the SIDS system on a daily basis. Also Chemetco was to maintain an inward gradient at the property boundary line by pumping at least 165 gpm from the four pumping wells provided in the submitted groundwater model. At this time Chemetco has installed two pumping wells, Pumping Well B and Pumping Well D. These wells do not have pumps installed in them. They were to be used for gradient control as outlined in the post-closure plan approval letter. Pumping Well B was installed in 1989 and Pumping Well D was installed in 1992. This is an alleged violation of 35 IAC 703.121(a), 35 IAC 725.211, 35 IAC 725.213(b) and Section 21(f)(1) & (2) of the Environmental Protection Act.

Chemetco has proposed the designation of a groundwater management zone in the perched and regional aquifers. This designation has not been approved by the Agency.

Geology and Hydrogeology

Chemetco has submitted several quarters of groundwater monitoring data and a summary of geologic and hydrologic conditions at the facility; this report was dated January 1991. The following information was gathered from the Agency groundwater files as part of the review process required by this inspection. The geologic and hydrologic conditions described in Chemetco's submittal are consistent with existing ISGS geologic information.

The facility is located about one mile east of the confluence of the Missouri and Mississippi Rivers in a flood plain area locally known as the American Bottoms. The American Bottoms topography is relatively flat and includes about 175 square miles of Mississippi River floodplain, is approximately 30 miles long and ranges from about 3 to a maximum of 11 miles wide.

The American Bottoms is an area underlain by Pleistocene-age, unconsolidated valley fill deposits that range from 12 to 170 feet thick and average 120 feet in thickness. Generally the grain size sediments coarsens in the valley fill. A generalized cross section submitted by Chemetco depicts the area as underlain by top soil and slag fill which ranges in thickness from 0-11 feet. This underlain by clay and silt with interbedded lenses of sand and silt. The interbedded sands and silts are predominant in the southeast corner of the site. The sand lense does not extend to the northern and western boundaries of the facility. A second sand lense has been identified to the east of monitoring well 12. (See Attachment A for sand lense location) These

deposits range in thickness from 15 to 55 feet thick. Underlying the clay and silt is a sand layer containing some gravel and silt which ranges from 12 to 75 feet in thickness. A 50 foot sand and gravel layer underlies the finer sand unit. This is underlain by limestone bedrock.

Three zones are monitored by Chemetco, a shallow, perched aquifer and the American Bottoms aquifer which they have defined as consisting of an upper zone and a lower zone. The perched and regional aquifers beneath the facility meet the definition of a Class I aquifer under 35 Ill. Admin. Code, Part 620. Interbedded sand lenses in the recent alluvium allow for the presence of a perched water table at the site. The perched sand aquifer extends from 5 to 20 feet below grade with a maximum thickness of 15 feet and is bounded above and below by the clay and silty clay.

The fine sand layer and the underlying coarse sand and gravel layer comprise the regional American Bottoms aquifer. There is no boundary between these formations in the regional aquifer, but they are two distinct geologic units. The fine sand layer and coarse sand and gravel layer are one hydrostratigraphic unit and they have direct hydraulic connection with each other. This regional aquifer is generally greater than 90 feet thick and extends to bedrock. Local groundwater use in the area includes Chemetco's industrial use only well and 10 private wells located within one mile of the facility. The aquifer is a source of municipal, industrial and agricultural water within the area. The limestone bedrock aquifer below the American Bottoms aquifer is highly mineralized and has not been used for groundwater supplies.

Pumping and slug tests were performed in the upper and lower aquifers and in the silt and clay between these layers. The slug tests determined the average hydraulic conductivity in the perched unit to be 2.8×10^{-3} cm/sec, the upper regional hydraulic conductivity to be 1×10^{-2} cm^2/sec and the lower regional hydraulic conductivity to be 1×10^{-1} cm^2/sec.

During the period from April 15, 1997 to May 7, 1997, twenty-nine monitoring wells were abandoned and fifteen new or replacement monitoring wells were installed. After the completetion of the well installation and abandonment procedures Chemetco has a total of 30 monitoring wells. These wells are divided between a shallow perched aquifer, the upper zone and the lower zone of the regional aquifer. Two new background wells have been installed east of the plant. Not all 30 wells are used for water collection purposes, some are used strictly for collecting groundwater elevation data. (See Attachment B maps and monitoring well schedule). Samples are also collected from the SID system and are analyzed quarterly for arsenic, cadmium, chromium, copper, iron, nickel, lead, tin, zinc and pH.

Field Evaluation

The groundwater sampling activities were conducted under the interim-status sampling and analysis plan contained in Chemetco's Closure and Post-Closure Plan dated January 1991. This plan was reviewed as part of this inspection. During this second quarter round of sampling as well as the first, third and fourth, Chemetco's groundwater samples were analyzed for Arsenic,

Cadmium, Chromium, Copper, Lead, Nickel, Tin, Zinc, pH, Specific Conductance, TOC and TOX. During the fourth quarter additional parameters including Antimony, Barium, Beryllium, Cobalt, Mercury, Selenium, Silver, Vanadium, and Appendix IX Semi-Volatile Compounds are collected from the following monitoring wells: 28, 31A, 38R, 44R and 47R. The inorganic parameters are all analyzed for totals rather than dissolved constituents.

During this inspection the monitoring wells included in the assessment monitoring programs were checked for evidence of damage and integrity problems. All of the wells were labeled, but not all of them were sufficiently locked. All except two of the wells appeared to be in good condition. Monitor Well 27 had an outer casing hinge in needing of repair/replacement. The broken hinge does not allow the well to be locked. Monitor Well 28 had a surface seal in needing of repair/replacement. The condition of the seal compromises the integrity of the monitor well. This is an alleged violation of 35 IAC 725.191(c) and 35 IAC 620.505(a)(5)(D)(iii).

Chemetco provided all requested documents during the record review. The 7/14/97 and 10/6/97 entries in the field logbook indicated that several monitoring wells were not locked. The 7/14/97 entries reported that monitor well 28 had a cracked plug. The suggestion was made that the operating record reflects any repairs or replacement activitity performed on the wells. This inspection revealed that Monitor Well 27 and Monitor Well 28 had not been repaired during the quarters following the 7/14/97 round of sampling. This is an alleged violation of 35 IAC 725.115(c).

The Environmental Analysis staff samples the wells for this site and various sites across Missouri and Illinois. Their sampling protocol was observed during this inspection and is described in the following paragraphs. They began by measuring the water levels for all monitoring wells within a 24 hour period. All the water level elevations are taken prior to groundwater sample collection. Depth to water and total well depth measurements were taken with an electronic water level indicator. These readings were taken from the top of the inner well casing and recorded to the nearest 0.01 foot. The well caps were vented, therefore water level stabilization was not required prior to measurement. All data were recorded in a field log/well history. Headspace measurements were not taken upon uncapping of the wells. Historic sampling data demonstrate that this precautionary measure is not required for the wells at this site. A deionized water rinse was used to decon the water level indicator cable and probe in between well measurements.

Prior to the purging and measuring activities, a large plastic sheet was placed around the well head to provide a clean working surface. Purge amounts were calculated for each well. Teflon bailers were used to purge and sample the wells. Dedicated nylon ropes which are stored in numbered bags, were attached to the bailers and then lowered into the wells. The Environmental Analysis staff keeps the dedicated equipment at a storage facility. Three purge volumes are removed from each well before the samples are collected. Stabilization parameters; pH, specific conductivity, and temperature are collected from the first sample.

All purge fluids were contained in a 250-gallon plastic tank and then taken and put in Chemetco's process water. The bailers were decontaminated between wells. The decon procedure consisted of scrubbing with alconox solution, rinsing with tap water, rinsing with nitric acid, rinsing with deionized water and placing the bailers back in the plastic tubes to dry. The bailers provided by Environmental Analysis are not dedicated to Chemetco; they are used at numerous sites. Equipment blanks are collected at every tenth well. A clean bailer is filled with deionized water and then poured into sample bottles.

After the completion of well purging, the bailers are allowed to hang in the wells while well recharge occurs. The samples are collected within 24 hours after the wells are purged. Recharge time varied between wells; some wells were sampled within a few hours of purging, but others were allowed to recharge overnight.

The sample bottles were filled directly from the sampling device and in order of decreasing sensitivity to volatilization: TOX, TOC and metals. The sample bottles were filled to avoid overtopping and rinsing of the bottle. The filled sample bottles were placed in coolers packed with ice.

Chain-of-custody forms were prepared every day and taken with the samples to the laboratory by the Environmental Analysis staff. Environmental Analysis operates their own laboratory facilities and provides all the analytical data for Chemetco. The samplers are able to log the samples in themselves and retain the chain-of-custody until they are logged in.

The sampling personnel wore clean gloves while sampling and changed gloves after each well. Care was taken not to place sampling equipment on the ground. All sample bottles are prepared and preserved by the laboratory. The sampling personnel labels the bottles with the following information: well I.D., date, time and analyses required.

The scope of this inspection was solely to review the groundwater monitoring program. The following violations will be cited as a result of the findings during this Operation and Maintenance Groundwater Monitoring Inspection.

725.115(c)
725.191(c)
620.505(a)(5)(D)(iii)
Section 21(f)(1) & (2) of the Illinois Environmental Protection Act
703.121(a)
620.115
725.211
725.213(b)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

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USEPA ID #: ILD048843809 IEPA ID #: 1198010003

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Location: Hwy 3, Box 187 County: Madison

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Region: Collinsville Inspection Date: :04/13,14&16/98 Time: 13th-12:30-3:35p. 14th-9:00-3:40p.

Weather: overcast, soil condictions-wet, ~70 F 16th-11:00-3:30p.

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

CEI: CME/O&M: CSI: X NRR: F/U to: / / CCI: PIF: CVI: CSE: CAO: Other:

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Part B Submitted/Issued (circle one): 03 / 03 / 93 Post-Closure

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ACTIVE ENFORCEMENT ORDERS

CACO: / / CAFO: / / Federal Court Order: / /

Consent Decree: / / IPCB Order: / / State Court Order: 06 / 30 / 88

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D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83**	Yes	Yes	Yes	No	Yes	No	N / N / N
D83***	No	No	Yes	No	Yes	No	N / N / N
S03****	No	No	Yes	No	Yes	No	N / N / N
* Zinc Oxide	Bunker						/ /
** Zinc Oxide	Pits, Floor	wash impounds	Cooling water	canals			/ /
*** Newly	Discovered	Zinc Oxide	disposal in S.I.				/ /
**** Refractory	Brick waste	pile & Slag fine	waste pile.	and brick	clean up piles		/ /

OWNER		OPERATOR	
Name: Chemetco, Inc.		Name:	
Address: Hwy 3, Box 187		Address:	
City: Hartford		City:	
State: Illinois	Zip Code: 62048	State:	Zip Code:
Phone #: 618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
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Brian Gibson	Environmental Analysis	314-921-4488
Rick Whitney	Environmental Analysis	314-921-4488

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PREPARED BY	AGENCY/DIVISION	PHONE #
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	21(d)(1)&(2)	X	DCP	724.156(a)	X	DSI	724.321(h)	X
	21(e)	X	DCP	724.156(j)	X	DSI	724.323(a)	X
	21(f)	X	DMR	724.173	X	DSI	724.326	X
	21(p)(1)&(4)	X	DMR	724.174	X	DWP	724.351(a)	X
DOR	703.121(a)	X	DMR	724.175	X	DWP	724.351(c)	X
DOR	703.121(b)	X	DMR	724.177	X	DWP	724.351(d)	X
DOR	703.151(a)	X	DGW	724.190(a)	X	DWP	724.351(f)	X
GGR	722.111	X	DGW	724.191(a)	X	DWP	724.354	X
GGR	722.141(b)	X	DGW	724.197(a)	X	DWP	724.358(a)	X
DGS	724.114(a)	X	DCL	724.212(a)	X	DWP	724.358(c)	X
DGS	724.114(b)	X	DFR	724.242	X	DGW	725.190(b)	X
DGS	724.114(c)	X	DFR	724.243	X	GWM	725.194(a)(2)	X
DGS	724.115(a)	X	DFR	724.244	X	DSI	725.326	X
DGS	724.115(b)	X	DFR	724.245	X	DPP	725.131	X

x = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X
GLB	728.107(a)	X
G/DLB	728.135	X
G/DLB	728.139	X
	807.201	X
	807.202	X
	808.121(a)	X
DGS	725.115(c)	X
	739.122(c)	X
DGW	12a	
	620.115	
	620.301(a)	
	620.405	
	620.410(a)	
	620.410(d)	

AREA	SECTION	X

AREA	SECTION	X

x = Continuing Violation

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

DATE: August 13, 1998

TO: Division File

FROM: Gina Search, Collinsville Region Geologist

SUBJECT: 1198010003--Madison County
Hartford/Chemetco, Inc.
FOS

This reports documents a sampling inspection conducted to determine compliance status concerning groundwater requirements for Chemetco, Inc. The inspection was conducted to determine compliance with the Illinois Environmental Protection Act and the Title 35 IAC regulations.

Gina Search, IEPA/BOL/FOS-Collinsville Region was present to split samples with Chemetco from 23 monitor wells which are included in their quarterly monitoring program. The IEPA analytical results are included as Attachment C to this report and are also summarized in the Attachment D tables.

April 13, 14 & 16, 1998 Inspection:

Ms. Heather Young, with CSD and Mr. Brian Gibson, Environmental Specialist and Rick Whitney, Field Supervisor, both with Environmental Analysis, Inc. were present when I arrived at 12:30 p.m. on April 13, 1998. Mr. Gibson and Mr. Whitney performed all the sampling activities without assistance from the IEPA. This writer was on site to review the sampling personnel's protocol, inspect the monitoring system and to split samples. The weather was cloudy, drizzly and approximately 65 degrees. We began by reviewing records which include well inspection maintenance records and the operating records. Mr. Gibson and Mr. Whitney had arrived on site earlier, and they had been purging the wells in preparation for collecting groundwater samples.

Heather Young inquired about the list of parameters that IEPA would analyze the sample for. I gave her a copy of the Unified Sample Document and pointed out the Inorganic Parameter Group, Groundwater Totals. She stated that Chemetco does not analyze their samples for all of the parameters listed in this group, and that it would cost more money for them to do so. I pointed out that Chemetco had the opportunity to run identical parameters, but the cost would have to be covered by the facility. Ms. Young opted not to run parameters identical to the IEPA parameter list.

Groundwater Sampling

A review of Mr. Gibson and Mr. Whitney's sampling protocol is provided in the Field Evaluation Section of the Operation and Maintenance Inspection Report dated April 13, 14 & 16, 1998. They had arrived in the morning on April 13 to set up and begin purging the wells. They often purge the monitor wells and allow a few hours or overnight for the wells to recharge. Mr. Gibson explained that the wells are always sampled within 24 hours after they are purged. The bailer is often left hanging above the static water level in the well casing until the well has had sufficient time to recharge.

On April 13, 1998, Monitor wells 31A, 16, 27, 28, 29 and 19R were sampled. I collected samples for groundwater totals which required filling a cyanide bottle, metals bottle, nutrients bottle, phenol bottle and unpreserved bottle for each of the 23 monitor wells. See Attachment B for list of wells sampled.

Total metals samples require that nitric acid be added to preserve the sample. This writer added a vial of nitric acid to each 32-ounce polyethylene bottle containing total metals sample. pH paper was dipped into the preserved sample to check for pH levels less than 2.

After preservative was added to the metals sample bottles, each set of bottles from each individual well was placed in food-grade plastic bags and sealed with evidence tape. The samples were then placed in iced coolers. Samples G31A, G16, G27, G28, G29 and G19R were taken back to the Collinsville Regional Office and placed in a refrigerator until they could be shipped to the IEPA Champaign laboratory.

On April 14, 1998, Monitor wells G41, G54, G56, G55, G44R, G51, G52, G53 and G50 were sampled. Samples for wells G41 and G56 were collected at 9:45 and 10:19 a.m. They were placed on ice in coolers and taken back to the regional office where they were sealed and prepared for shipping. Samples from the previous day of sampling were shipped along with samples G41 and G56 on April 14, 1998. The rest of the samples collected on the April 14; G55, G44R, G51, G52, G53, G54 and G50 were stored in the refrigerator until they could be delivered to the laboratory.

No samples were collected on April 15, 1998 due to inclement weather. Monitor wells G49, G39R, G38R, G37R, G36R, G48, and G47R were sampled on April 16, 1998. The samples were bagged and sealed on site, placed on ice in coolers and refrigerated overnight. These samples and the remaining samples collected on April 14 were driven by this writer to the IEPA laboratory in Champaign on April 17, 1998.

Groundwater Classification

The boring logs and cross sections submitted by Chemetco indicate that both the perched aquifer and the upper regional aquifer have greater than 5 feet of unconsolidated sand present in the stratigraphic units. Slug tests conducted in the perched sand lense determined the hydraulic conductivity to be 2.8×10^{-3} cm^2/sec. The upper regional aquifer hydraulic conductivity was reported to be 1×10^{-2} cm^2/sec and the lower regional aquifer hydraulic conductivity was reported to be 1×10^{-1} cm^2/sec. These characteristics qualify the groundwater in the zones being monitored as a Class I Resource Groundwater.

Analytical Results

The groundwater analytical results are summarized in Attachment D and the groundwater laboratory results are included in Attachment C of this report. The following is a comparison of the Exceedences of the 35 Ill. Adm. Code Part 620 Groundwater Quality Standards for Chemetco's and IEPA analytical data for groundwater samples collected on April 13, 14 and 16, 1998.

Exceedences of the 620 Standards found in the Shallow Aquifer:

Chemetco Groundwater Data April 1998	IEPA Groundwater Data April 1998
Did not sample for Antimony	Antimony in wells 16, 27, 28
Arsenic in well 29	Arsenic in wells 31A and 54
Did not sample for Boron	Boron in wells 16 and 27
Cadmium in wells 27 and 31A	Cadmium in wells 16, 27, 28, 31A and 54
Did not sample for Chloride	Chloride in wells 16,27 and 28
Copper in wells 16, 31A and 54	Copper in wells 16, 28 31A, 54,
Did not sample for Iron	Iron in wells 16, 29, 41 and 54
Lead in wells 19R, 29, 31A, 41 and 54	Lead in wells 27, 29, 31A, 41 and 54,
Did not sample for Manganese	Manganese in wells 16,19R, 27,28,29,31A,41,54&56
Nickel in wells 16, 27, 28, 31A and 54	Nickel in wells 16, 27, 28, 31A and 54
Did not sample for Selenium	Selenium in wells 31A and 54
Did not sample for Sulfate	Sulfate in wells 19R, 28, 41, 54 and 56
Did not sample for Thallium	Thallium in well 27
Zinc in wells 16, 27, 28 and 31A	Zinc in wells 16, 27, 31A
Did not sample for TDS	TDS in wells 16, 19R,27,28,29,31A,41 and 56
pH in wells16,27,28,29,31A,41&54	pH in wells 16, 19R,27, 28, 29,31A,41,54&56

Exceedences of the 620 Standards in the Upper Regional Aquifer

Chemetco Groundwater Data April 1998	IEPA Groundwater Data April 1998
Arsenic in well 38R	Arsenic in well 38R
Did not sample for Boron	Boron in wells 37R and 44R

Did not sample for Chloride	Chloride in wells 37R, 44R, 48, 51 and 55
Did not sample for Iron	Iron in wells 38R, 44R, 48, 49, 50, 51 and 55
Lead in wells 37R, 38R, 49, 50 and 51	Lead in wells 37R, 38R, 48, 49 and 50
Did not sample for Manganese	Manganese in wells 7R,38R,44R,47R,48,49,50,51&55
Did not sample for Sulfate	Sulfate in wells 37R, 44R and 55
Did not sample for TDS	TDS in wells 44R and 55
pH in well 55	No pH exceedences in upper regional

Exceedences of the 620 Standards in the Lower Regional Aquifer

Chemetco Groundwater Data April 1998	IEPA Groundwater Data April 1998
Did not sample for Chloride	Chloride in wells 36R and 39R
Did not sample for Iron	Iron in wells 36R, 39R, 52 and 53
Did not sample for Manganese	Manganese in wells 36R, 39R, 52 and 53

APPARENT VIOLATIONS
of
TITLE 35 IAC, PART 620

1. **35 IAC 620.115 -** Causing, threatening or allowing a violation of the Act, the IGPA or regulations adopted by the Board thereunder, including but not limited to this Part.

2. **35 IAC 620.301(a) -** Causing or allowing the release of contaminants to a resource groundwater.

3. **35 IAC 620.405 -** Causing or allowing contaminants to exceed established groundwater quality standards.

4. **35 IAC 620.410(a)-** Causing or allowing concentrations of inorganic chemical constituents to exceed established standards for Class I groundwater.

5. **35 IAC 620.410(d)-**Causing or allowing groundwater pH values to exceed a pH range of 6.5-9.0 units.

Apparent Violations of the Illinois Environmental Protection Act

6. **Section 12(a) of the Act** - Causing or threatening or allowing the discharge of any contaminants into the environment so as to cause or tend to cause water pollution.
7. **Section 12(d) of the Act** - Deposition of any contaminants upon the land in such place and manner so as to create a water pollution hazard.

LPC: 1199010003

City/Site Name Hartford / Chemetco, Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: ___ _____Facility ___X___IEPA

App IX	Inorganic Contaminant	35 IAC 620 GW Standards Uniform (Table) Class I GW-19	Class II	Monitor Point No. G31A		G84		G27		G19		G28		G29	
				Sample type Totals		Totals		Totals		Totals		Totals		Totals	
				Sampling Date 8/94/13											
	620 INORGANICS			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony - UG/L 8/94	6	24	6K		6K		[illegible]		[illegible]		[illegible]		6K	
IX	Arsenic - UG/L	50	200	[illegible]		57		10K		10K		10K		23	
IX	Barium - UG/L	2000	2000	120		180		94		52		22		440	
IX	Beryllium - UG/L 8/94	4	500	2.1		2.4		1K		2.8		1K		1K	
	Boron - UG/L	2000	2000	1600		1500		[illegible]		[illegible]		770		320	
X IX	Cadmium - UG/L	5	50	[illegible]	140	[illegible]	93	[illegible]	1500	[illegible]	92	[illegible]	56	5K	
	Chloride - MG/L	200	200	178		84.6		[illegible]		[illegible]		[illegible]		21.4	
IX	Chromium - UG/L	100	1000	18		8		13		5K		7.4		5K	
IX	Cobalt - UG/L	1000	1000	42		74		680		160		49		5K	
IX	Copper - UG/L	650	650	[illegible]		[illegible]		28		[illegible]		[illegible]		6.2	
	Cyanide - UG/L	200	600	0.01K		0.01K		0.01K		0.01K		0.01K		0.01K	
	Fluoride - MG/L	4	4	1.08		1.88		5.58		2.18		2.80		0.190	
	Iron - UG/L	5000	5000	4800		[illegible]		2900		[illegible]		360		[illegible]	
X IX	Lead - UG/L	7.5	100	[illegible]	120	[illegible]	16	[illegible]	9.3	7.2		5.0		[illegible]	8.1
	Manganese - UG/L	150	10,000	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
IX	Mercury - UG/L	2	10												
IX	Nickel - UG/L	100	2000	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		21	
	*Nitrate as N - MG/L	10	100	1.27		1.08		0.03		0.40		0.36		0.06	
IX	Selenium - UG/L	50	50	[illegible]		[illegible]		10K		28		10K		10K	
IX	Silver - UG/L	50	-	5K		5K		5K		5K		5K		5K	
	Sulfate - MG/L	400	400	219		[illegible]		219		219		[illegible]		10K	
IX	Thallium - UG/L 8/94	2	20	10K		10K		[illegible]		10K		10K		10K	
IX	Zinc - UG/L	5000	10,000	[illegible]		2400		[illegible]		[illegible]		4900		100K	
	TDS (ROE) - MG/L	1200	1200	[illegible]		1040		[illegible]		[illegible]		[illegible]		[illegible]	
	pH - field	6.5-9	6.5-9												
	pH - lab	6.5-9	6.5-9	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
	OTHER	Other Standards													
	Alkalinity as CaCO3 - MG/L			10K		10K		413		74.1		784		491	
	BOD, 5-day - MG/L														
	COD - MG/L														
	Kjeldahl N - UG/L														
	Specific Conductivity - field														
	Specific Conductivity - Lab			9600um/cm		1760um/cm		18000um/cm		12500um/cm		11800um/cm		9500um/cm	
	Temperature, field - Deg. F														
	Aluminum - UG/L			7800		18000		3800		4000		300		700	
	Ammonia as N (NH3 & NH4)			2.6		0.85		3.8		4.6		1.1		8.8	
	Calcium - MG/L			280		170		670		540		540		110	
	Magnesium - UG/L			12		34		310		86		680		43	
	Phosphorous (P) - MG/L			0.10		0.61		0.08		0.07		0.08		1.3	
	Potassium - UG/L			17		9.2		17		6.7		5.0		5.6	
	Sodium - MG/L			250		190		2800		840		220		22	
	Strontium - UG/L			780		360		1800		570		1600		780	
IX	Sulfide - MG/L														
IX	Tin - UG/L														
IX	Vanadium - UG/L			8		22		14		8		5.1		5K	
	Turbidity - Lab														
	Phenols - UG/L			10K		10K		10K		10K		10K		10K	

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as indicated by an 8/94 notation to the right of the parameter.

NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 & NO2

(D) = Presumed Dissolved *Bold = GW Monitoring Permit Requirement* R = replacement well

[illegible] APP IX - Parameter also derived from 40 CFR 264, GW monitoring list

qpwb1:520-IUN620

City/Site Name ___ Hartford / Chemetco, Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: _____Facility _____X____IEPA

App IX	Inorganic Contaminant	35 IAC 620 GW Standards		Monitor Point No.											
				G66		G19R		G41							
				Sample type											
				Totals		Totals		Totals							
		Unit(ug/L)		Sampling Date											
		Class I	Class II	8/8/93											
	620 INORGANICS	GW-10		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony 8/94	8	24	6K		6K		6K							
IX	Arsenic - UG/L	50	200	10K		10K		10K							
IX	Barium - UG/L	2000	2000	33		66		180							
IX	Beryllium 8/94	4	500	1K		1K		1K							
	Boron - UG/L	2000	2000	300		250		600							
IX	Cadmium - UG/L	5	50	5K		5K		5K							
	Chloride - MG/L	200	200	63.4		83.0		89.6							
IX	Chromium - UG/L	100	1000	5K		5K		12							
IX	Cobalt - UG/L	1000	1000	5K		5K		7.1							
IX	Copper - UG/L	650	650	5K		11		12							
	Cyanide - UG/L	200	600	0.01K		0.01K		0.01K							
	Fluoride - MG/L	4	4	0.170		0.190		0.170							
	Iron - UG/L	5000	5000	1400		3300		[illegible]							
IX	Lead - UG/L	7.6	100	5K		7.6		[illegible]	9.5						
	Manganese - UG/L	150	10,000	[illegible]		[illegible]		[illegible]							
IX	Mercury - UG/L	2	10												
IX	Nickel - UG/L	100	2000	11		48		20							
	*Nitrate as N - MG/L	10	100	0.66		0.37		4.43							
IX	Selenium - UG/L	50	50	10K		10K		11							
IX	Silver - UG/L	50	-	5K		5K		5K							
	Sulfate - MG/L	400	400	[illegible]		[illegible]		[illegible]							
IX	Thallium 8/94	2	20	10K		10K		10K							
IX	Zinc - UG/L	5000	10,000	100K		100K		100K							
	TDS (ROE) - MG/L	1200	1200	[illegible]		[illegible]		[illegible]							
	pH - field	6.5-9	6.5-9												
	pH - lab	6.5-9	6.5-9	[illegible]		[illegible]		[illegible]							
	OTHER:	Other Standards													
	Alkalinity as CaCO3 - MG/L			797		467		494							
	BOD, 5-day - MG/L														
	COD - MG/L														
	Kjeldahl N - UG/L														
	Specific Conductivity - field														
	Specific Conductivity - Lab			8300 um/cm		9400 um/cm		9400 um/cm							
	Temperature, field - Deg. F														
	Aluminum - UG/L			330		2600		6400							
	Ammonia as N (NH3 & NH4)			2.2		0.28		0.23							
	Calcium - MG/L			400		340		400							
	Magnesium - UG/L			180		59		85							
	Phosphorous (P) - MG/L			0.06		0.10		0.42							
	Potassium - UG/L			7.2		3.9		6.8							
	Sodium - MG/L			210		30		95							
	Strontium - UG/L			2300		490		580							
IX	Sulfide - MG/L														
IX	Tin - UG/L														
IX	Vanadium - UG/L			5K		8.4		25							
	Turbidity - Lab														
	Phenols - UG/L		10 & 10	10K		10K		10K							

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as indicated by an 8/94 notation to the right of the parameter.

NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 & NO2

(D) = Presumed Dissolved ***Bold = GW Monitoring Permit Requirement*** R = replacement well

A Number BOLD, SHADED in HIGHLIGHT = Exceeds GW Standard APP IX - Parameter also derived from 40 CFR 264, GW monitoring list

qpwb1:620-IWS20

LPC: 11980100003 -- Madison County

City/Site Name Hartford/ Chemetco Inc.
Groundwater/Analytical File
SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER
Collected by: _____ **Facility** X **IEPA**

AP IX	Inorganic Contaminant	35 IAC 620 GW Standards		Monitor Point No. G37R		G38R		G48		G49		G50		G51	
				Sample type Totals				Totals		Totals		Totals		Totals	
				Sampling Date											
	620.IN.ORGANICS	Dissolved	Total	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony 8/94	6	24	6K		6K		6K		6K		6K		6K	
IX	Arsenic - UG/L	50	200	10K		10K		10K		10K		10K		10K	
IX	Barium - UG/L	2000	2000	42		1000		130		610		620		480	
IX	Beryllium 8/94	4	500	1K		1.4		1K		1K		1K		1K	
	Boron - UG/L	2000	2000	2400		140		820		70		66		92	
IX	Cadmium - UG/L	5	50	5K		5K		5K		5K		5K		5K	
	Chloride - MG/L	200	200	244		61.9		308		3.85		4.50		5.75	
IX	Chromium - UG/L	100	1000	5K		35		5K		8		5K		5K	
IX	Cobalt - UG/L	1000	1000	5K		13		5K		5K		5K		5K	
IX	Copper - UG/L	650	650	29		57		8		56		10		5K	
	Cyanide - UG/L	200	600	0.01K		0.01K		0.01K		0.01K		0.01K		0.01K	
	Fluoride - MG/L	4	4	0.460		0.230		0.210		0.270		0.270		0.200	
	Iron - UG/L	5000	5000	2400		3800		7400		2500		10000		9100	
IX	Lead - UG/L	7.5	100	28	26	32	33	8	6	23	23	8	9	5K	
	Manganese - UG/L	150	10,000	1400		3800		210		500		110		720	
IX	Mercury - UG/L	2	10												
IX	Nickel - UG/L	100	2000	9		36		8		10		6		5K	
	*Nitrate as N - MG/L	10	100	0.04		0.16		0.02		0.11		0.08		0.06	
IX	Selenium - UG/L	50	50	10K		10K		10K		10K		10K		10K	
IX	Silver - UG/L	50	-	5K		5K		5K		5K		5K		5K	
	Sulfate - MG/L	400	400	444		147		394		47.4		49.6		88.9	
IX	Thallium 8/94	2	20	10K		10K		10K		10K		10K		10K	
IX	Zinc - UG/L	5000	10,000	100K		130		100K		100K		100K		100K	
	TDS (ROE) - MG/L	1200	1200	1030		650		998		358		352		966	
	pH - field	6.5-9	6.5-9												
	pH - lab	6.5-9	6.5-9	7.2		7.3		7.2		7.3		7.3		7.2	
	OTHER	Other Standards													
	Alkalinity as CaCO3 - MG/L			240		312		310		273		269		335	
	BOD, 5-day - MG/L														
	COD - MG/L														
	Kjeldahl N - UG/L														
	Specific Conductivity - field														
	Specific Conductivity - Lab			1740 um/cm		900 um/cm		1670 um/cm		590 um/cm		590 um/cm		1600 um/cm	
	Temperature, field - Deg. F														
	Aluminum - UG/L			100K		24000		1200		5200		2700		1600	
	Ammonia as N (NH3 & NH4)			0.35		0.91		0.30		0.72		0.48		0.23	
	Calcium - MG/L			270		160		280		95		91		180	
	Magnesium - UG/L			84		37		57		22		21		40	
	Phosphorous (P) - MG/L			0.17		0.89		0.08		0.55		0.40		0.16	
	Potassium - UG/L			5.6		9.0		6.5		4.3		4.2		3.1	
	Sodium - MG/L			110		22		110		11		12		28	
	Strontium - UG/L			750		410		410		280		260		230	
IX	Sulfide - MG/L														
IX	Tin - UG/L														
IX	Vanadium - UG/L			5K		72		5K		18		9		7	
	Turbidity - Lab														
	Phenols - UG/L		10 & 10	10K		10K		10K		10K		10K		10K	

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as indicated by an 8/94 notation to the right of the parameter.

NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 & NO2

(D) = Presumed Dissolved **Bold = GW Monitoring Permit Requirement** R = replacement well

BOLD, SHADED or HIGHLIGHTED = Exceeds GW Standards AP IX - Parameter also derived from 40 CFR 264, GW monitoring list

gpwb1:620-JUN620

LPC: 11980100003 – Madison County Page 4 of 5

City/Site Name Hartford / Chemetco Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: _____ **Facility** ___X___ **IEPA**

App IX	Inorganic Contaminant	35 IAC 620 GW Standards Unless Noted (Totals) Class I	Class II	Monitor Point No. G65		G44R		G47R							
				Sample type Totals		Totals		Totals							
				Sampling Date mm/dd/yy											
	620 INORGANICS:	GW-10		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony 8/94	6	24	6K		6K		6K							
IX	Arsenic - UG/L	50	200	10K		10K		10K							
IX	Barium - UG/L	2000	2000	74		120		110							
IX	Beryllium 8/94	4	500	1K		1K		1K							
	Boron - UG/L	2000	2000	91		5300		430							
IX	Cadmium - UG/L	5	50	5K		5K		5K							
	Chloride - MG/L	200	200	334		4380		95.3							
IX	Chromium - UG/L	100	1000	5K		7		5K							
IX	Cobalt - UG/L	1000	1000	5K		5K		5K							
IX	Copper - UG/L	650	650	5K		8		5K							
	Cyanide - UG/L	200	600	0.01K		0.01K		0.01K							
	Fluoride - MG/L	4	4	0.10K		3.44		0.250							
	Iron - UG/L	5000	5000	15000		8300		2400							
IX	Lead - UG/L	7.5	100	5K		7		5K							
	Manganese - UG/L	150	10,000	2000		760		670							
IX	Mercury - UG/L	2	10												
IX	Nickel - UG/L	100	2000	5K		26		5K							
	*Nitrate as N - MG/L	10	100	0.24		0.02		0.04							
IX	Selenium - UG/L	50	50	10K		10K		10K							
IX	Silver - UG/L	50	-	5K		5K		5K							
	Sulfate - MG/L	400	400	1310		984		165							
IX	Thallium 8/94	2	20	10K		10K		10K							
IX	Zinc - UG/L	5000	10,000	100K		100K		100K							
	TDS (ROE) - MG/L	1200	1200	2010		3330		860							
	pH - field	6.5-9	6.5-9												
	pH - lab	6.5-9	6.5-9	6.7		7.2		7.2							
	OTHER:	00-4 Standards													
	Alkalinity as CaCO3 - MG/L			1050		358		310							
	BOD, 5-day - MG/L														
	COD - MG/L														
	Kjeldahl N - UG/L														
	Specific Conductivity - field														
	Specific Conductivity - Lab			3400um/cm		5600um/cm		1090um/cm							
	Temperature, field - Deg. F														
	Aluminum - UG/L			930		4500		600							
	Ammonia as N (NH3 & NH4)			0.99		0.22		0.21							
	Calcium - MG/L			850		340		150							
	Magnesium - UG/L			190		69		38							
	Phosphorous (P) - MG/L			0.24		0.30		0.08							
	Potassium - UG/L			9.4		7.8		5.5							
	Sodium - MG/L			110		770		44							
	Strontium - UG/L			1600		760		370							
IX	Sulfide - MG/L														
IX	Tin - UG/L														
IX	Vanadium - UG/L			5K		17		5K							
	Turbidity - Lab														
	Phenols - UG/L		10 & 10	10K		10K		10K							

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as indicated by an 8/94 notation to the right of the parameter.

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Values in BOLD SHADED or HIGHLIGHTED = Exceeds GW Standard APP IX - Parameter also derived from 40 CFR 264, GW monitoring list

qpwb1:620-IVN620

LPC: 11980100003 -- Madison County Page 5 of 5

City/Site Name Hartford / Chemetco, Inc.
Groundwater/Analytical File
SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER
Collected by: _____Facility ___X_____IEPA

App IX	Inorganic Contaminant	35 IAC 620 GW Standards		Monitor Point No. G38R		G39R		G52		G53					
				Sample type Totals		Totals		Totals		Totals					
		Drinking (Class I)	Other (Class II)	Sampling Date 9/9/98											
	620 INORGANICS	GW-19		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony 8/94	B	24	6K		6K		6K		6K					
IX	Arsenic - UG/L	50	200	10K		10K		10K		10K					
IX	Barium - UG/L	2000	2000	85		93		520		660					
IX	Beryllium 8/94	4	500	1K		1K		1K		1K					
	Boron - UG/L	2000	2000	240		680		50K		50K					
IX	Cadmium - UG/L	5	50	5K		5K		5K		5K					
	Chloride - MG/L	200	200	[illegible]		397		3.62		22.0					
IX	Chromium - UG/L	100	1000	5K		5K		5K		5K					
IX	Cobalt - UG/L	1000	1000	5K		5K		5K		5K					
IX	Copper - UG/L	650	650	7		5		5K		5K					
	Cyanide - UG/L	200	600	0.01K		0.01K		0.01K		0.01					
	Fluoride - MG/L	4	4	0.10		0.130		0.190		0.120					
	Iron - UG/L	5000	5000	[illegible]		[illegible]		[illegible]		[illegible]					
IX	Lead - UG/L	7.5	100	6		5K		5K		5K					
	Manganese - UG/L	150	10,000	[illegible]		[illegible]		[illegible]		[illegible]					
IX	Mercury - UG/L	2	10												
IX	Nickel - UG/L	100	2000	5K		10		5K		5K					
	*Nitrate as N - MG/L	10	100	0.06		0.14		0.02		0.07					
IX	Selenium - UG/L	50	50	10K		10K		10K		10K					
IX	Silver - UG/L	50	-	5K		5K		5K		5K					
	Sulfate - MG/L	400	400	278		454		19.8		44.7					
IX	Thallium 8/94	2	20	10K		10K		10K		10K					
IX	Zinc - UG/L	5000	10,000	100K		100K		100K		100K					
	TDS (ROE) - MG/L	1200	1200	835		1010		380		402					
	pH - field	6.5-9	6.5-9												
	pH - lab	6.5-9	6.5-9	7.3		7.1		7.4		7.4					
	OTHER	Other Standards													
	Alkalinity as CaCO3 - MG/L			247		298		200		268					
	BOD, 5-day - MG/L														
	COD - MG/L														
	Kjeldahl N - UG/L														
	Specific Conductivity - field														
	Specific Conductivity - Lab			1380um/cm		1700um/cm		800um/cm		650um/cm					
	Temperature, field - Deg. F														
	Aluminum - UG/L			180		100K		100K		820					
	Ammonia as N (NH3 & NH4)			0.51		0.90		0.45		0.39					
	Calcium - MG/L			150		250		84		93					
	Magnesium - UG/L			38		57		15		24					
	Phosphorous (P) - MG/L			0.17		0.23		0.42		0.26					
	Potassium - UG/L			5.0		5.9		1.8		2.2					
	Sodium - MG/L			120		100		7.5		12					
	Strontium - UG/L			210		400		140		220					
IX	Sulfide - MG/L														
IX	Tin - UG/L														
IX	Vanadium - UG/L			5K		5K		5K		5K					
	Turbidity - Lab														
	Phenols - UG/L		10 & 10	10K		10K		10K		10K					

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as indicated by an 8/94 notation to the right of the parameter.

NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 & NO2

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Highlighted = Exceeds GW Standard APP IX - Parameter also derived from 40 CFR 264, GW monitoring list

upwb1:620-ING20

INSPECTION/REPORT

Item: Zinc Oxide Storage Bunker **Date:** 8/4/98

Frequency: Weekly **Inspector:** [illegible]

Task/Description	OK	Not OK	COMMENTS
1. Inspect all walls for spills or releases Report problems & corrective action taken or planned.		✓	- Water in SE corner is spilling over side wall
2. Inspect side walls for cracks or leaks Note condition/problems.		✓	- Some seepage - bunker is full of water rain last Thursday (≈4" in a couple of hours)
3. Inspect secondary curbing for cracks leaks, etc. Note condition and problems.	✓		
4. Inspect curbing sump pump and operation. Note condition and problems.	✓		
5. Inspect reservoir pump and valves. Note condition and problems.	✓		
6. Pump water from reservoir to operating ponds.	✓		
7. Make visual inspection of dust control Note conditon/problems.	✓		
8. Record any repairs made or known releases.			* Last Thursday water in SE corner was over secondary curbing. Both pumps in that corner (inside & outside curbing) pump back to bunker.
9. Visual Inspection of Top of Bunker	✓		

Corrective Actions: * On 8/4 water below 2nd curbing level but rain is expected. Bunker still full.

Corrective Action Supervised By: (Signature) _____

INSPECTION/REPORT

Item: Zinc Oxide Storage Bunker

Date: 10/7/97

Frequency: Weekly

Inspector: [illegible]

Task/Description	OK	Not OK	COMMENTS
1. Inspect all walls for spills or releases Report problems & corrective action taken or planned.	✓		~~Some slag debris~~ An Area in the NW Corner slag overtopped side of Pile. Slight seepage in Corners
2. Inspect side walls for cracks or leaks Note condition/problems.	✓		Crack along SW edge
3. Inspect secondary curbing for cracks leaks, etc. Note condition and problems.		✓	Curbing along West side damaged
4. Inspect curbing sump pump and operation. Note condition and problems.	✓		
5. Inspect reservoir pump and valves. Note condition and problems.	✓		
6. Pump water from reservoir to operating ponds.	✓		
7. Make visual inspection of dust control Note conditon/problems.	✓		Area near NW corner appears to have been disturbed. Drainage problem
8. Record any repairs made or known releases.	✓		

Corrective Actions: Curbing is scheduled to be repaired. Slag is being replaced back into bunk

Corrective Action Supervised By: (Signature) [illegible]

CHEMETCO, INC.
Inspection Log for Container Storage of Baghouse Bags and Filter cloth

Date: 10/5/98
Inspector Name: [illegible]
Time of Inspection: 8:30 am/pm
Are containers closed? yes no
Are the containers in good condition? yes no
Are the containers properly labeled ? yes no
Comments or observations: 1 Supersack at DIS

Repairs or remedial actions taken: Label made 10/6 by [illegible] to G. Cotter.

Person/Date action was implemented:

Date: 10/12/98
Inspector Name: [illegible]
Time of Inspection: 8:15 am/pm
Are containers closed? yes no
Are the containers in good condition? yes no
Are the containers properly labeled ? yes no
Comments or observations: 1 Supersack in trailer

Repairs or remedial actions taken:

Person/Date action was implemented:

Date: 10/19/98
Inspector Name: [illegible]
Time of Inspection: 8:00 am/pm
Are containers closed? yes no 1 supersack needs new tie
Are the containers in good condition? yes no
Are the containers properly labeled ? yes no
Comments or observations: 3 Supersacks

Repairs or remedial actions taken:

Person/Date action was implemented:

10-20-98 2 supersacks for disposal
One kept since it was not full

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809 IEPA ID #: 1198010003

Facility Name: Chemetco Phone #: 618/254-4381

Location: Hwy 3, Box 187 County: Madison

City: Hartford State: Zip Code: 62048

Region: 6 Inspection Date: 01 / 05 / 98 Time:

Weather:

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

CEI: CME/O&M: CSI: NRR: X F/U to: / / CCI: PIF: CVI: CSE: CAO: Other:

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11/ 17 / 80 (initial) / / (subseque

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08/15/80 Amended: 07/03/90 Withdrawn: / /

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03/03/93

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: / / IAGO: 11/ 01 / 93 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

CACO: / / CAFO: / / Federal Court Order: / /

Consent Decree: / / IPCB Order: / / State Court Order: 06 / 30 /88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1994 1995 1996
S03*	Yes	Yes	Yes	No	Yes	No	N / N /N
D83**	Yes	Yes	Yes	No	Yes	No	N / N /N
D83**	Yes	Yes	Yes	No	Yes	No	N /N /N
D83**	Yes	Yes	Yes	No	Yes	No	N /N /N
D83***	No	No	Yes	No	Yes	No	N /N /N
S03****	No	No	Yes	No	Yes	No	N /N /N
*Zinc Oxide	Bunker						/ /
**Zinc Oxide	Pits, Floor	wash impounds	Cooling water	canals			/ /
***Newly	Discovered	Zinc Oxide	disposal in S.I.				/ /
****Refractory	Brick waste	pile & Slag fine	waste pile.	and brick	clean up piles		/ /

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND

1198010003--Madison County
Chemetco, Inc.
ILD048843809
Subpart F

Groundwater Monitoring Data Evaluation Report

On January 5, 1998, a review of Chemetco quarterly groundwater submittals was conducted by the Agency. The fourth quarter groundwater data contained several exceedances of the 35 IAC 620 Class I Groundwater Standards. These include exceedences of the arsenic, cadmium, copper, lead, nickel and zinc standards (See attachment A).

Chemetco currently monitors three hydrogeologic zones beneath the plant. These include a shallow perched zone and the underlying American Bottoms aquifer which they have defined as consisting of an upper zone and a lower zone. The upper perched zone consists of a clay and silt unit which contains interbedded sand lenses. These sand lenses allow for the presence of a perched water table at the site. The American Bottoms aquifer upper zone consists primarily of sand with some gravel and silt. The American Bottoms aquifer lower zone consists of primarily sand and gravel. There is no boundary between these formations in the regional aquifer, and they have direct hydraulic connection with each other. All three zones meet the definition of a Class I aquifer under 35 IAC, Part 620.

Inorganic parameter exceedences were detected in monitoring wells screened in the upper and lower zones of the American Bottoms aquifer and the upper perched zone. The highest concentrations of inorganic parameters have been detected in the upper perched zone. Since 1984 an interceptor trench, subsurface interceptor drainage (SID), has been used for passive remediation in the upper perched zone only. The SID system was designed to capture the groundwater flowing through the sand lenses. It is not able to recover the groundwater downgradient of the system. Groundwater flow in the shallow aquifer is from the northwest to the southeast (See attachment B). Several monitoring wells downgradient of the SID system, 16, 27, 28 and 29, contain high concentrations of the above listed parameters, but there is no remediation mechanism in place for these wells. Chemetco has estimated that the extent of contamination extends from 150 feet to 500 feet south of the Sid system (See attachment C).

The following table lists the monitoring wells which exceeded the 620 groundwater standards for the fourth quarter sampling period. The table designates which aquifer and zone each well is screened in. In addition to the monitoring well designation, the monitor point number is given.

Monitoring Well Number	Monitor Point No.	Aquifer
19R	G19R	Perched Aquifer
31A	G31A	Perched Aquifer
28	G128	Perched Aquifer
27	G127	Perched Aquifer
16	G116	Perched Aquifer
54	G154	Perched Aquifer
41	G141	Perched Aquifer
SIDS	SIDS	Perched Aquifer
49	G149	Upper Regional Aquifer
36R	G36R	Lower Regional Aquifer
39R	G39R	Lower Regional Aquifer

As a result of this groundwater record review, the following alleged violations will be cited:

Section 12(a) of the Illinois Environmental Protection Act -- Causing or threatening or allowing the discharge of any contaminants into the environment so as to cause or tend to cause water pollution.

Section 12(d) of the Illinois Environmental Protection Act -- Deposition of any contaminants upon the land in such place and manner so as to create a water pollution hazard.

35 IAC 620.115 -- Causing, threatening or allowing a violation of the Act, the IGPA or regulations adopted by the Board thereunder, including but not limited to this Part.

35 IAC 620.301(a) -- Causing or allowing the release of contaminants to a resource groundwater.

35 IAC 620.405 -- Causing or allowing contaminants to exceed established groundwater standards. Quarterly analytical results and review reports submitted by the facility reflect levels of contaminants above the 620 standards.

35 IAC 620.410(a) -- Causing or allowing concentrations of inorganic chemical constituents to exceed established standards for Class I Groundwater.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809 IEPA ID #: 1198010003

Facility Name: Chemetco Phone #: 618/254-4381

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City: Hartford State: Zip Code: 62048

Region: 6 Inspection Date: 01 / 05 / 98 Time:

Weather:

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Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

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NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11/ 17 / 80 (initial) / / (subseque

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Part B Submitted/Issued (circle one): 03/03/93

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Has the company been referred to: USEPA: / / IAGO: 11/ 01 / 93 County State's Attorney: / /

ACTIVE ENFORCEMENT ORDERS

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D83**	Yes	Yes	Yes	No	Yes	No	N / N /N
D83**	Yes	Yes	Yes	No	Yes	No	N /N /N
D83**	Yes	Yes	Yes	No	Yes	No	N /N /N
D83***	No	No	Yes	No	Yes	No	N /N /N
S03****	No	No	Yes	No	Yes	No	N /N /N
*Zinc Oxide	Bunker						/ /
**Zinc Oxide	Pits, Floor	wash impounds	Cooling water	canals			/ /
***Newly	Discovered	Zinc Oxide	disposal in S.I.				/ /
****Refractory	Brick waste	pile & Slag fine	waste pile.	and brick	clean up piles		/ /

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND

1198010003--Madison County
Chemetco, Inc.
ILD048843809
Subpart F

Groundwater Monitoring Data Evaluation Report

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Chemetco currently monitors three hydrogeologic zones beneath the plant. These include a shallow perched zone and the underlying American Bottoms aquifer which they have defined as consisting of an upper zone and a lower zone. The upper perched zone consists of a clay and silt unit which contains interbedded sand lenses. These sand lenses allow for the presence of a perched water table at the site. The American Bottoms aquifer upper zone consists primarily of sand with some gravel and silt. The American Bottoms aquifer lower zone consists of primarily sand and gravel. There is no boundary between these formations in the regional aquifer, and they have direct hydraulic connection with each other. All three zones meet the definition of a Class I aquifer under 35 IAC, Part 620.

Inorganic parameter exceedences were detected in monitoring wells screened in the upper and lower zones of the American Bottoms aquifer and the upper perched zone. The highest concentrations of inorganic parameters have been detected in the upper perched zone. Since 1984 an interceptor trench, subsurface interceptor drainage (SID), has been used for passive remediation in the upper perched zone only. The SID system was designed to capture the groundwater flowing through the sand lenses. It is not able to recover the groundwater downgradient of the system. Groundwater flow in the shallow aquifer is from the northwest to the southeast (See attachment B). Several monitoring wells downgradient of the SID system, 16, 27, 28 and 29, contain high concentrations of the above listed parameters, but there is no remediation mechanism in place for these wells. Chemetco has estimated that the extent of contamination extends from 150 feet to 500 feet south of the Sid system (See attachment C).

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36R	G36R	Lower Regional Aquifer
39R	G39R	Lower Regional Aquifer

As a result of this groundwater record review, the following alleged violations will be cited:

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35 IAC 620.115 -- Causing, threatening or allowing a violation of the Act, the IGPA or regulations adopted by the Board thereunder, including but not limited to this Part.

35 IAC 620.301(a) -- Causing or allowing the release of contaminants to a resource groundwater.

35 IAC 620.405 -- Causing or allowing contaminants to exceed established groundwater standards. Quarterly analytical results and review reports submitted by the facility reflect levels of contaminants above the 620 standards.

35 IAC 620.410(a) -- Causing or allowing concentrations of inorganic chemical constituents to exceed established standards for Class I Groundwater.

City/Site Name Chemetco, Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: Chemetco

X P P IX	Inorganic Contaminant	35 IAC 620 GW Standards		Monitor Point No. G39R		G149		STDS	
				Sample type Groundwater		Groundwater		Groundwater	
		Unfiltered Total(s) Class I	Class II	Sampling Date 10/8/97		[illegible]		[illegible]	
	620 INORGANICS:	Class I		Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony - UG/L 8/94	6	24						
IX	Arsenic - UG/L	50	200	7		<5.0		<5.0	
IX	Barium - UG/L	2000	2000						
IX	Beryllium - UG/L 8/94	4	500						
	Boron - UG/L	2000	2000						
IX	Cadmium - UG/L	5	50						
	Chloride - MG/L	200	200						
IX	Chromium - UG/L	100	1000	19		<10.0		27	
IX	Cobalt - UG/L	1000	1000						
IX	Copper - UG/L	650	650	13		9			
	Cyanide - UG/L	200	600						
	Fluoride - MG/L	4	4						
	Iron - UG/L	5000	5000						
IX	Lead - UG/L	7.5	100	<5.0		<5.0		<5.0	
	Manganese - UG/L	150	10,000						
IX	Mercury - UG/L	2	10						
IX	Nickel - UG/L	100	2000	<50.0		<50.0			
	*Nitrate as N - MG/L	10	100						
IX	Selenium - UG/L	50	50						
IX	Silver - UG/L	50	-						
	Sulfate - MG/L	400	400						
IX	Thallium - UG/L 8/94	2	20						
IX	Zinc - UG/L	5000	10,000	15		6			
	TDS (ROE) - MG/L	1200	1200						
	pH - field	6.5-9	6.5-9						
	pH - lab	6.5-9	6.5-9						
	OTHER:	Other Standards							
	Alkalinity as CaCO3 - MG/L								
	BOD, 5-day - MG/L								
	COD - MG/L								
	Kjeldahl N - UG/L								
	Specific Conductivity - field								
	Specific Conductivity - Lab								
	Temperature, field - Deg. F								
	Aluminum - UG/L								
	Ammonia as N (NH3 & NH4)								
	Calcium - MG/L								
	Magnesium - UG/L								
	Phosphorous (P) - MG/L								
	Potassium - UG/L								
	Sodium - MG/L								
	Strontium - UG/L								
IX	Sulfide - MG/L								
IX	Tin - UG/L			<200.0		<500.0		<200.0	
IX	Vanadium - UG/L								
	Turbidity - Lab								
	Phenols - UG/L		10 & 10						

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as ind
NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 &
(D) = Presumed Dissolved *Bold = GW Monitoring Permit Requirement* R = replacement well
A number BOLD, SHADED or HIGHLIGHTED = Exceeds GW Standard APP IX - Parameter also derived from 40 CFR 264.

City/Site Name Chemetco, Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: Chemetco

APP IX	Inorganic Contaminant	35 IAC 620 GW Standards Unfiltered (Totals) Class I	Class II	Monitor Point No. G12S Sample type Groundwater Sampling Date		G31A Groundwater		G19R Groundwater	
	620 INORGANICS:	GW-1		Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony - UG/L 8/94	6	24						
IX	Arsenic - UG/L	50	200	<5.0				<5.0	
IX	Barium - UG/L	2000	2000						
IX	Beryllium - UG/L 8/94	4	500						
	Boron - UG/L	2000	2000						
IX	Cadmium - UG/L	5	50						
	Chloride - MG/L	200	200						
IX	Chromium - UG/L	100	1000	<10.0		<10.0		<10.0	
IX	Cobalt - UG/L	1000	1000						
IX	Copper - UG/L	650	650					<5.0	
	Cyanide - UG/L	200	600						
	Fluoride - MG/L	4	4						
	Iron - UG/L	5000	5000						
IX	Lead - UG/L	7.5	100	<5.0				<5.0	
	Manganese - UG/L	150	10,000						
IX	Mercury - UG/L	2	10						
IX	Nickel - UG/L	100	2000					50	
	*Nitrate as N - MG/L	10	100						
IX	Selenium - UG/L	50	50						
IX	Silver - UG/L	50	-						
	Sulfate - MG/L	400	400						
IX	Thallium - UG/L 8/94	2	20						
IX	Zinc - UG/L	5000	10,000	4630				<5.0	
	TDS (ROE) - MG/L	1200	1200						
	pH - field	6.5-9	6.5-9						
	pH - lab	6.5-9	6.5-9						
	OTHER:	Other Standards							
	Alkalinity as CaCO3 - MG/L								
	BOD, 5-day - MG/L								
	COD - MG/L								
	Kjeldahl N - UG/L								
	Specific Conductivity - field								
	Specific Conductivity - Lab								
	Temperature, field - Deg. F								
	Aluminum - UG/L								
	Ammonia as N (NH3 & NH4)								
	Calcium - MG/L								
	Magnesium - UG/L								
	Phosphorous (P) - MG/L								
	Potassium - UG/L								
	Sodium - MG/L								
	Strontium - UG/L								
IX	Sulfide - MG/L								
IX	Tin - UG/L			<200.0		<200.0		<20.0	
IX	Vanadium - UG/L								
	Turbidity - Lab								
	Phenols - UG/L		10 & 10						

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as lpd
NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 &
(D) = Preserved Dissolved *Bold = GW Monitoring Permit Requirement* R = replacement well
A number BOLD, SHADED or HIGHLIGHTED = Exceeds GW Standard; APP IX - Parameter also derived from 40 CFR 264,

City/Site Name Chemetco, Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: Chemetco

APP IX	Inorganic Contaminant	35 IAC 620 GW Standards		Monitor Point No. G141		G154		G38R	
				Sample type Groundwater		Groundwater		Groundwater	
		Unfiltered (Total)		Sampling Date					
		Class I	Class II						
	620 INORGANICS:	GW-1of		Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony - UG/L 8/94	6	24						
IX	Arsenic - UG/L	50	200	<5.0		35		<5.0	
IX	Barium - UG/L	2000	2000						
IX	Beryllium - UG/L 8/94	4	500						
	Boron - UG/L	2000	2000						
IX	Cadmium - UG/L	5	50						
	Chloride - MG/L	200	200						
IX	Chromium - UG/L	100	1000	<10.0		83		<10.0	
IX	Cobalt - UG/L	1000	1000						
IX	Copper - UG/L	650	650	6				8	
	Cyanide - UG/L	200	600						
	Fluoride - MG/L	4	4						
	Iron - UG/L	5000	5000						
IX	Lead - UG/L	7.5	100	<5.0		<50.0		<5.0	
	Manganese - UG/L	150	10,000						
IX	Mercury - UG/L	2	10						
IX	Nickel - UG/L	100	2000	<50.0				<50.0	
	*Nitrate as N - MG/L	10	100						
IX	Selenium - UG/L	50	50						
IX	Silver - UG/L	50	-						
	Sulfate - MG/L	400	400						
IX	Thallium - UG/L 8/94	2	20						
IX	Zinc - UG/L	5000	10,000	16				7	
	TDS (ROE) - MG/L	1200	1200						
	pH - field	6.5-9	6.5-9						
	pH - lab	6.5-9	6.5-9						
	OTHER:	Other Standards							
	Alkalinity as CaCO3 - MG/L								
	BOD, 5-day - MG/L								
	COD - MG/L								
	Kjeldahl N - UG/L								
	Specific Conductivity - field								
	Specific Conductivity - Lab								
	Temperature, field - Deg. F								
	Aluminum - UG/L								
	Ammonia as N (NH3 & NH4)								
	Calcium - MG/L								
	Magnesium - UG/L								
	Phosphorous (P) - MG/L								
	Potassium - UG/L								
	Sodium - MG/L								
	Strontium - UG/L								
IX	Sulfide - MG/L								
IX	Tin - UG/L			<20.0		<200.0		<200.0	
IX	Vanadium - UG/L								
	Turbidity - Lab								
	Phenols - UG/L		10 & 10						

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as ind
NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N or NO3 &
(D) = Presumed Dissolved. ***Bold = GW Monitoring Permit Requirement*** R = replacement well
(A bolded/ BOLD, SHADED or HIGHLIGHTED = Exceeds GW Standard APP IX = Parameter also derived from 40 CFR 264,

City/Site Name Hartford/Chemelco Inc.
Groundwater/Analytical File

SUMMARY OF INORGANIC ANALYTICAL RESULTS: GROUNDWATER

Collected by: ___ Chemelco

APP IX	Inorganic Contaminant	35 IAC 620 GW Standards		Monitor Point No. G116		G127			
				Sample type Groundwater		Groundwater			
		Unfiltered (Totals) Class I	Class II	Sampling Date [illegible]		[illegible]			
	620 INORGANICS	GW>1#		Total	Dissolved	Total	Dissolved	Total	Dissolved
IX	Antimony - UG/L 8/94	6	24						
IX	Arsenic - UG/L	50	200	<5.0		<50.0			
IX	Barium - UG/L	2000	2000						
IX	Beryllium - UG/L 8/94	4	500						
	Boron - UG/L	2000	2000						
IX	Cadmium - UG/L	5	50						
	Chloride - MG/L	200	200						
IX	Chromium - UG/L	100	1000	<10.0		39			
IX	Cobalt - UG/L	1000	1000						
IX	Copper - UG/L	650	650			19			
	Cyanide - UG/L	200	600						
	Fluoride - MG/L	4	4						
	Iron - UG/L	5000	5000						
IX	Lead - UG/L	7.5	100			<5.0			
	Manganese - UG/L	150	10,000						
IX	Mercury - UG/L	2	10						
IX	Nickel - UG/L	100	2000						
	*Nitrate as N - MG/L	10	100						
IX	Selenium - UG/L	50	50						
IX	Silver - UG/L	50	-						
	Sulfate - MG/L	400	400						
IX	Thallium - UG/L 8/94	2	20						
IX	Zinc - UG/L	5000	10,000						
	TDS (ROE) - MG/L	1200	1200						
	pH - field	6.5-9	6.5-9						
	pH - lab	6.5-9	6.5-9						
	OTHER:	Other Standards							
	Alkalinity as CaCO3 - MG/L								
	BOD, 5-day - MG/L								
	COD - MG/L								
	Kjeldahl N - UG/L								
	Specific Conductivity - field								
	Specific Conductivity - Lab								
	Temperature, field - Deg. F								
	Aluminum - UG/L								
	Ammonia as N (NH3 & NH4)								
	Calcium - MG/L								
	Magnesium - UG/L								
	Phosphorous (P) - MG/L								
	Potassium - UG/L								
	Sodium - MG/L								
	Strontium - UG/L								
IX	Sulfide - MG/L								
IX	Tin - UG/L			<200.0		<200.0			
IX	Vanadium - UG/L								
	Turbidity - Lab								
	Phenols - UG/L		10 & 10						

NOTE: All 620 groundwater standards are based on total analyses. 620 Standards were effective 11-7-91 with revisions of 8-11-94, as I
NA or blank = Not Analyzed ND or (-) = Not Detected *Nitrate = IEPA Lab reports this as total N = NO3 &
(D) = Presumed Dissolved *Bold = GW Monitoring Permit Requirement* R = replacement well
A *nitrate* BOLD, SHADED or HIGHLIGHTED = Exceeds GW Standard APP IX - Parameter also derived from 40 CFR 264,

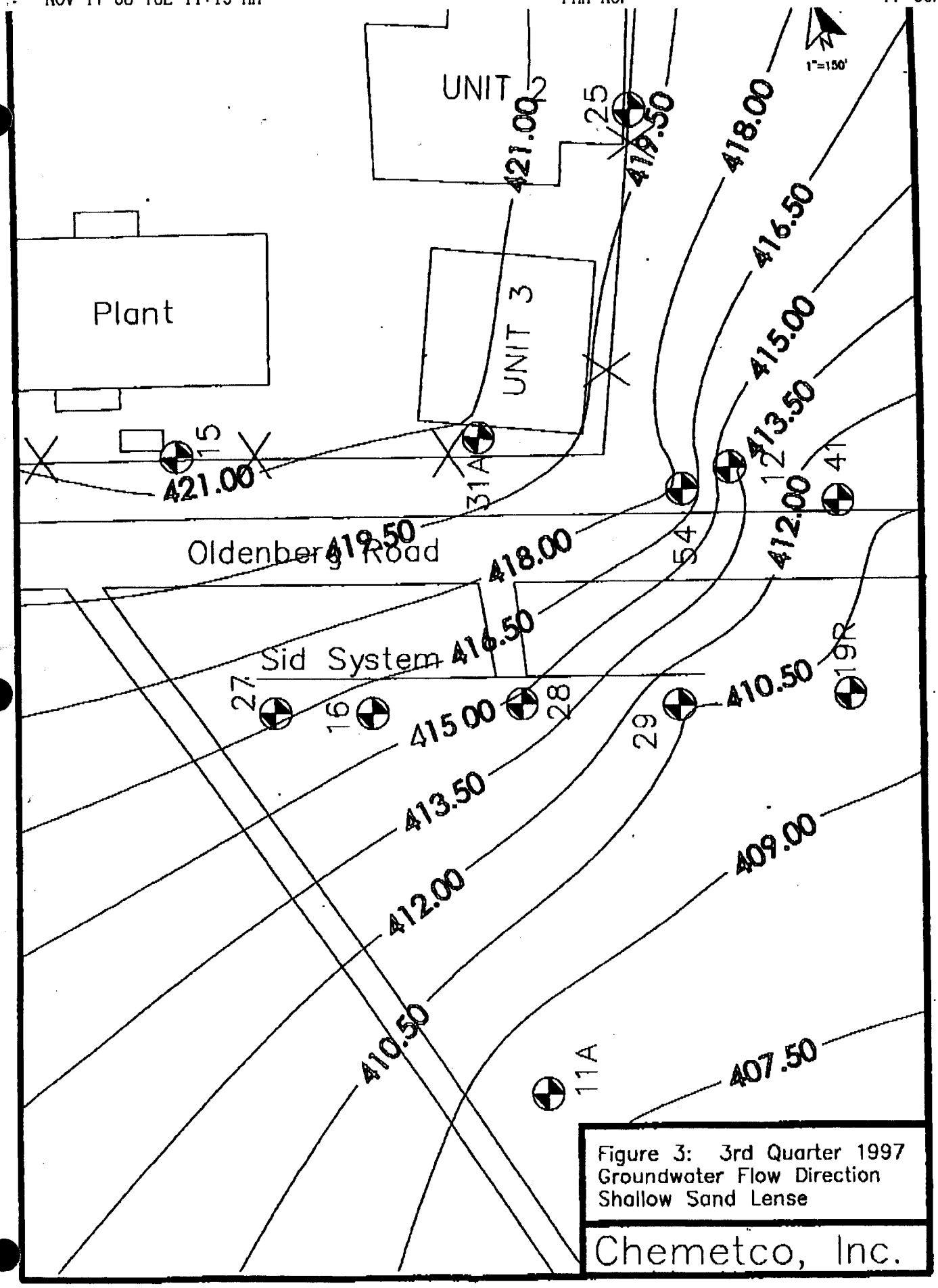


Figure 3: 3rd Quarter 1997
Groundwater Flow Direction
Shallow Sand Lense

Chemetco, Inc.

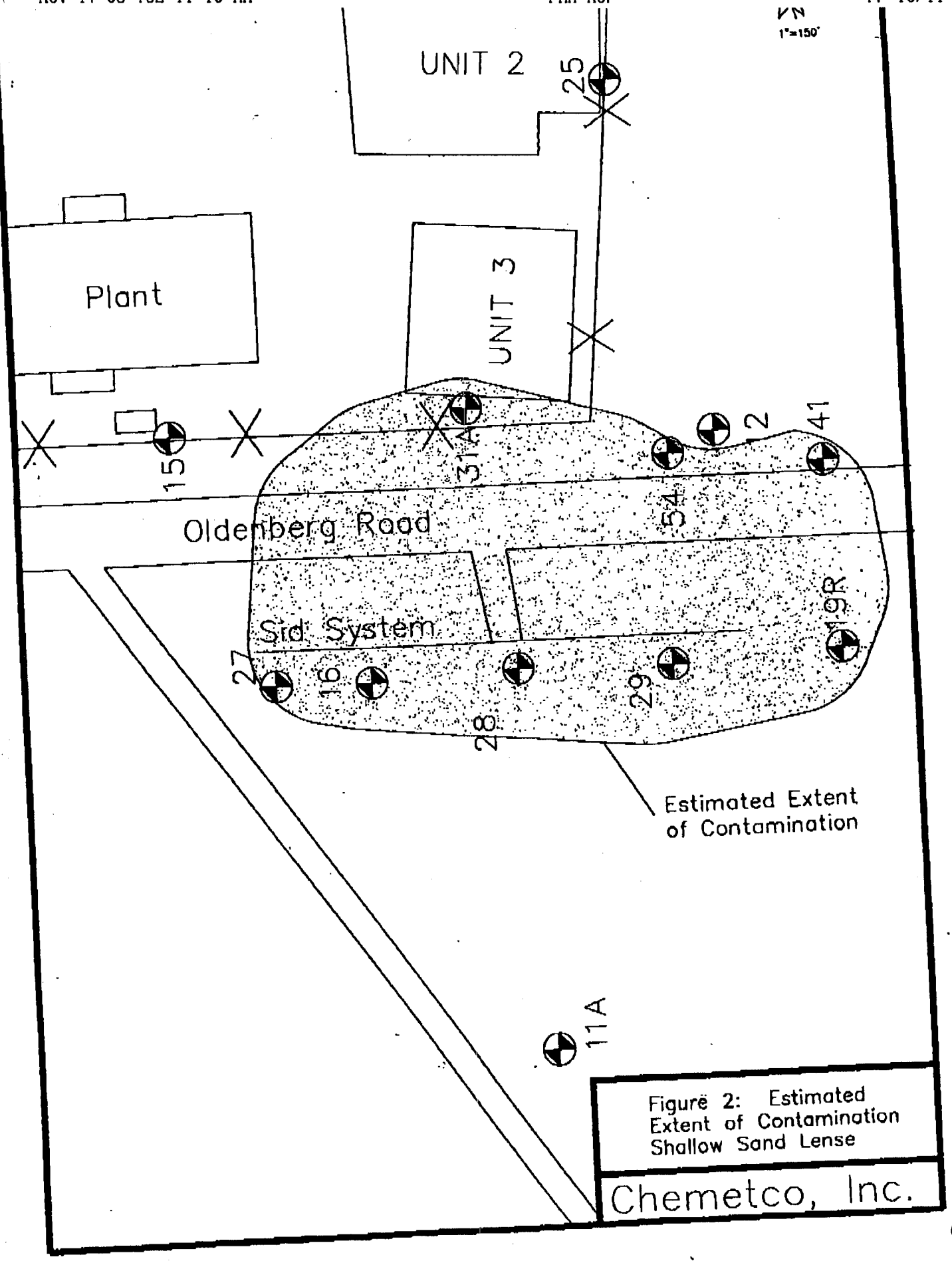


Figure 2: Estimated Extent of Contamination Shallow Sand Lense

Chemetco, Inc.

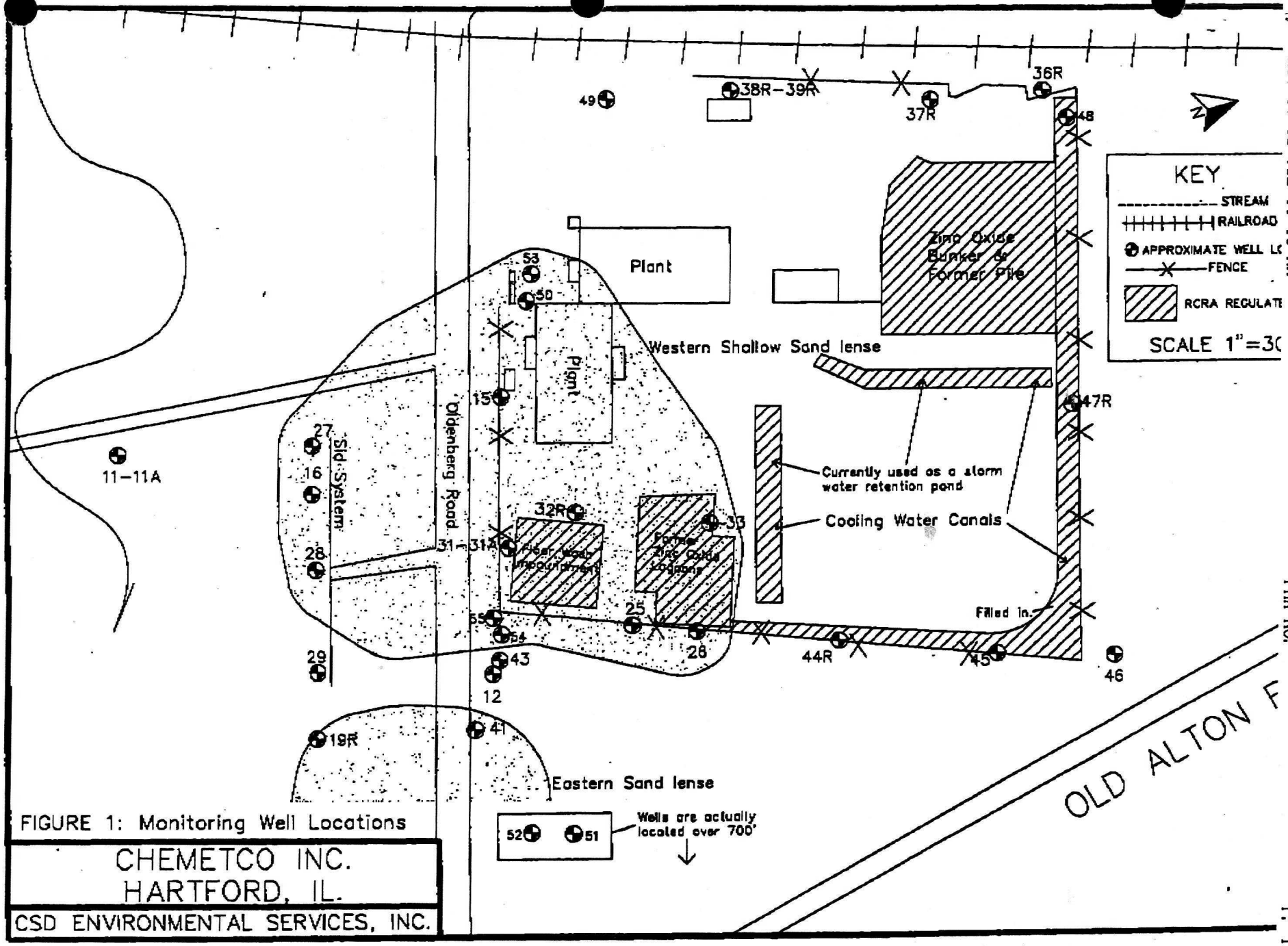


FIGURE 1: Monitoring Well Locations

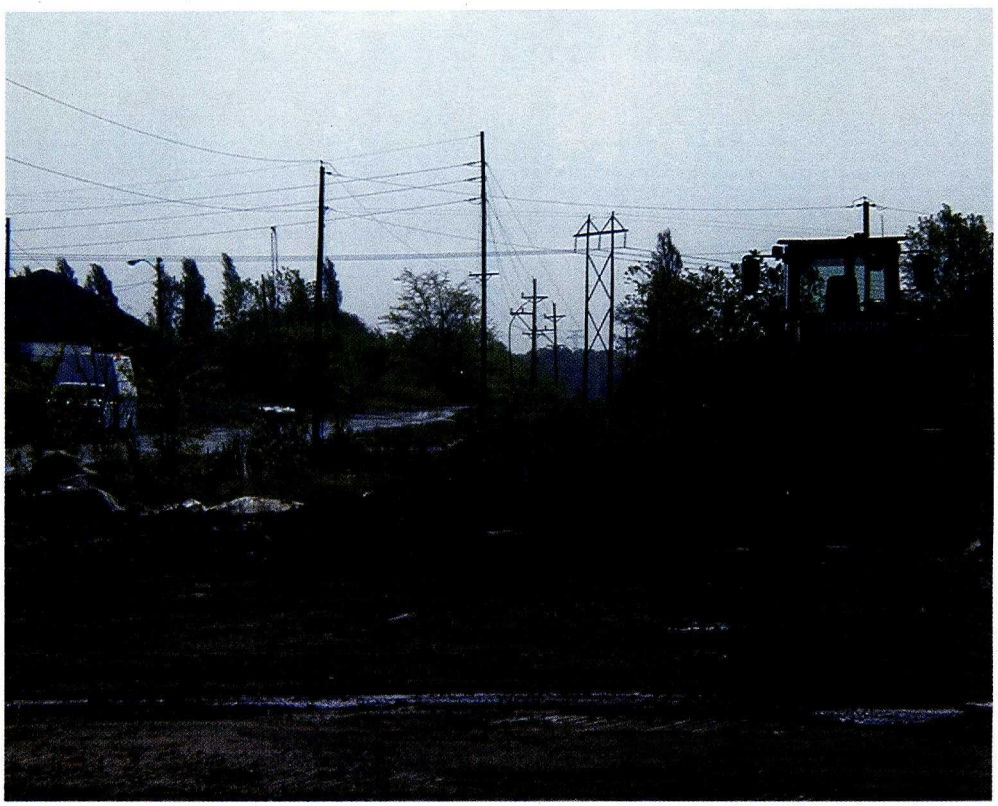
CHEMETCO INC.
HARTFORD, IL.

CSD ENVIRONMENTAL SERVICES, INC.

LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 08, 2000
TIME: 10:25 – 11:00
DIRECTION: east
PHOTO by:C. Cahnovsky
PHOTO FILE NAME:
1198010003~05082000-001



DATE: May 08, 2000
TIME: 10:25 – 11:00
DIRECTION: east
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-002

LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 08, 2000
TIME: 10:25 – 11:00
DIRECTION: South
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05052000-003

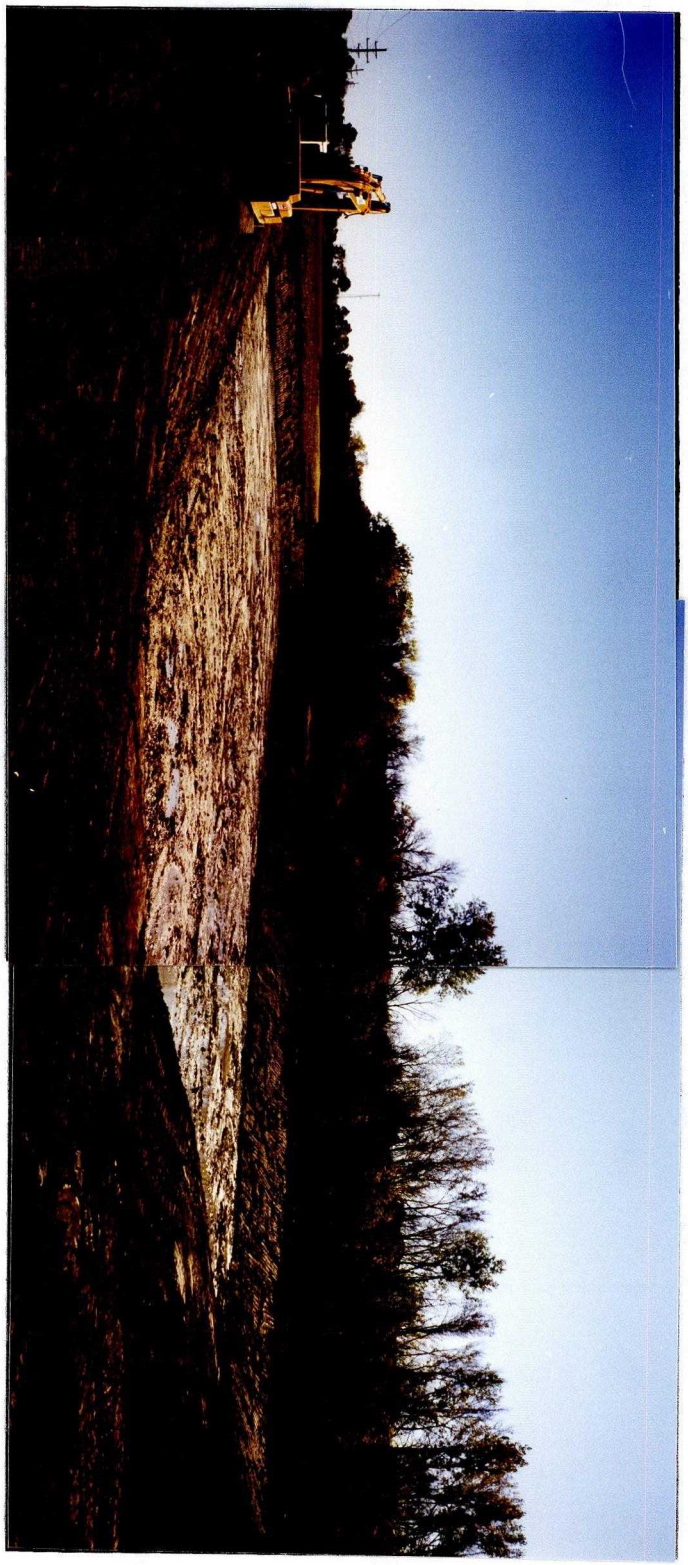
INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southeast

ROLL#: 3347	**PHOTO#:** 2b



DATE: 10/22/98
TIME: 9:10-1:15
PHOTOGRAPH TAKEN BY: Chris Cahnovsky
COMMENTS: Pictures taken toward: Southeast

ROLL#: 3347	**PHOTO#:** 1b

CNC:jlb

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: West

ROLL#: 3347 **PHOTO#:** 3b

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3347 **PHOTO#:** 4b

CNC:jlb

TOS

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3345 **PHOTO#:** 1

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3345 **PHOTO#:** 4

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southeast

ROLL#: 3345 **PHOTO#:** 3

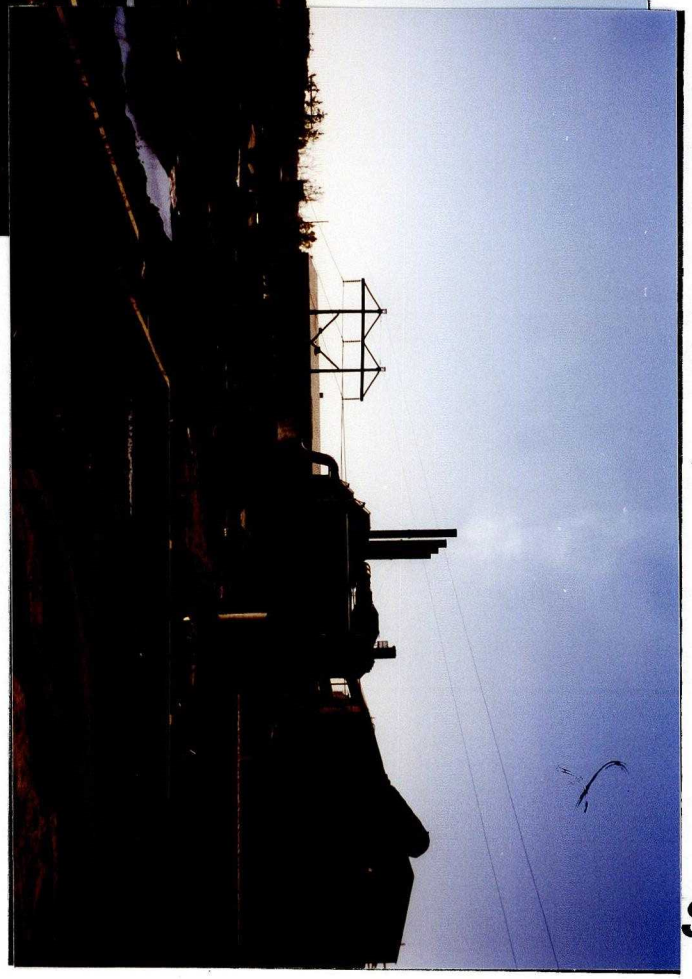
DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southeast

ROLL#: 3345 **PHOTO#:** 2



CNC:jlb

S

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3345 **PHOTO#:** 5

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northeast

ROLL#: 3345 **PHOTO#:** 6

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3345 **PHOTO#:** 7

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southeast

ROLL#: 3345 **PHOTO#:** 8

CNC:jlb

FOS

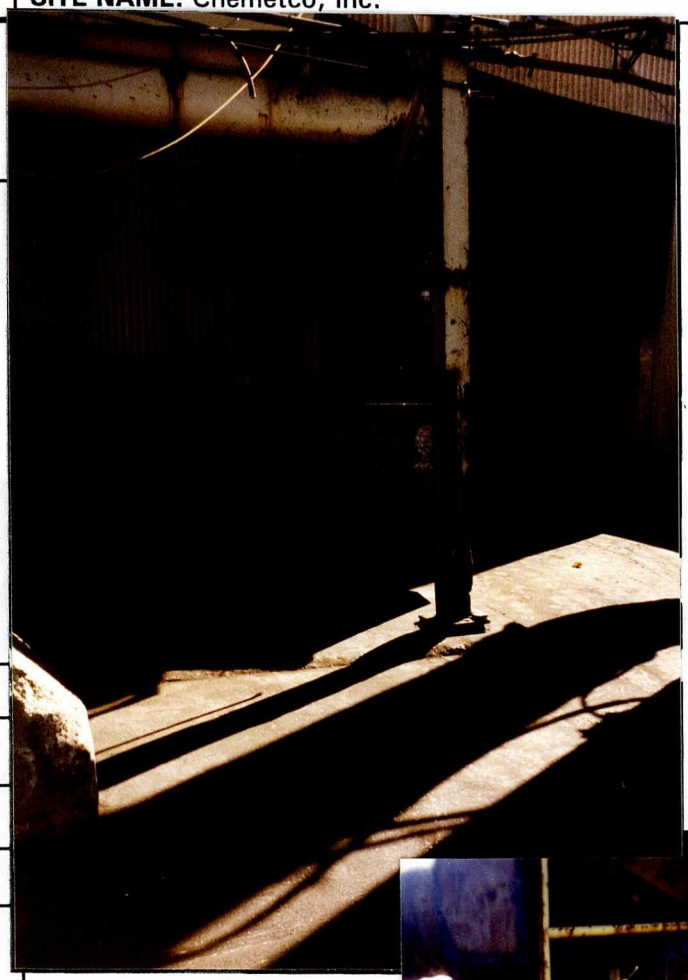
INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: East

ROLL#: 3345 **PHOTO#:** 9



DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3345 **PHOTO#:** 10

CNC:jlb

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: North

ROLL#: 3345 **PHOTO#:** 11

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3345 **PHOTO#:** 12

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3346 **PHOTO#:** 1a

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: East

ROLL#: 3346 **PHOTO#:** 2a

CNC:jlb

FOS

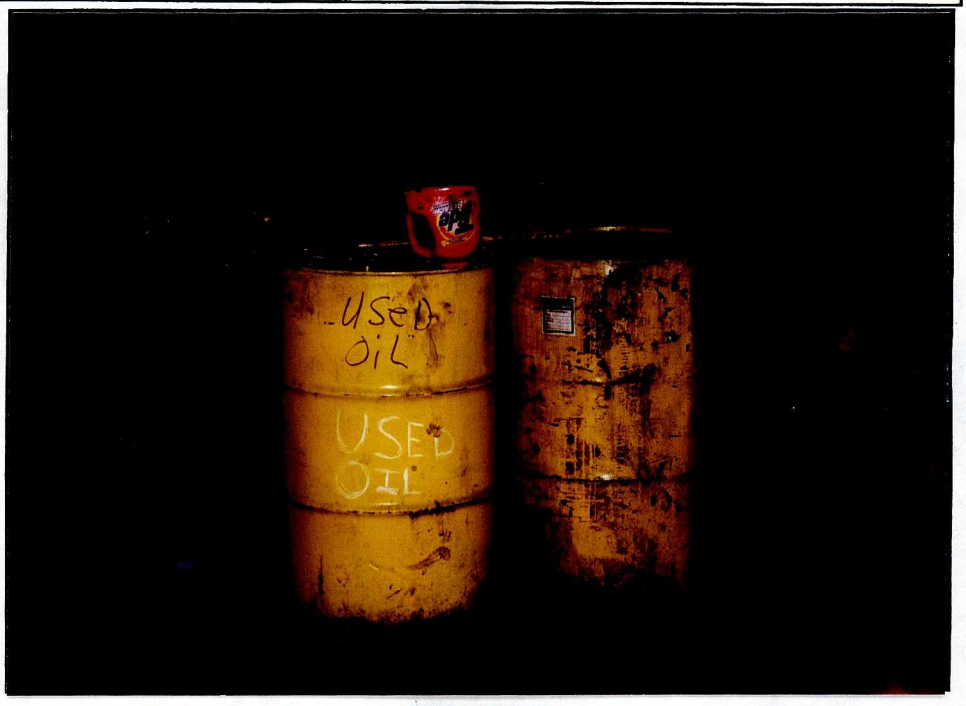
INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: West

ROLL#: 3346 **PHOTO#:** 3a



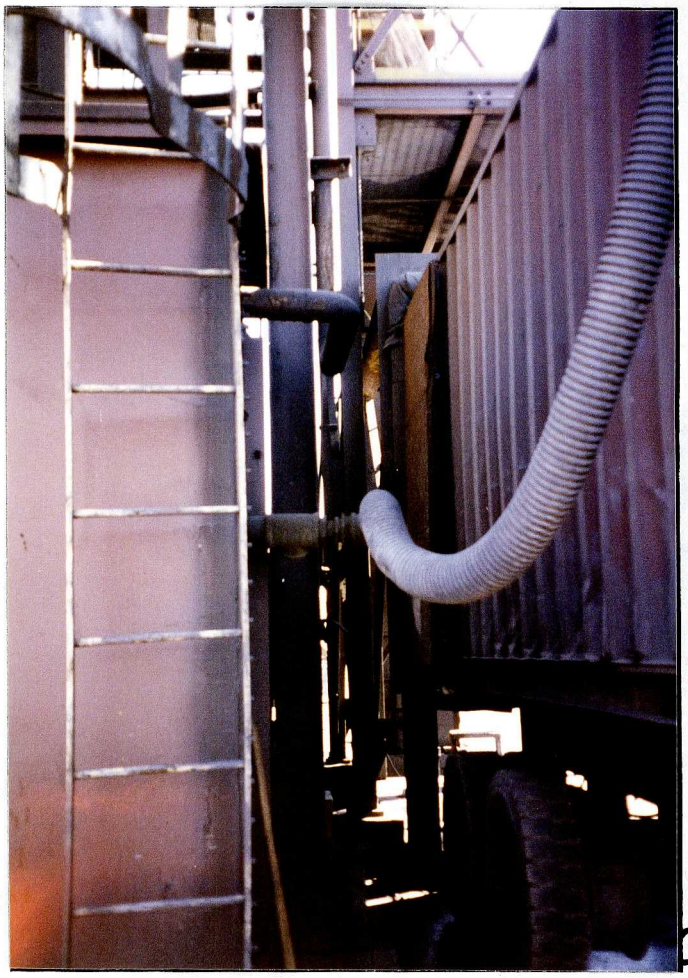
DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: East

ROLL#: 3346 **PHOTO#:** 4a



CNC:jlb

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southeast

ROLL#: 3346 **PHOTO#:** 5a

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Southwest

ROLL#: 3346 **PHOTO#:** 6a

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3346 **PHOTO#:** 7a

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3346 **PHOTO#:** 8a

CNC:jlb

FOS

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3346 **PHOTO#:** 9a

DATE: 10/22/98	
TIME: 9:10-1:15	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: South

ROLL#: 3346 **PHOTO#:**10a

CNC:jlb

INSPECTION PHOTOS

DATE: 10/22/98	**SITE #:** 1 1 9 8 0 1 0 0 0 3	**CO.:** Madison
TIME: 9:10-1:15	**SITE NAME:** Chemetco, Inc.	

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3346 **PHOTO#:**12a

DATE: 10/22/98

TIME: 9:10-1:15

PHOTOGRAPH TAKEN BY: Chris Cahnovsky

COMMENTS: Pictures taken toward: Northwest

ROLL#: 3346 **PHOTO#:**11a

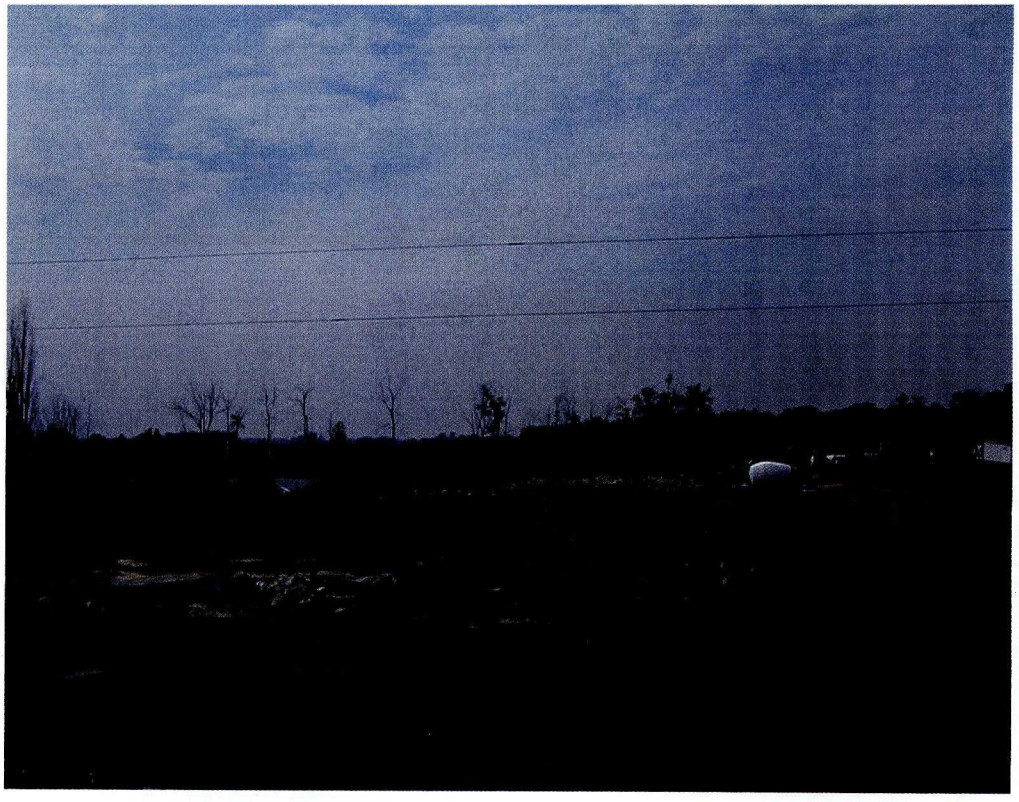
CNC:jlb

LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 17, 2000
TIME: 9:30 – 9:45
DIRECTION: East
PHOTO by:C. Cahnovsky
PHOTO FILE NAME:
1198010003~05172000-001

DATE: May 17, 2000
TIME: 9:30 – 9:45
DIRECTION: Southeast
PHOTO by:C. Cahnovsky
PHOTO FILE NAME:
1198010003~05172000-002



LPC # 1198010003 – Madison County
Hartford/Chemetco, Inc.
FOS File

DIGITAL PHOTOGRAPH PHOTOCOPIES

DATE: May 17, 2000
TIME: 9:30 – 9:45
DIRECTION: Southeast
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05172000-003

DATE: May 17, 2000
TIME: 9:30 – 9:45
DIRECTION: Southeast
PHOTO by: C. Cahnovsky
PHOTO FILE NAME:
1198010003~05172000-004

INSPECTION PHOTOS

DATE: 04 / 16 / 98	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 11:00-3:30 p	SITE NAME: Hartford/Chemetco

PHOTOGRAPH TAKEN BY: Gina Gasch

COMMENTS: Pictures taken toward: Southeast

ROLL #: 3231 PHOTO #: 3

DATE: 04 / 16 / 98	
TIME: 11:00-3:30p	

PHOTOGRAPH TAKEN BY: Gina Gasch

COMMENTS: Pictures taken toward: Southeast

ROLL #: 3231 PHOTO #: 4

GRS:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

INSPECTION PHOTOS

DATE: 04 / 16 / 98	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 11:00-3:30 p	SITE NAME: Hartford/Chemetco

PHOTOGRAPH TAKEN BY: Gina Dersch

COMMENTS: Pictures taken toward: East

ROLL #: 3231 PHOTO #: 5

DATE: 04 / 16 / 98	
TIME: 11:00-3:30p	

PHOTOGRAPH TAKEN BY: Gina Dersch

COMMENTS: Pictures taken toward: North

ROLL #: 3231 PHOTO #: 6

GRS:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

INSPECTION PHOTOS

DATE: 04 / 16 / 98	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 11:00-3:30 p	SITE NAME: Hartford/Chemetco

PHOTOGRAPH TAKEN BY: Gina Dasch

COMMENTS: Pictures taken toward: North

ROLL #: 3231 PHOTO #: 7

DATE: __ /__ /__	
TIME:	
PHOTOGRAPH TAKEN BY:	
COMMENTS: Pictures taken toward:	
ROLL #:	PHOTO #:

NO PHOTO

GRS:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

INSPECTION PHOTOS

DATE: 04 / 21 / 97	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 1:45-2:35	SITE NAME: Chemetco, Inc.
PHOTOGRAPH TAKEN BY:	
COMMENTS: Pictures taken toward: South	
ROLL #: 3021 PHOTO #: 8	

DATE: 04 / 21 / 97	
TIME: 1:45-2:35	
PHOTOGRAPH TAKEN BY:	
COMMENTS: Pictures taken toward: North	
ROLL #: 3021 PHOTO #: 9	

CNC:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

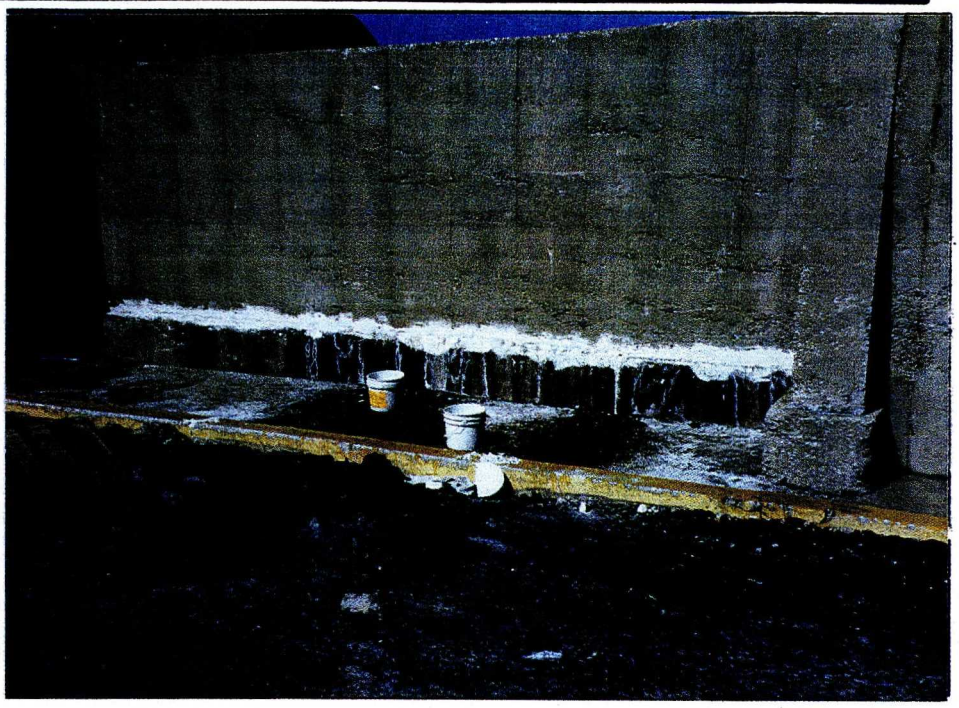
INSPECTION PHOTOS

DATE: 04 / 16 / 97	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 9:50-10:30	SITE NAME: Chemetco, Inc.

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: West

ROLL #: 3021 PHOTO #: 1



DATE: 04 / 16 / 97

TIME: 9:50-10:30

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: West

ROLL #: 3021 PHOTO #: 2

CNC:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

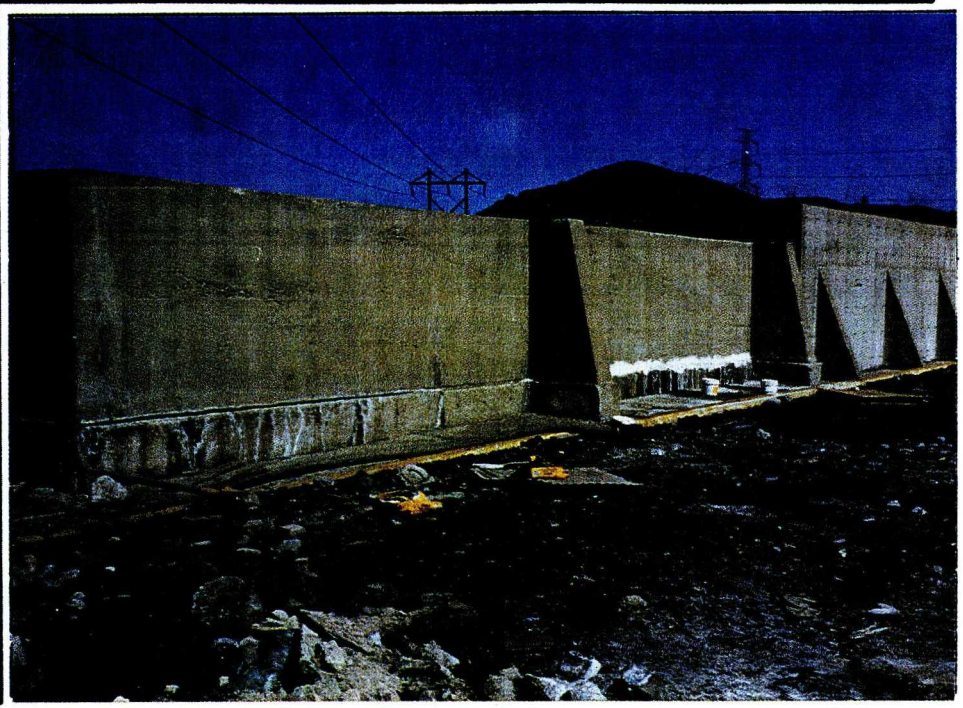
INSPECTION PHOTOS

DATE: 04 / 16 / 97	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 9:50-10:30	SITE NAME: Chemetco, Inc.

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: Northwest

ROLL #: 3021 PHOTO #: 3



DATE: __ /__ /__	
TIME:	
PHOTOGRAPH TAKEN BY:	
COMMENTS: Pictures taken toward:	
ROLL #:	PHOTO #:

NO PHOTO

CNC:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

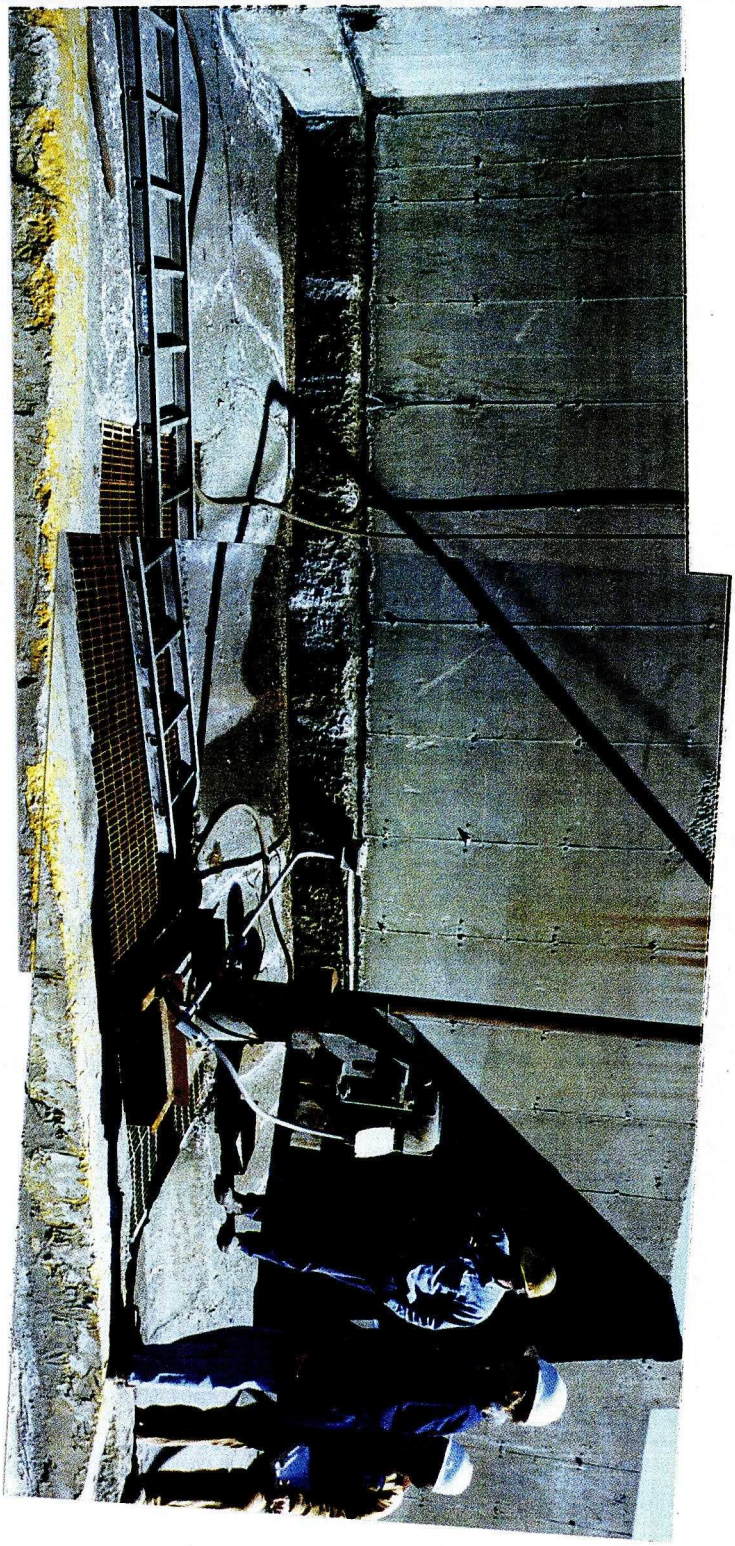
INSPECTION PHOTOS

DATE: 04 / 16 / 97	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 9:50-10:30	SITE NAME: Chemetco, Inc.

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: North.

ROLL #: 3021 PHOTO #: 4



DATE: 04/ 16 / 97	
TIME: 9:50-10:30	

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: North

ROLL #: 3021 PHOTO #: 5

CNC:jlb

FOS

IL 532 1910
LPC 375 08/90

Printed on Recycled Paper

INSPECTION PHOTOS

DATE: 04 / 21 / 97	SITE #: 1 1 9 8 0 1 0 0 0 3 CO.: Madison
TIME: 1:45-2:35	SITE NAME: Chemetco, Inc.

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: South

ROLL #: 3021 PHOTO #: 6

DATE: 04/ 21 /97	
TIME: 1:45-2:35	

PHOTOGRAPH TAKEN BY:

COMMENTS: Pictures taken toward: South

ROLL #: 3021 PHOTO #: 7

CNC:jlb

FOS

IL 532 1910
LPC 375 08/90

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: ILD048843809 IEPA ID #: 1198010003

Facility Name: Chemetco, Inc. Phone #: 618/254-4381

Location: Hwy 3, Box 187 County: Madison

City: Hartford State: Illinois Zip Code: 62048

Region: Collinsville Inspection Date: 06/12/97 Time: 10:00-12:50

Weather: Cloudy-Light Drizzle

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

CEI: ___ CME/O&M: ___ CSI: ___ NRR: ___ F/U to: 09/18/96 CC: ___ PIF: ___ CVI: ___ CSE: ___ Other: ___

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11/17/80 (initial) ___/___/___ (subsequent)

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08/15/80 Amended: 07/03/90 Withdrawn: ___/___/___

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03/03/93 Post Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: ___/___/___ IAGO: 11/01/93 County State's Attorney: ___/___/___

ACTIVE ENFORCEMENT ORDERS

CACO: ___/___/___ CAFO: ___/___/___ Federal Court Order: ___/___/___

Consent Decree: ___/___/___ IPCB Order: ___/___/___ State Court Order: 06/30/88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Annual Report 1993 1994 1995
S03*	Y	Y	Y	N	Y	N	Y / Y / Y
D83**	Y	Y	Y	N	Y	N	N / N / N
D83**	Y	Y	Y	N	Y	N	N / N / N
D83**	Y	Y	Y	N	Y	N	N / N / N
D83***	N	N	Y	N	Y	N	N / N / N
S03****							/ /
Zinc Oxide Bunker							/ /
**Zinc Oxide pits, Floor wash water impoundment, Cooling water canals							/ /
***Newly discovered Zinc Oxide disposal in surface impoundment							/ /
****Refractory Brick wash pile & Slag Fines waste pile							/ /

GROUP EXHIBIT A-5

		OPERATOR	
Name: Chemetco, Inc.		Name:	
Address: Hwy 3, Box 187		Address:	
City: Hartford		City:	
State: Illinois	Zip Code: 62048	State:	Zip Code:
Phone #: 618/254-4381		Phone #:	

PERSON(S) INTERVIEWED	TITLE	PHONE #
Greg Cotter	Env. Coordinator	618/254-4381
Dave Hoff	President	618/254-4381
Bruce Hendrickson	General Manager	618/254-4381
Cindy Davis	CSD Environmental	618/254-4381

INSPECTION PARTICIPANTS	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/DLPC	618/346-5120
Kevin Lesko	IEPA/BOL-Permits	217/524-3271
Jeff Benbenek	IEPA/BOA	618/346-5120
Sarah Phelps	IEPA/BOA	618/346-5120

PREPARED BY	AGENCY/DIVISION	PHONE #
Chris Cahnovsky	IEPA/DLPC	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X	AREA	SECTION	X	AREA	SECTION	X
	21(a)	X	DPP	724.131	X	DFR	724.245	X
	21(d)(1)-(2)	X	DCP	724.151	X	DSI	724.321(c)	X
	21(e)	X	DCP	724.156(a)	X	DSI	724.321(g)	X
	21(f)	X	DCP	724.156(j)	X	DSI	724.321(h)	X
	21(p)(1)-(4)	X	DMR	724.173	X	DSI	724.323(a)	X
DCR	703.121(a)	X	DMR	724.174	X	DSI	724.326	X
DCR	703.121(b)	X	DMR	724.175	X	DPP	725.131	X
DCR	703.151(a)	X	DMR	72 .177	X	DSI	725.353(a)	X
GGR	722.111	X	DGW	724.190(a)	X	GLB	728.107(a)	X
GGR	722.141(b)	X	DGW	724.191(a)	X	GIDLB	728.135	X
DGS	724.114(a)	X	DGW	724.197(a)	X	GIDLB	728.139	X
DGS	724.114(b)	X	DCL	724.212(a)	X		807.201	X
DGS	724.114(c)	X	DFR	724.242	X		807.202	X
D[illegible]	724.115(a)	X	DFR	724.243	X		808.121(a)	X
DGS	724.115(b)	X	DFR	724.244	X	DGS	725.115(c)	X

X = Continuing Violation

SUMMARY OF APPARENT VIOLATIONS

AREA	SECTION	X
DGW	725.190(b)	X
GWM	725.194(a)(2)	X
	12(d)	X
DWP	724.351(a)	X
DWP	724.351(c)	X
DWP	724.351(d)	X
DWP	724.351(f)	X
DWP	724.354	X
DWP	724.358(a)	X
DWP	724.358(c)	X

AREA	SECTION	X

AREA	SECTION

X = Continuing Violation

1198010003 - Madison County
Chemetco, Inc.
Date of Inspection: May 20, 1997
Prepared by: Chris Cahnovsky

NARRATIVE

On the dates of May 20, 1997 and June 12, 1997, I conducted a Compliance Evaluation Inspection at Chemetco, Inc., in Hartford, Illinois. Present during the May 20, 1997 inspection were Keven Lesko, BOL-Permits Section, Sarah Phelps, BOA-FOS and myself representing the Illinois Environmental Protection Agency. Representing Chemetco were Dave Hoff, President, Bruce Hendrickson, General Manager, Greg Cotter, Environmental Coordinator and Cindy Davis of CSD Environmental. Present during the June 12, 1997, inspection was Jeff Benbenek, BOA, Greg Cotter and myself.

The May 20, 1997 inspection was conducted as a result of a May 7, 1997 phone call from Cindy Davis to the Collinsville Regional Office. On this date, Ms Davis informed me that the sample results of the slag taken on April 7, 1997 showed lead levels of about 50 mg/l. She stated that these fines are from the screening process used to screen the old slag and the new slag into shingle material. These fines are the unusable fines from the shingle making process. She also stated that she believed it was possible that the whole slag pile might be a RCRA unit. This is due to Chemetco dumping the unusable slag fines on the existing slag pile. I told her that Chemetco must control the wind dispersion of these slag fine and stop them from blowing onto the Beottcher's property. I also told her to stop the water from flowing off the slag pile.

During the May 20, 1997 inspection, Mr. Dave Hoff explained the difference between old and new slag and how it relates to the shingle material. According to Mr. Hoff the old slag, air cooled, and the new slag, water cooled, is sent to the shingle plant (Granulated Slag Drying and Screening). The shingle plant sizes the slag into a particle that is acceptable to the shingle manufacturers. Slag that is too fine to make shingles (undersize <30 mesh) is truck up on top of the slag pile and dumped. Per Mr. Hoff, the manufacturers do not want these fines to make shingles. I sampled the unusable fines from the shingle plant on April 7, 1997. The purpose for sampling these fines was because I observed the similar fines on the property of Ann and Robert Beottcher. It appeared that these fines had blown off the pile and landed on property the Beottcher's property. The results of the Agency's samples showed lead at 75.0 mg/l, TCLP. Chemetco's duplicate sample results of the slag showed lead levels at 64.9 mg/l, TCLP. The TCLP limit for lead is 5.0 mg/l.

The slag fines from the shingle process have been dumped in numerous locations on the existing slag pile. Per Mr. Hoff, Chemetco has shut down the sizing plant regarding the air cool slag (old slag). The plant is only processing the water cooled slag (new slag). I stated that in order for Chemetco to continue to run the plant, they would have to contain the fines and manage them as a waste. I explained that a hopper would have to be placed under the conveyer to collect the fines and the fines would have to be properly disposed. Ms. Davis said she would do this. We discussed on-site treatment pursuant to 728.107(a)(4) and the use of the slag as a substitute for sand in the production of concrete panels.

On April 14, 1997, I observed these slag fines blowing off the pile and onto the neighboring property. In the May 7, 1997 phone conversation with Cindy Davis, I told her that Chemetco must control the wind dispersal of these fines. In response to this, Mr. Cotter stated that the north side of the slag pile has been partially spray with a dust suppressant called Coherex. He has stopped the use of Coherex because the Material Safety Data Sheet for Coherex show that it was carcinogenic. He is switching to a product called Pen-Suppress.

According to Ms. Davis, Chemetco is proposing to construct a concrete pad designed to control run off for the unusable slag fines. Also, Chemetco plans to remove the slag fines from the slag pile and place then in a lower protected spot for temporary holding. She said that she intends to resample the slag fines and if the fines are still hazardous then, Chemetco will apply for a Part B permit for the storage of the material.

During the plant tour, I observed the shingle plant. On the east side of the building the fines are dropped from a conveyer belt to an area with no containment. Fugitive dust emissions were observed from this conveyer operation. These are the same type of fines that were found to contain 75.0 mg/l of lead. According to Mr. Hoff, these fines are trucked to the top of the slag and dumped. It appears that this is true. The fines are also dumped at several other locations on the slag pile.

A BOA Construction and Operating Permit for the Granulated Slag Drying and Screening Process was issued on February 6, 1996. This permit is for the construction and operation of an Aztec rotary dryer with a wheelabrator baghouse. Chemetco has constructed and is operating a baghouse that is not covered by this permit or any other permit issued by the Agency. Per Chemetco's August 4, 1994 permit application, Mr. Hoff certified that only wet granulated slag is going to be used in this process. The permit states that "There are no other types of materials that will be processed through this unit as raw material." On May 20, 1997, Mr. Hoff told me that he was using both wet granulated slag and dry air cooled slag. This would be a violation of Chemetco's permit. Chemetco also stated in the permit that the slag fine conveyers would be covered and they are not. The conveyer that dumps the unusable fines out the building is not covered. I observed fines blowing off this conveyer. This is an apparent violation of 724.131.

On June 12, 1997, Jeff Benbenek, BOA and I returned to this site. While en route to the plant, we observed fugitive emissions coming from the slag screening process. Upon arrival to the site, we met with Greg Cotter. We told Mr. Cotter that we wanted to observe the slag screening process. By the time we got to the screening process, it had been shut down. I observed that the unusable fines were not being contained. I observed a pile about 20 feet by 20 feet by 15 feet high under the conveyer.

The granulated slag drying and screening process has two baghouses, one permitted and one not permitted. Under both baghouses are hoppers used to collect baghouse dust. These hoppers were observed open and dust was observed blowing out of the hoppers and onto the ground. Dust was also observed on the top of the foundation wall to the unpermitted baghouse. Dust was observed dumped on the slag pile along the north end of the slag screening building. Dust was observed dumped in a pit on the northeast side of the screening building next to the slag fines. The hinged door to the hopper under permitted baghouse could not even be closed. Large amounts of dust were observed around this dumpster and in the slag screening building. Only some baghouse dust is being containerized. The dust collection discharge shoot of the unpermitted baghouse that drops the dust to the hopper is about two feet above the open hopper. Dust was observed blowing out of this shoot. Chemetco has not done a waste analysis of the baghouse dust. This is an apparent violation of 722.111. The baghouse dust meets the definition of pollution control waste. Therefore, the dust is a solid waste and very possibly a hazardous waste. It appears that Chemetco is not attempting to clean up this dust or even trying to contain the dust. I asked Greg Cotter how Chemetco is managing the baghouse dust. He said it was being mixed with the fines and placed on the slag pile to make CA6. CA6 is a one-inch minus material used to road aggregate. Chemetco has not sold any CA6 road aggregate since 1995. Mr. Cotter later changed his storey and said that the dust and fines were being feed to the Dust Injection System.

In Chemetco's permit application they state that the baghouse fines will be stored in hoppers until Chemetco is ready to use them for aggregate production. According to Greg Cotter, the baghouse dust is dumped back on the large slag pile with the fines. Later Mr. Cotter said that the dust and fines were being feed into the Dust Injection System. I asked to see the DIS building. I asked Mr. Cotter to point out the dust and fines. He said he did not see any. According to Chemetco's permit, the permitted baghouse generates 749.635 pounds of dust per hour and the screening operation generates 4.4625 tons per hour of undersized fines. These numbers are based on maximum use at 8 hours/day, 5 days/week and 52 weeks/year. It is not known how much dust is generated from the unpermitted baghouse. According to Mr. Cotter, the screening operation runs about eight hours per day. So at least 39 tons of dust and fines are generated per day. The DIS system could not possibly handle this much volume along with Chemetco's normal feed rate to the DIS without stockpiling some of this material before processing. It appears that no fines or baghouse dust from the granulated slag drying and screening process is being feed into the DIS. On May 20, 1997, Mr. Hoff said that slag is not removed from the furnaces until all the zinc, copper and tin that can be removed are removed. This would suggest that adding slag to the DIS is not for metal recovery. The granulated slag drying and screening process began operation in March 1994. Using Chemetco's figures, at least 32,197 tons of baghouse dust and fines have been dumped on the slag pile.

Mr. Benbenek and I waited till Chemetco restarted the operation. Upon start up, fugitive emissions were observed from the dryer and the baghouses. From the unpermitted baghouse, I observed dust blowing from the dust collection discharge shoot. Some of this dust fell into the hopper, some fell to the ground and some was being dispersed by the wind. Dust had accumulated on the ground around the dumpster and on the top of the wall of the concrete foundation to the baghouse. Dust from the permitted baghouse was observed blowing out of the hopper into the building. Large amounts of dust were observed on the floor of the building and around the hopper. I observed a front-end loader collecting the fines from the conveyer system. Fugitive emissions were observed from this operation.

As a result of this inspection and the April 7, 1997 sample results, it appears that the fines from the granulated slag drying and screening process that are being deposited on the slag pile are a hazardous waste. Chemetco does not have a RCRA permit to store this waste in a waste pile. This waste is not protected from wind dispersion and Chemetco is not providing any run-on or run off protection from the slag pile. Also, no hazardous waste determination has been conducted on the baghouse dust. The following are violations observed during the May 20, 1997 and June 12, 1997 site visits.

1) 12(d) of the Act - Chemetco placed waste, slag fines, on the land in such a place or manner so as to cause a water pollution hazard. On April 8, 1997 and April 25, 1997 Agency personnel observed water flowing from the slag pile on to neighboring property.

2) 21(f)[1] of the Act, Chemetco conducted a hazardous waste-disposal operation without a RCRA Permit issued by the Agency and in violation of the Regulations and Standards of the Board. Chemetco disposed of slag fines from the shingle process in an unpermitted waste pile.

3) 703.121(a)[1] Chemetco disposed of a hazardous waste slag fines in an unpermitted waste pile without a RCRA permit issued by the Agency.

4) 703.121(b)[1] Chemetco failed to have a post-closure permit for the disposal of hazardous waste slag fines in a waste pile.

5) 703.151(a)[1] Chemetco failed to have obtained a Part B Permit before disposal of hazardous waste slag fines in a waste pile.

6) 722.111[1] Chemetco failed to make a hazardous waste determination of the unusable slag fines from the granulated slag drying and screening process. Chemetco also failed to make a hazardous waste determination on the dust from the two baghouses.

7) 724.131[1] Fugitive emissions of baghouse dust and fines were observed.

8) 724.212(a)[1] Chemetco failed to have a closure plan for a hazardous waste pile.

9) 724.351(a) Chemetco failed to design, construct and install a liner for the waste pile.

10) 724.351(c) Chemetco failed to design, construct, operate and maintain a run-on control system.

11) 724.351(d) Chemetco failed to design, construct, operate and maintain a run off control system. On April 8, 1997 and April 25, 1997 Agency personnel observed water flowing from the slag pile on to neighboring property.

12) 724.351(f) Chemetco failed to provide wind dispersal controls. On April 14, 1997, Agency personnel observed slag blowing off the pile and across Chemetco's fence line.

13) 724.354 Chemetco failed to conduct weekly inspections of the waste pile.

14) 724.358(a) Chemetco failed to have a closure plan for a hazardous waste pile.

15) 724.358(c) Chemetco failed to have a closure plan for a hazardous waste pile.

16) 728.135[1] Chemetco land disposed of third-third waste (D008) in violation of this Section.

17) 728.139[1] Chemetco land disposed hazardous waste (D008) in an unpermitted waste pile.

[1] These violations were previously cited because of a September 18, 1997 Compliance Evaluation Inspection. They are being cited again for the disposal of hazardous waste in an unpermitted waste pile.

CNC/CHEM18.CEI

DLPC SPECIAL ANALYSIS FORM

1980100003 - Madison
IEPA ID # County

Chemetco, Inc
Site Name

ILD048843808 Field Sample #: X301
USEPA ID #
FOS

Date Collected: 4-7-97 Time Collected: 1:21

Program Code: LP41 Unit Code: 5

Lab Location
Champaign X
Chicago
Springfield

Lab #: B7C52-15

Date Received: APR 08 1997

Time Received: 9A

Received By: pd

Sampling Purpose: (01-Sp. Req.) (02-DCI) (03-Emerg. Resp.) (04-Routine Sampling)

Source of Sample (Exact Location): Top of Slag pile on North side of Chemetco's property

Physical Observations, Remarks: fines from the slag screening operation
Black metallic fine particles
Black metallic fine particles

Tests Requested: Total and TCLP metals Copper & Zinc

RECEIVED
MAY 27 1997
I.E.P.A. / B.O.L.

Retain samples until released by responsible authority (Yes) (No)

Collected By: C Cahnovsky Transported By: LIPS

LABORATORY

Date Forwarded: 5/19/97

Laboratory Reviewer Signature:

RECEIVED
IEPA
MAY 30 1997
COLLINSVILLE OFFICE

Printed on Recycled Paper

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 3705244
SAMPLING POINT DESC. : CHEMETCO INC X101

SUBMITTING SOURCE # : 1198010003 SITE # : 1198010003
DATE COLLECTED : 970407 TIME COLLECTED : 1113 SAMPLING PROGRAM :

COLLECTED BY : C CAHNOSKY DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : LP41 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 970408 TIME RECEIVED : 0900 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : RPF NOTE : K = LESS THAN VALUE

A10000 PH,FINAL TCLP EXT UNITS : 5.2 P49134 MERCURY,TCLP SLD MG/L : 0.001K
P99023 MERCURY,SW84 D/WT MG/KG : 0.10K P49100 ANTIMONY,TCLP SLD MG/L : 0.012
P49099 ARSENIC,TCLP SLD MG/L : 0.01K P49101 BARIUM,TCLP SLD MG/L : 0.980
P49102 BERYLLIUM,TCLP SLD MG/L : 0.057 P49103 CADMIUM,TCLP SLD MG/L : 0.160

P49105 CHROMIUM,TCLP SLD MG/L : 0.005K P49109 LEAD,TCLP SLD MG/L : 3.5
P49112 NICKEL,TCLP SLD MG/L : 0.390 P49114 SELENIUM,TCLP SLD MG/L : 0.01K
P49115 SILVER,TCLP SLD MG/L : 0.005K P49118 THALLIUM,TCLP SLD MG/L : 0.01K
P49119 VANADIUM,TCLP SLD MG/L : 0.005K : COPPER,TCLP SLD MG/L 5.1

ZINC, TCLP SLD MG/L 74.0 P79581 CALCIUM,SW84 D/WT MG/KG : 7200
P79550 MAGNESIUM,SW D/WT MG/KG : 3400 P79705 SODIUM,SW846 D/WT MG/KG : 4100
P00937 POTASSIUM,SW D/WT MG/KG : 1900 P97545 ALUMINUM,SW8 D/WT MG/KG : 12000
P79547 ANTIMONY,SW8 D/WT MG/KG : 4.7K P79548 ARSENIC,SW84 D/WT MG/KG : 4.7K

P79550 BARIUM,SW846 D/WT MG/KG : 400 P79563 BORON,SW846 D/WT MG/KG : 230
P79556 BERYLLIUM,SW D/WT MG/KG : 31 P79580 CADMIUM,SW84 D/WT MG/KG : 8.1
P79591 CHROMIUM,SW8 D/WT MG/KG : 110 P79594 COPPER,SW846 D/WT MG/KG : 2000
P79593 COBALT,SW846 D/WT MG/KG : 75 P79645 IRON,SW846 D/WT MG/KG : 121000

P79649 LEAD,SW846 D/WT MG/KG : 4200 P79651 MANGANESE,SW D/WT MG/KG : 1700
P79671 NICKEL,SW846 D/WT MG/KG : 240 P79703 SELENIUM,SW8 D/WT MG/KG : 5
P79704 SILVER,SW846 D/WT MG/KG : 2.3K P79706 STRONTIUM,SW D/WT MG/KG : 56
P79712 THALLIUM,SW8 D/WT MG/KG : 4.7K P79722 VANADIUM,SW3 D/WT MG/KG : 23

P79726 ZINC,SW846 D/WT MG/KG : 37000

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IEPA
JUN 12 1997
COLLINSVILLE OFFICE

MIDCO INDUSTRIES
700 South Spring
St. Louis, Missouri 63110
314-776-5600
800-344-3134
Fax: 314-776-5529

Chemetco, Inc.
Rt. 3 at Chemetco Lane
Hartford, IL 62048

9-Apr-97

ATTN: Greg Cotter

Sample type: Slag

Analysis Requested: TCLP extraction, Pb analysis of extract

Preparation Method: Rotary Extraction

Analysis Method: Direction aspiration atomic absorption
Standard addition spike

Sample Identification	Pb, ppm
#3 4-7-97 fines	64.9

Approved by: Jane A. Burough
Laboratory Manager

TEKLAB, INC.

5445 HORSESHOE LAKE ROA
COLLINSVILLE, ILLINOIS 6223

VIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004
FAX. 618-344-1005

May 27, 1997

REPORT #20244

Ms. Sarah Phelps
IEPA
Division of Pollution Control, BOA
2009 Mall Street
Collinsville, IL 62234

Project: Water Quality Testing
119801/AAC/CHEMETCO

Sample Received: 05-20-97

Sample ID	1
Sample Date/Time	05-20-97/1600
Lab ID	970520-789

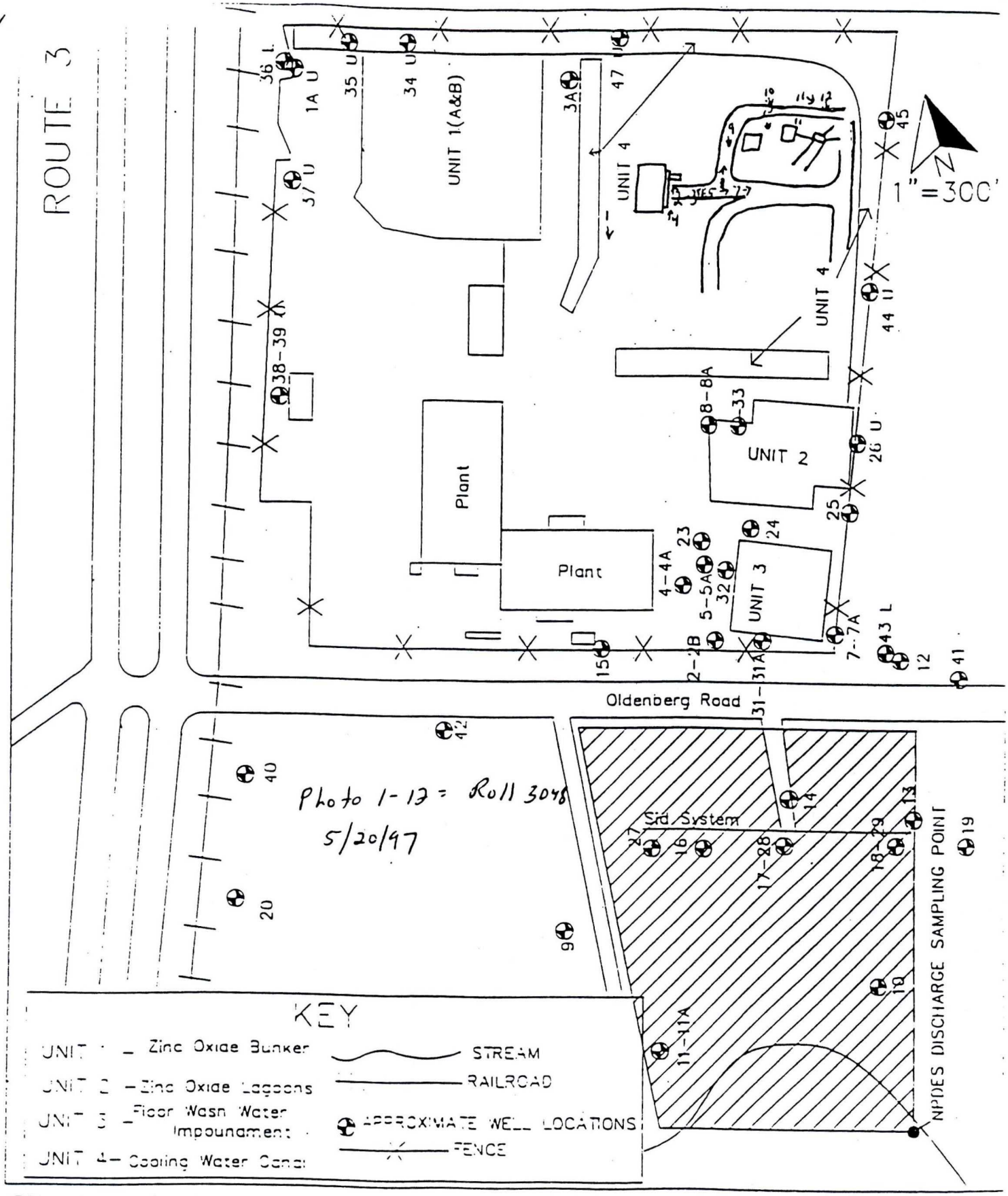
ANALYSIS RESULTS

PARAMETER	RESULT
pH	9.47
Lead, mg/l	9.86
Zinc, mg/l	22.3

These tests were conducted in accordance with Standard Methods for the Evaluation of Water and Wastewater, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 18th Edition, 1992.

TEKLAB INC.

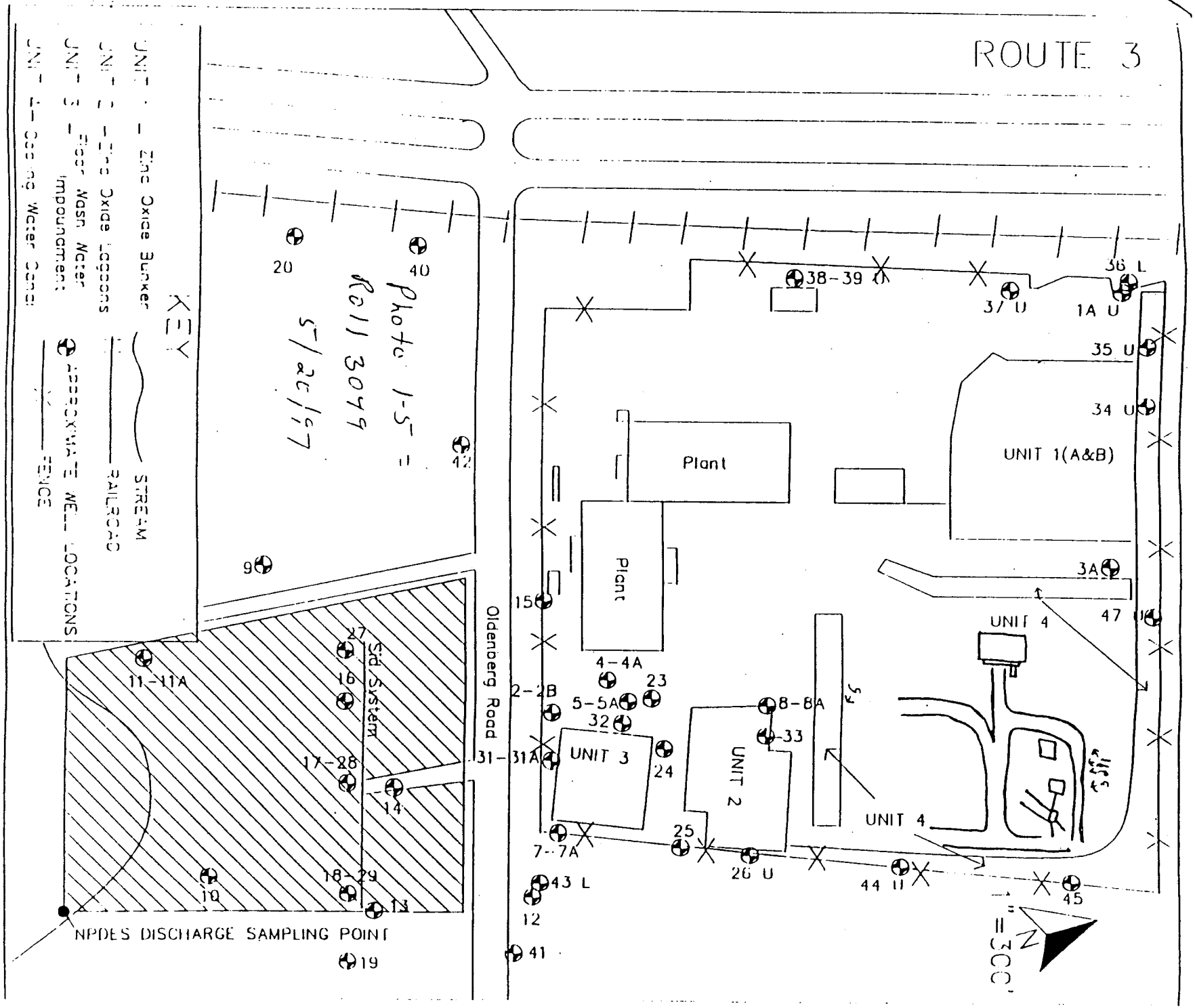
For Michael L. Austin
Michael L. Austin
Director of Operations

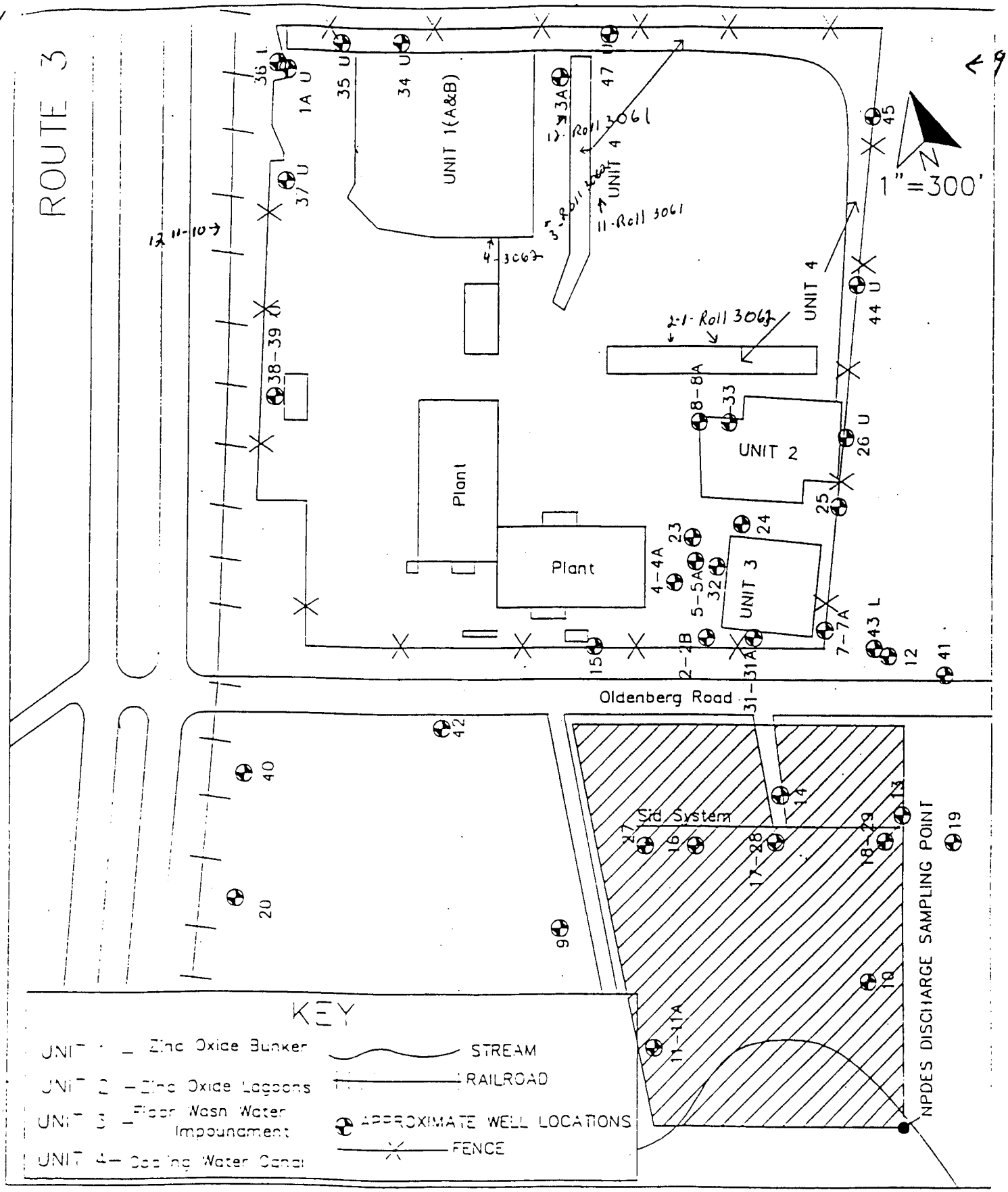


Site Location
SE 1/4 Sec. 16
T. 4 N. R. 9 W. of
the 3rd Principal
Madison Co.

CHEMETCO, INC.

Stormwater Runoff Line Drawing
Form 1 Item III Supplemental
NPDES Renewal Application


ROUTE 3
Photo 1-5 =
Roll 3049
5/26/97
KEY
UNIT 1 - Zinc Oxide Bunker
UNIT 2 - Zinc Oxide Lagoons
UNIT 3 - Floor Wash Water Impoundment
UNIT 4 - Cooling Water Canal
STREAM
RAILROAD
APPROXIMATE WELL LOCATIONS
FENCE
Plant
Plant
UNIT 1(A&B)
UNIT 3
UNIT 2
UNIT 4
UNIT 4
Oldenberg Road
3rd System
NPDES DISCHARGE SAMPLING POINT
38-39
36 L
37 U
1A U
35 U
34 U
3A
47
20
40
42
9
15
4-4A
23
2-2B
5-5A
32
8-8A
33
31-31A
24
17-28
14
11-11A
27
16
7-7A
25
26 U
44 U
45
43 L
12
41
10
18-29
13
19
N
SCC



Site Location

SE 1/4 Sec. 16
T. 4 N. R. 9 W. of
the 3rd Principal
Meridian in
Cook County, Illinois

CHEMETCO, INC.

Stormwater Runoff Line Drawing
Form 1 Item 11: Supplemental V
NPDES Renewal Application
[illegible]

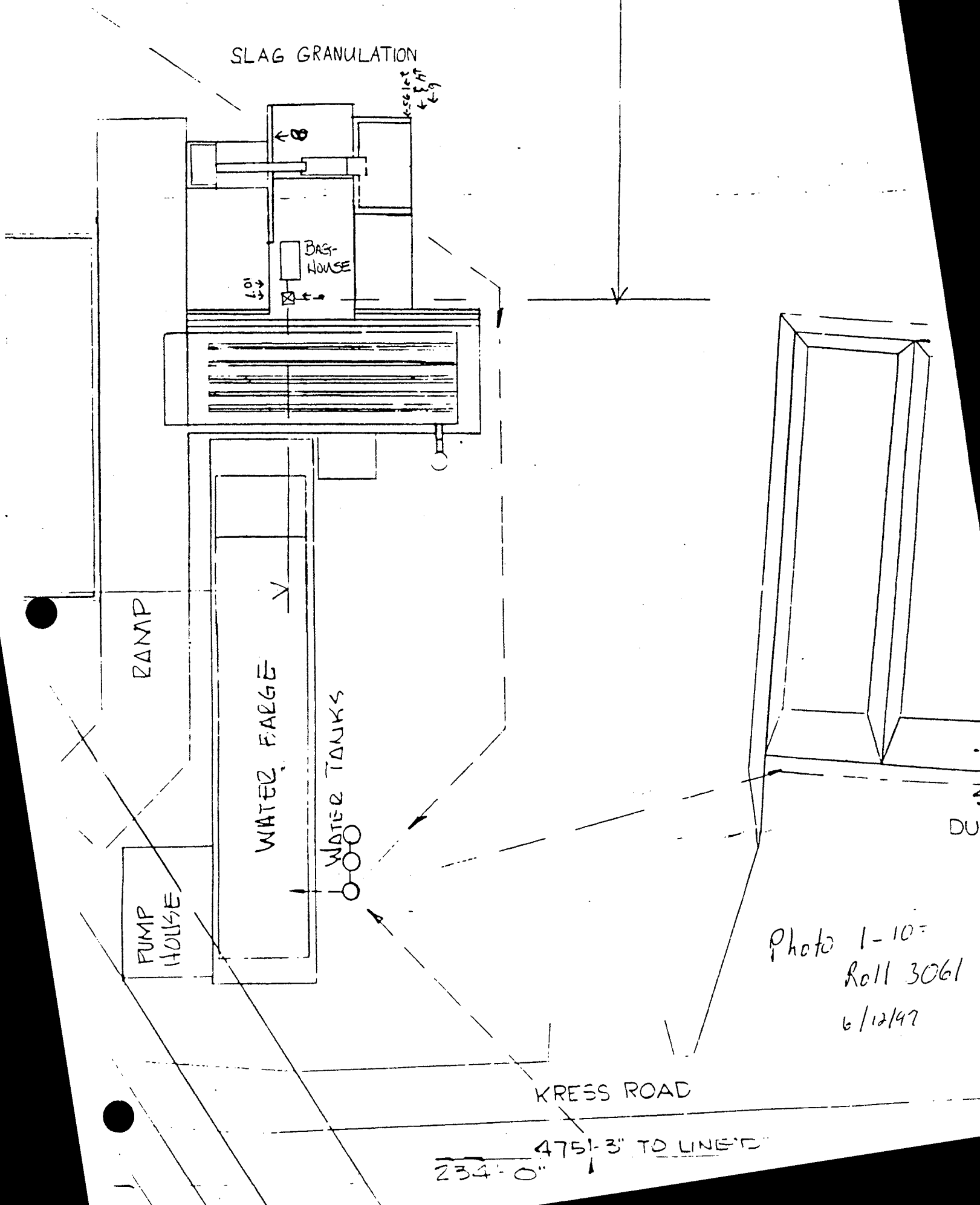
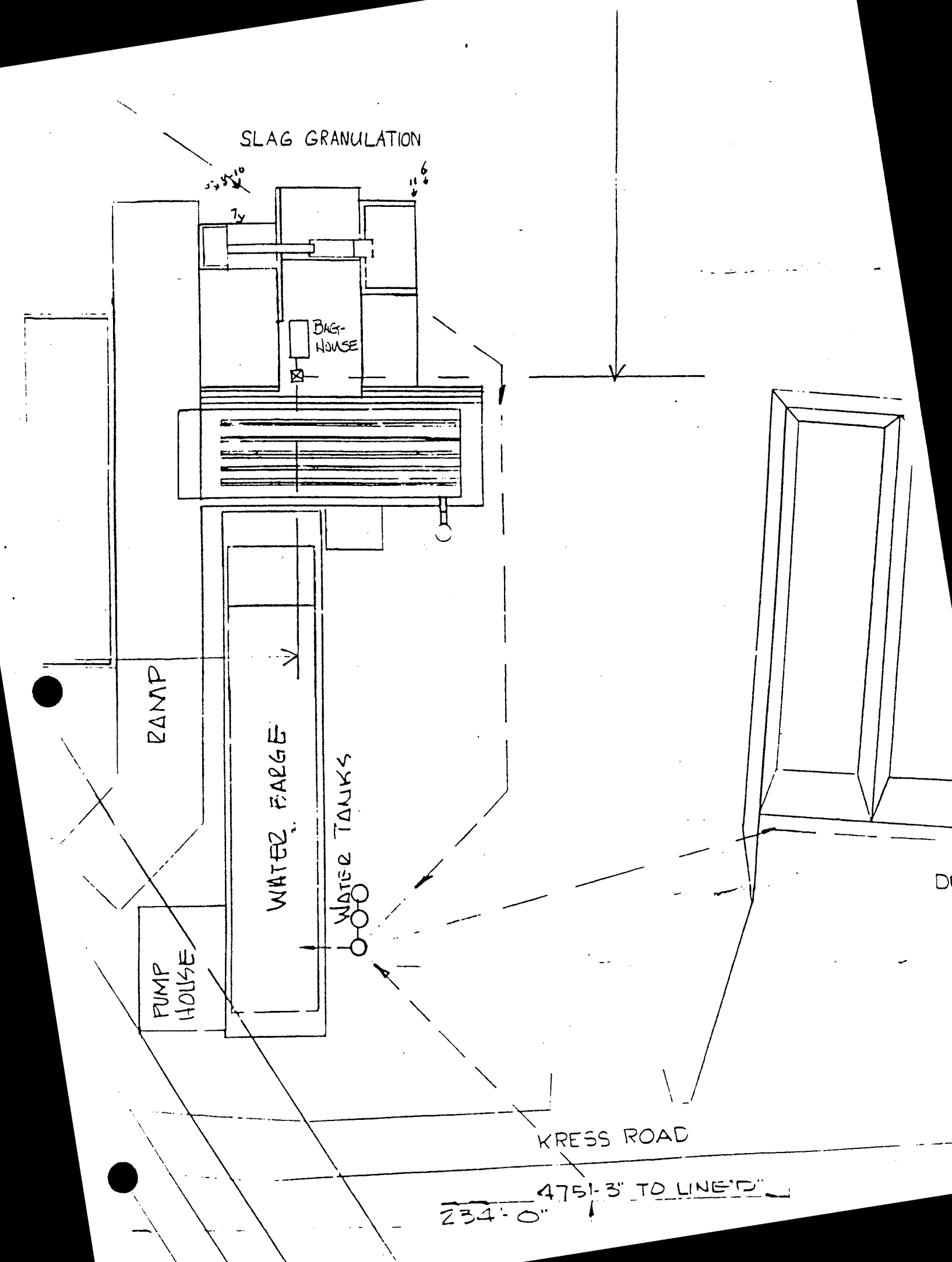


Photo 1-10
Roll 3061
6/12/97


SLAG GRANULATION
BAG-HOUSE
RAMP
WATER BARGE
WATER TANKS
PUMP HOUSE
KRESS ROAD
4751-3" TO LINE 'D'
234'-0"

Prairie Analytical Systems, Inc.

An Environmental and Agricultural Testing Laboratory

CSD Environmental Services, Inc.
2220 Yale Boulevard
Springfield, IL 62703

Date Sampled: 20 May 1997
Date Received: 21 May 1997
Date Analyzed: 23 May 1997
Date Reported: 27 May 1997

Project: Chemetco

PAS Project Code: CSD-167

Sample Description: E-W STW

PAS Sample No.: 9705212880

Total Metal Analysis

Analytes	Detection Limit mg/l	Result mg/l	E.P.A. Method
Lead	0.04	0.84	6010A
Zinc	0.002	0.97	6010A
pH (Units)	—	9.18	4500-H^+

Stephen R. Johnson, Laboratory Director

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Form PAS-RSLEAD1

Prairie Analytical Systems, Inc.

An Environmental and Agricultural Testing Laboratory

CSD Environmental Services, Inc.
2220 Yale Boulevard
Springfield, IL 62703

Date Sampled: 02 July 1997
Date Received: 03 July 1997
Date Analyzed: 11 July 1997
Date Reported: 14 July 1997

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707023673	9707023674

Toxic Pollutants & Total Phenols - Table 2F-3

Parameters	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Antimony, Total	0.03	0.07	0.03	6010A
Arsenic, Total	0.05	0.07	<0.05	6010A
Beryllium, Total	0.0003	<0.0003	<0.0003	6010A
Cadmium, Total	0.004	0.10	0.10	6010A
Chromium, Total	0.007	<0.007	<0.007	6010A
Copper, Total	0.006	1.31	0.67	6010A
Lead, Total	0.04	2.62	0.73	6010A
Mercury, Total	0.0002	0.0008	<0.0002	7470
Nickel, Total	0.015	<0.015	<0.015	6010A
Selenium, Total	0.075	0.30	<0.075	6010A
Silver, Total	0.007	<0.007	<0.007	6010A
Thallium, Total	0.04	<0.04	0.07	6010A
Zinc, Total	0.002	2.59	2.59	6010A
Cyanide	0.5	<0.5	<0.5	9010
Phenols	0.1	<0.1	<0.1	9067

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Prairie Analytical Systems, Inc.

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CSD Environmental Services, Inc. 2220 Yale Boulevard Springfield, IL 62703	Date Sampled: Date Received: Date Analyzed: Date Reported:	02 July 1997 03 July 1997 11 July 1997 14 July 1997
Project: Chemetco	PAS Project Code: CSD-181	
Sample Description: PAS Sample Number:	E-W Canal 9707023673	N-S Canal 9707023674

Volatile Organic Compounds - (Method 8260A) - Table 2F-3

Parameters	Detection Limit ug/l	Result ug/l	Result ug/l	E.P.A. Method
Acrolein	10	<10	<10	8260A
Acrylonitrile	10	<10	<10	8260A
Benzene	5	<5	<5	8260A
Bromoform	5	<5	<5	8260A
Carbon Tetrachloride	5	<5	<5	8260A
Chlorobenzene	5	<5	<5	8260A
Chlorodibromomethane	5	<5	<5	8260A
Chloroethane	5	<5	<5	8260A
2-Chloroethylvinyl Ether	5	<5	<5	8260A
Chloroform	5	<5	<5	8260A
Dichlorobromomethane	5	<5	<5	8260A
1,1-Dichloroethane	5	<5	<5	8260A
1,2-Dichloroethane	5	<5	<5	8260A
1,1-Dichloroethene	5	<5	<5	8260A
1,2-Dichloropropane	5	<5	<5	8260A
1,3-Dichloropropylene	5	<5	<5	8260A
Ethylbenzene	5	<5	<5	8260A
Methyl Bromide	5	<5	<5	8260A
Methyl Chloride	5	<5	<5	8260A
Methylene Chloride	5	<5	<5	8260A
1,1,2,2-Tetrachloroethane	10	<10	<10	8260A
Tetrachloroethylene	5	<5	<5	8260A
Toulene	5	<5	<5	8260A

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An Environmental and Agricultural Testing Laboratory

Project No.: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number	9707023673	9707023674

Volatile Organic Compounds - (Method 8260A) - Table 2F-3(Cont.)

Parameters	Detection Limit ug/l	Result ug/l	Result ug/l	E.P.A. Method
1,2-trans-Dichloroethylene	5	<5	<5	8260A
1,1,1-Trichloroethane	5	<5	<5	8260A
1,1,2-Trichloroethane	5	<5	<5	8260A
Trichloroethylene	5	<5	<5	8260A
Vinyl Chloride	10	<10	<10	8260A
Surrogates	Recovery Limit	% Recovery	% Recovery	
1,2-Dichloroethane d4	80-120%	93%	93%	
4-Bromofluorobenzene	80-120%	93%	94%	
Toluene d8	80-120%	99%	99%	

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Date Sampled: 02 July 1997
Date Received: 03 July 1997
Date Analyzed: 11 July 1997
Date Reported: 14 July 1997

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707023673	9707023674

8270 Base/Neutral/Acid Extractable Compounds - Table 2F-3

Analytes	Detection Limit ug/l	Result ug/l	Result ug/l	E.P.A. Method
2-Chlorophenol	10	<10	<10	8270B
2,4-Dimethylphenol	10	<10	<10	8270B
2,4-Dinitrophenol	50	<50	<50	8270B
4,6-Dinitro-O-Cresol	50	<50	<50	8270B
2,4-Dinitrophenol	50	<50	<50	8270B
2-Nitrophenol	50	<50	<50	8270B
4-Nitrophenol	50	<50	<50	8270B
p-Chloro-M-Cresol	50	<50	<50	8270B
Pentachlorophenol	50	<50	<50	8270B
Phenol	10	<10	<10	8270B
2,4,5-Trichlorophenol	10	<10	<10	8270B
Acenaphthene	10	<10	<10	8270B
Acenaphthylene	10	<10	<10	8270B
Anthracene	10	<10	<10	8270B
Benzidine	10	<10	<10	8270B
Benzo (a) Anthracene	10	<10	<10	8270B
Benzo (a) Pyrene	10	<10	<10	8270B
3,4-Benzofluoranthene	10	<10	<10	8270B
Benzo (g,h,i) Perylene	10	<10	<10	8270B
Benzo (k) Fluoranthene	10	<10	<10	8270B
Bis (2-chloroethoxy) Methane	10	<10	<10	8270B
Bis (2-chloroethyl) Ether	10	<10	<10	8270B
Bis (2-chloroisopropyl) Ether	10	<10	<10	8270B
Bis (2-ethylhexyl) Phthalate	10	<10	<10	8270B
4-Bromophenyl Phenyl Ether	10	<10	<10	8270B

Project No.: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707023673	9707023674

8270 Base/Neutral/Acid Extractable Compounds - Table 2F-3(Cont.)

Parameters	Detection Limit ug/l	Result ug/l	Result ug/l	E.P.A. Method
Butyl Benzyl Phthalate	10	<10	<10	8270B
2-Chloronaphthalene	10	<10	<10	8270B
4-Chlorophenyl Phenyl Ether	10	<10	<10	8270B
Chrysene	10	<10	<10	8270B
Dibenzo (a,h) Anthracene	10	<10	<10	8270B
1,2-Dichlorobenzene	10	<10	<10	8270B
1,3-Dichlorobenzene	10	<10	<10	8270B
1,4-Dichlorobenzene	10	<10	<10	8270B
3,3'-Dichlorobenzidine	20	<20	<20	8270B
Diethyl Phthalate	10	<10	<10	8270B
Dimethyl Phthalate	10	<10	<10	8270B
Di-N-Butylphthalate	10	<10	<10	8270B
2,4-Dinitrotoluene	10	<10	<10	8270B
2,6-Dinitrotoluene	10	<10	<10	8270B
Di-N-Octyl Phthalate	10	<10	<10	8270B
1,2-Diphenylhydrazine	10	<10	<10	8270B
Fluoranthene	10	<10	<10	8270B
Fluorene	10	<10	<10	8270B
Hexachlorobenzene	10	<10	<10	8270B
Hexachlorobutadiene	10	<10	<10	8270B
Hexachloroethane	10	<10	<10	8270B
Indeno (1,2,3-c,d) Pyrene	10	<10	<10	8270B
Isophorone	10	<10	<10	8270B
Naphthalene	10	<10	<10	8270B
Nitrobenzene	10	<10	<10	8270B
N-Nitrosodimethylamine	10	<10	<10	8270B
N-Nitrosodi-N-propylamine	10	<10	<10	8270B
N-Nitrosodiphenylamine	10	<10	<10	8270B

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An Environmental and Agricultural Testing Laboratory

Project No.: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707023673	9707023674

8270 Base/Neutral/Acid Extractable Compounds - Table 2F-3(Cont.)

Parameters	Detection Limit ug/l	Result ug/l	Result ug/l	E.P.A. Method
Phenanthrene	10	<10	<10	8270B
Pyrene	10	<10	<10	8270B
1,2,4-Trichlorobenzene	10	<10	<10	8270B
Surrogates	Recovery Limit	% Recovery	% Recovery	
Nitrobenzene d5	35-114%	56%	65%	
Terphenyl d14	33-141%	80%	107%	
2-Fluorobiphenyl	43-116%	87%	77%	
Phenol d6	10-94%	69%	27%	
2-Fluorophenol	21-100%	90%	54%	
2,4,6-Tribromophenol	10-123%	104%	107%	

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Springfield, IL 62703

Date Sampled: 02 July 1997
Date Received: 03 July 1997
Date Analyzed: 11 July 1997
Date Reported: 14 July 1997

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707033673	9707033674

Pesticides - Table 2F-3

Parameters	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Aldrin	0.004	<0.004	<0.004	8081
alpha-BHC	0.003	<0.003	<0.003	8081
beta-BHC	0.006	<0.006	<0.006	8081
delta-BHC	0.009	<0.009	<0.009	8081
gamma-BHC (Lindane)	0.004	<0.004	<0.004	8081
Chlordane	0.014	<0.014	<0.014	8081
4,4'-DDD	0.011	<0.011	<0.011	8081
4,4'-DDE	0.004	<0.004	<0.004	8081
4,4'-DDT	0.012	<0.012	<0.012	8081
Dieldrin	0.002	<0.002	<0.002	8081
Alpha-Endosulfan	0.014	<0.014	<0.014	8081
Beta-Endosulfan	0.004	<0.004	<0.004	8081
Endosulfan Sulfate	0.066	<0.066	<0.066	8081
Endrin	0.006	<0.006	<0.006	8081
Endrin Aldehyde	0.023	<0.023	<0.023	8081
Heptachlor	0.003	<0.003	<0.003	8081
Heptachlor Epoxide	0.083	<0.083	<0.083	8081
Toxaphene	0.240	<0.240	<0.240	8081
Aroclor 1016	0.050	<0.050	<0.050	8081
Aroclor 1221	0.065	<0.065	<0.065	8081
Aroclor 1232	0.065	<0.065	<0.065	8081
Aroclor 1242	0.065	<0.065	<0.065	8081
Aroclor 1248	0.090	<0.090	<0.090	8081

Prairie Analytical Systems, Inc.

An Environmental and Agricultural Testing Laboratory

Project: Chemecto

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707033673	9707033674

Pesticides - Table 2F-3 (Cont.)

Analyte	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Aroclor 1254	0.10	<0.10	<0.10	8081
Aroclor 1260	0.10	<0.10	<0.10	8081
Aroclor 1262	0.10	<0.10	<0.10	8081
Aroclor 1268	0.10	<0.10	<0.10	8081

Surrogates	Recovery Limit	% Recovery	% Recovery
2,4,5,6-Tetrachloro-m-xylene	35-114%	75%	
Dibutyl Chlorendate	35-114%	91%	

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Date Sampled: 02 July 1997
Date Received: 03 July 1997
Date Analyzed: 11 July 1997
Date Reported: 14 July 1997

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707033673	9707033674

Hazardous Substances - Table 2F-4

Parameters	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Acetaldehyde	0.110	<0.110	<0.110	8315
Allyl alcohol	---	ND	ND	8260A
Allyl chloride	---	ND	ND	8260A
Aniline	0.010	<0.010	<0.010	8270B
Benzyl chloride	0.005	<0.005	<0.005	8121
Butylamine	0.010	<0.010	<0.010	8260A
Carbaryl	0.002	<0.002	<0.002	8318
Carbofuran	0.002	<0.002	<0.002	8318
Carbon disulfide	0.005	<0.005	<0.005	8260A
Chloropyrifos	0.001	<0.001	<0.001	8321
Coumaphos	0.001	<0.001	<0.001	8321
Cresol	0.001	<0.001	<0.001	8270B
Crotonaldehyde	0.006	<0.006	<0.006	8315
Cyclohexane	0.006	<0.006	<0.006	8315
2,4-D	0.029	<0.029	<0.029	8321
Diazinon	0.001	<0.001	<0.001	8321
Dicamba	0.054	<0.054	<0.054	8321
Dichlobenil	---	ND	ND	8081
Dichlone	---	ND	ND	8270
2,2-Dichloropropionic acid	---	ND	ND	8270
Dichlorvos	0.001	<0.001	<0.001	8321
Diethyl amine	---	ND	ND	8260A
Dimethyl amine	---	ND	ND	8260A

Prairie Analytical Systems, Inc.

An Environmental and Agricultural Testing Laboratory

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707033673	9707033674

Hazardous Substances - Table 2F-4 (Cont.)

Analyte	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Dinitrobenzene	0.010	<0.010	<0.010	8090
Diquat	—	ND	ND	549.1
Disulfoton	0.001	<0.001	<0.001	8321
Diuron	0.001	<0.001	<0.001	8270B
Epichlorohydrin	0.001	<0.001	<0.001	8260A
Ethion	0.001	<0.001	<0.001	8270B
Ethylene diamine	0.001	<0.001	<0.001	8260A
Ethylene dibromide	0.001	<0.001	<0.001	8260A
Formaldehyde	0.001	<0.001	<0.001	8315
Furfural	0.001	<0.001	<0.001	8270B
Guthion	0.001	<0.001	<0.001	8270B
Isoprene	0.001	<0.001	<0.001	8270B
Isopropanolamine	---	ND	ND	8270B
Kelthane	—	ND	ND	8270B
Kepone	—	ND	ND	8270B
Malathion	0.001	<0.001	<0.001	8270B
Marcaptodimethur	---	ND	ND	8270B
Methoxychlor	0.057	<0.057	<0.057	8270B
Methyl mercaptan	0.001	<0.001	<0.001	8270B
Methyl methacrylate	0.001	<0.001	<0.001	8260A
Methyl parathion	0.001	<0.001	<0.001	8321
Mevinphos	0.001	<0.001	<0.001	8321
Mexacarbate	---	ND	ND	8270B
Monomethyl amine	---	ND	ND	8270B
Naled	0.001	<0.001	<0.001	8321
Nitrotoluene	0.001	<0.001	<0.001	8321
Parathion	0.001	<0.001	<0.001	8270B
Phenolsulfonate	---	ND	ND	8270B
Propargite	---	ND	ND	8270B

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An Environmental and Agricultural Testing Laboratory

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707033673	9707033674

Hazardous Substances - Table 2F-4 (Cont.)

Analyte	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Pyrethrins	—	ND	ND	8081
Quinoline	—	ND	ND	8270B
Resorcinol	—	ND	ND	8270B
Strontium	0.0005	<0.0005	<0.0005	6010A
Styrene	0.005	<0.005	<0.005	8260A
2,4,5-T	0.034	<0.034	<0.034	8321
2,4,5-TP	0.034	<0.034	<0.034	8321
Trichlorofon	—	ND	ND	8321
Triethylamine	—	ND	ND	8270B
Uranium	0.01	<0.01	<0.01	6010A
Vanadium	0.008	<0.008	<0.008	6010A
Vinyl acetate	0.005	<0.005	<0.005	8260A
Xylene	0.005	<0.005	<0.005	8260A
Xylenol	0.005	<0.005	<0.005	8260A
Zirconium	0.01	<0.01	<0.01	6010A

ND = Not Detected on the Total Ion Chromatogram

Stephen R. Johnson, Laboratory Director

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Prairie Analytical Systems, Inc.

An Environmental and Agricultural Testing Laboratory

CSD Environmental Services, Inc.
2220 Yale Boulevard
Springfield, IL 62703

Date Sampled: 02 July 1997
Date Received: 03 July 1997
Date Analyzed: 11 July 1997
Date Reported: 14 July 1997

Project: Chemetco

PAS Project Code: CSD-181

Sample Description:	E-W Canal	N-S Canal
PAS Sample Number:	9707023673	9707023674

Conventional & Nonconvential Pollutants Table 2F-2

Parameters	Detection Limit mg/l	Result mg/l	Result mg/l	E.P.A. Method
Aluminum, Total	0.045	0.40	0.20	6010A
Barium, Total	0.010	0.03	0.04	6010A
Boron, Total	0.100	8.6	11.0	6010A
Bromide	1.0	529	506	4110
Chlorine, Total Residual	0.1	<0.1	<0.1	4500 Cl
Cobalt, Total	0.100	<0.100	<0.100	6010A
Fluoride	0.10	263	94	4110
Iron, Total	0.020	2.1	6.2	6010A
Magnesium, Total	0.005	11.6	20.0	6010A
Molybdenum, Total	0.10	1.2	0.7	6010A
Nitrate-Nitrite	0.10	1.1	<0.1	4110
Nitrogen, Total Kjedahl	1.0	3.3	2.4	4500 -N_{ORG}
Oil & Grease	1.0	7	<1.0	5520
Phosphorus	0.05	1.2	0.61	4500 -P
Sulfate	1.0	3234	3572	4110
Sulfide	0.1	<0.1	<0.1	4500 -S^{2-}
Sulfite	0.1	<0.1	<0.1	4500 - SO_3^{2-}
Surfactants	0.025	0.265	0.221	5540C
Tin, Total	0.02	0.03	<0.02	6010A
Titanium, Total	0.01	<0.01	<0.01	6010A
Fecal Coliform (Colonies/100ml)	---	<1.0	<1.0	9221

/Stephen R. Johnson Laboratory Director

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF LAND/FIELD OPERATIONS SECTION

RCRA INSPECTION REPORT

GENERAL FACILITY INFORMATION

USEPA ID #: I L D 0 4 8 8 4 3 8 0 9 IEPA ID #: 1 1 9 8 0 1 0 0 0 3

Facility Name: Chemetco, Inc. Phone #: 618/254-4381

Location: Hwy 3, Box 187 County: Madison

City: Hartford State: Illinois Zip Code: 62048

Region: Collinsville Inspection Date: 4/7/97 Time: 10:00-1:30

Weather: 4/8/97 · 8:45-9:30 + 4/14/97-2:00-2:4

TYPE OF FACILITY

Notified As: G/TSD Regulated As: G/S/D

TYPE OF INSPECTION

CEI: ___ CME/O&M: ___ CSI: ___ NRR: ___ F/U to: __/__/__ CC: ___ PIF: ___ CVI: ___ CSE: ___ Other: X (Samp

NOTIFICATION INFORMATION (EPA 8700-12)

Notification Date: 11/ 17/ 80 (initial) __/__/__ (subseque

PART A PERMIT INFORMATION (EPA 3510-3)

Part A Date: 08/ 15/ 80 Amended: 07 /03 / 90 Withdrawn: __/__/__

PART B PERMIT INFORMATION

Part B Submitted/Issued (circle one): 03/ 03/ 93 Post Closure

ACTIVE ENFORCEMENT

Has the company been referred to: USEPA: __/__/__ IAGO: 11/ 01 / 93 County State's Attorney: __/__/__

ACTIVE ENFORCEMENT ORDERS

CACO: __/__/__ CAFO: __/__/__ Federal Court Order: __/__/__

Consent Decree: __/__/__ IPCB Order: __/__/__ State Court Order: 06 / 30 / 88

TSD FACILITY ACTIVITY SUMMARY

Activity by Process Code	On Part A?	On Part B?	Activity ever done?	Closed?	Being done during insp?	Exempt per 35 IAC Sec:	On Ann Repo 1993 / 1994
S03*	Y	Y	Y	N	Y	N	Y / Y
D83**	Y	Y	Y	N	Y	N	N / N
D83**	Y	Y	Y	N	Y	N	N / N
D83**	Y	Y	Y	N	Y	N	N / N
D83***	N	N	Y	N	Y	N	N / N
							/
*Zinc Oxide Bunker							/
**Zinc Oxide pits, Floor wash water impoundment, Cooling water canals							/
***Newly discovered Zinc Oxide disposal in surface impoundment							/
							/

RECEIVED APR 30 1997 IEPA-DLPC

SCREENED

OWNER		OPERATOR	
iemetco, Inc.		Name:	
Hwy 3, Box 187		Address:	
Hartford		City:	
Illinois	Zip Code: 62048	State:	Zip Code:
#: 618/254-4381		Phone #:	

RSON(S) INTERVIEWED	TITLE	PHONE #
Greg Cotter	Env. Coordinator	618/254-4381

PECTION PARTICIPANTS	AGENCY/DIVISION	PHONE #
ris Cahnovsky	IEPA/DLPC	618/346-5120
n Mensing	IEPA/DLPC	618/346-5120
ck Mahlandt	IEPA/DWPC	618/346-5120

PARED BY	AGENCY/DIVISION	PHONE #
ahnovsky	IEPA/DLPC	618/346-5120

SUMMARY OF APPARENT VIOLATIONS

SECTION	X
21(a)	X
21(d)(1)-(2)	X
21(e)	X
21(f)	X
21(p)(1)-(4)	X
703.121(a)	X
703.121(b)	X
703.151(a)	X
722.111	X
722.141(b)	X
724.114(a)	X
724.114(b)	X
724.114(c)	X
724.115(a)	X
724.115(b)	X

AREA	SECTION	X
DPP	724.131	X
DCP	724.151	X
DCP	724.156(a)	X
DCP	724.156(j)	X
DMR	724.173	X
DMR	724.174	X
DMR	724.175	X
DMR	72 .177	X
DGW	724.190(a)	X
DGW	724.191(a)	X
DGW	724.197(a)	X
DCL	724.212(a)	X
DFR	724.242	X
DFR	724.243	X
DFR	724.244	X

AREA	SECTION	X
DFR	724.245	X
DSI	724.321(c)	X
DSI	724.321(g)	X
DSI	724.321(h)	X
DSI	724.323(a)	X
DSI	724.326	X
DPP	725.131	X
DWP	725.353(a)	X
GLB	728.107(a)	X
GIDLB	728.135	X
GIDLB	728.139	X
	807.201	X
	807.202	X
	808.121(a)	X
DGS	725.115(c)	X

nuing Violation

SUMMARY OF APPARENT VIOLATIONS

A	SECTION	X		AREA	SECTION	X	AREA	SECTION	X
	725.190(b)	X	X						
M	725.194(a)(2)	X	X						

ntinuing Violation