EPA Region 5 Records Ctr.
298229

RECEIVED
Program
Support Section

Site Inspection Report

Sandoval Zinc Company
Marion County
LPC 1210500002 ILD 053 980454

EPA 1210500002

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	053 987 454

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Sandoval Zinc Company	Smelter Road & Highway 51

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Sandoval	IL	62882	Marion	121	IL-22

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
38 36 43.0	89 26 28.0	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
05 12 87	☐ ACTIVE ☒ INACTIVE	1885 / 1986 ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ___ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER ___ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Greg Dunn	LSCT	IEPA	(217) 782-6761
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Rich Lange	EPS	IEPA	(217) 782-6761
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Mr. Dwight Friedrich	owners agent	800 E. Noleman Centralia IL 62801	(618) 532-2212
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:30 am	Partly Sunny, Warm ≈ 80°, slight breeze

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Dennis Newman	IEPA	(217) 782-6761

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Gregory W. Dunn	IEPA	RPMS	(217) 782-6761	08 10 87

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053980454

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [X] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

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

- TONS _____
- CUBIC YARDS 2222
- NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	Unknown	CY	Wastewater scrubber sludge
OLW	OILY WASTE			Lagoon dimensions are
SOL	SOLVENTS			100 ft by 150 ft by 4ft deep
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown	CY	Wastes produced on-site

IV. HAZARDOUS SUBSTANCES (Use Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (Use Appendix for CAS Numbers)

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

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

Soil Samples taken on 4/9/87
Site Inspection 5/12/87

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053 980454

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ≈200
04 NARRATIVE DESCRIPTION
Contamination of the shallow aquifer in the area is likely. Heavy metal infiltration into ground water could contaminate it due to the shallowness of the aquifer and the depth of the metal-rich cinders underneath the plant.

01 [X] B. SURFACE WATER CONTAMINATION — 02 [X] OBSERVED (DATE: 1987) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: UNKNOWN
04 NARRATIVE DESCRIPTION
Sediment samples taken on-site show levels of Zinc above background. Also, levels of Iron, Copper, Nickel, Mercury and lead are above background levels.

01 [X] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: UNKNOWN
04 NARRATIVE DESCRIPTION
It is know that the facility has had past trouble with air emissions. It is thought that heavy metal cinders and ash were deposited on the surrounding land by the stack emissions, but its inconclusive at this time.

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: ____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____
04 NARRATIVE DESCRIPTION

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: UNKNOWN
04 NARRATIVE DESCRIPTION
The site is easily accessible. No barrier blocking entrance and most buildings are accessible. Only inaccessible building was the office, but the windows were broken, so someone could crawl through the windows.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 1987) — [ ] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: ≈15 (Acres)
04 NARRATIVE DESCRIPTION
Soil samples taken on site indicate high levels of Zinc, Lead, Iron, Copper and Nickel.

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ≈200
04 NARRATIVE DESCRIPTION
Contamination of the shallow aquifer could contaminate the drinking wells used by area residents.

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: ____) — [ ] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ____
04 NARRATIVE DESCRIPTION

01 [ ] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: ____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____
04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: ILD
02 SITE NUMBER: 053980454

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 [X] OBSERVED (DATE 1987) — [ ] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Fields to the North and South of the site had little if any growth. These areas stretched approximately 75 yards from the borders of the facility.

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

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

01 [ ] M. UNSTABLE CONTAINMENT OF WASTES — 02 [ ] OBSERVED (DATE _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 [X] N. DAMAGE TO OFFSITE PROPERTY — 02 [X] OBSERVED (DATE 1987) — [ ] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Damage to nearby lands, caused by run-off from the facility, has created areas of no vegetation.

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

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

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: ≥200

IV. COMMENTS
Sandoval Zinc had an Air Permit (#121214AA3) for its zinc operations. On August 12, 1986 Sandoval withdrew the permit.

V. SOURCES OF INFORMATION
Site Inspection 5/12/87
Soil Samples taken 4/9/87
Sediment Samples taken 3/30/87

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	053980454

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☒ C. AIR	121 814 AAB	1970	1986	Permit Withdrawn By request of Company
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	UNKNOWN	CY
☐ B. PILES		
☒ C. DRUMS, ABOVE GROUND	UNKNOWN	GA
☒ D. TANK, ABOVE GROUND	UNKNOWN	GA
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCINERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE: ≈15 (Acres)

07 COMMENTS
Surface Impoundment held scrubber wastewater from the plant. The wastewater was known to be high in zinc and other heavy metals. Tank on-site probably held some type of fuel, but it is unknown. The drums are found all over the site. Only two are known to contain any contents.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☒ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.
Drums are found all over site in all types of positions.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS
All buildings on-site are easily accessible. Every building has an open door to enter any building.

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

Site inspection 5/12/87
1982 Cooperative Groundwater Report #9 Illinois State Water Survey and Illinois State Geological Survey.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: ILD
02 SITE NUMBER: 053980454

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. [X]	B. [ ]
NON-COMMUNITY	C. [ ]	D. [X]

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. [ ]	B. [ ]	C. [ ]
D. [ ]	E. [ ]	F. [ ]

03 DISTANCE TO SITE
A. 5.0 (mi)
B. 0.45 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)
[X] A. ONLY SOURCE FOR DRINKING
[ ] B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
[ ] C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
[ ] D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 500
03 DISTANCE TO NEAREST DRINKING WATER WELL: 0.45 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
7 (ft)	WSW	18 (ft)	unknown (gpm)	[ ] YES [X] NO

09 DESCRIPTION OF WELLS (including wells, depth, and chemical records to monitoring and municipal)
Sec. 8, T2N, R1E SE,SE,SE 20 feet deep, drinking water
Sec 8, T2N, R1E NE,NW,NE 20 feet deep drinking
Sec 9 T2N R1E NE,NW,NW 27 ft deep drinking
Sec 16, T2N, R1E SE,SE,SE 13-14 ft drinking
Sec 16 T2N, R1E NW,NE,NE 15 ft drinking
Sec 16 T2N, R1E SE,SE,SW 14 ft drinking

10 RECHARGE AREA
[ ] YES
[X] NO
COMMENTS

11 DISCHARGE AREA
[ ] YES
[X] NO
COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)
[ ] A. RESERVOIR, RECREATION DRINKING WATER SOURCE
[ ] B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
[ ] C. COMMERCIAL, INDUSTRIAL
[X] D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
Prairie Creek	[ ]	0.5 (mi)
	[ ]	(mi)
	[ ]	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 1799 (no. of persons)	B. 2126 (no. of persons)	C. 3631 (no. of persons)

02 DISTANCE TO NEAREST POPULATION: 0.28 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: ≈600
04 DISTANCE TO NEAREST OFF-SITE BUILDING: 0.14 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site (e.g., the villages, density, distribution, other areas)
The City of Sandoval is less than 1/2 mile away from site. West Side of site is a rural village (Sandoval). North, South and East of site is rural farm land.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053980454

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☒ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
65 (ft)	≈ 20 (ft)	3.4 - 8.0*

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
+5 (in)	2.5-3.0 (in)	≈ 2.0 %	East Southeast	5.5 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

None (mi)

ENDANGERED SPECIES: None

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 1/4 (mi)	B. ≈ 1/2 (mi)	C. ≈ 1 (mi)	D. 1/5 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

A Railroad track runs to the North of the Site. The track is even with the topography on the west side but is about 10 feet higher on the east side. Two drainage ditches run, one either side of the plant, toward the south. (The drainage ditch on the east is more like a stream) The stream on the east runs through part of the cinders that underlie the plant. The South side of the site is farmland that is relatively flat.

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

*-Soil pH came from 1982 Cooperative Groundwater Report #9, Retention of Zinc, Cadmium, Copper and lead by Geologic Materials, Illinois State Water Survey and Illinois State Geological Survey Centralia East, IL 7.5 Quadrangle

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	053980454

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	3	Envirodyne Engineers Inc.	June 15, 1987
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	4	Envirodyne Engineers Inc.	June 15, 1987
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF IEPA Southern Region & Springfield Office

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS IEPA Southern Region & Springfield Office

V. OTHER FIELD DATA COLLECTED

VI. SOURCES OF INFORMATION

Illinois EPA Land Files.

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053980454

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Mr. Albert Haas	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE
Chicago	IL	

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER
Leonard Wheill	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

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

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
FLD	053 980454

II. CURRENT OPERATOR		OPERATOR'S PARENT COMPANY	
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER		

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)		PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)	
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD		
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD		
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD		

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

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053980454

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

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

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053980454

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053980454

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

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

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	053 980454

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

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

Site Inspection of 5/12/87

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: August 14, 1987

TO: Division File

FROM: Gregory W. Dunn GWD

SUBJECT: L1210500002--Marion County
Sandoval/Sandoval Zinc Company
Superfund/HRS

Narrative Summary

A site inspection was conducted on May 12, 1987 at the Sandoval Zinc Company by Greg Dunn and Rich Lange of the PA/SI Unit. The plant is located east of Sandoval, in the SE¼, NE¼ of Section 17, Township 2 North, Range 1 East, Marion County, Illinois. The plant initially processed zinc ore in 1890 and was converted to a secondary zinc smelter about 1915. Wastes produced prior to 1970 consisted of heavy metal-rich cinders and ashes, which were used for fill material around the plant building.

In order to comply with air pollution regulations, a scrubber was installed on the plant stack in 1970. The wastewater from the scrubber was disposed in a lagoon (on the southeast corner of the site) constructed from the cinders produced by past plant operations. The scrubber wastewater was allowed to seep into the ground until a sludge-like material remained. After a large amount of sludge had accumulated, the sludge was reprocessed for zinc recovery or allowed to dry before being sold to fertilizer companies. The lagoon was in use close to 10 years and measured 100 feet wide, 150 feet long by 4 feet deep.

The plant was almost completely destroyed by fire on June 27, 1972. The fire began at 10:00 a.m. when an oil line, that feeds the furnaces, broke and spilled oil onto the plant grounds. The fire destroyed all but (2) two buildings. The buildings were rebuilt and operations continued until 1985. On December 19, 1986, Sandoval Zinc Company's charter in the State of Illinois was dissolved.

During the inspection, 3 monitor wells were sampled and 4 sediment samples were taken. The sediment samples were taken in the east side stream (S101 and S102) and in the ditch on the west side of the facility (S201 and S202). Monitor wells G101, G102, and G103 were the monitor well sample points.

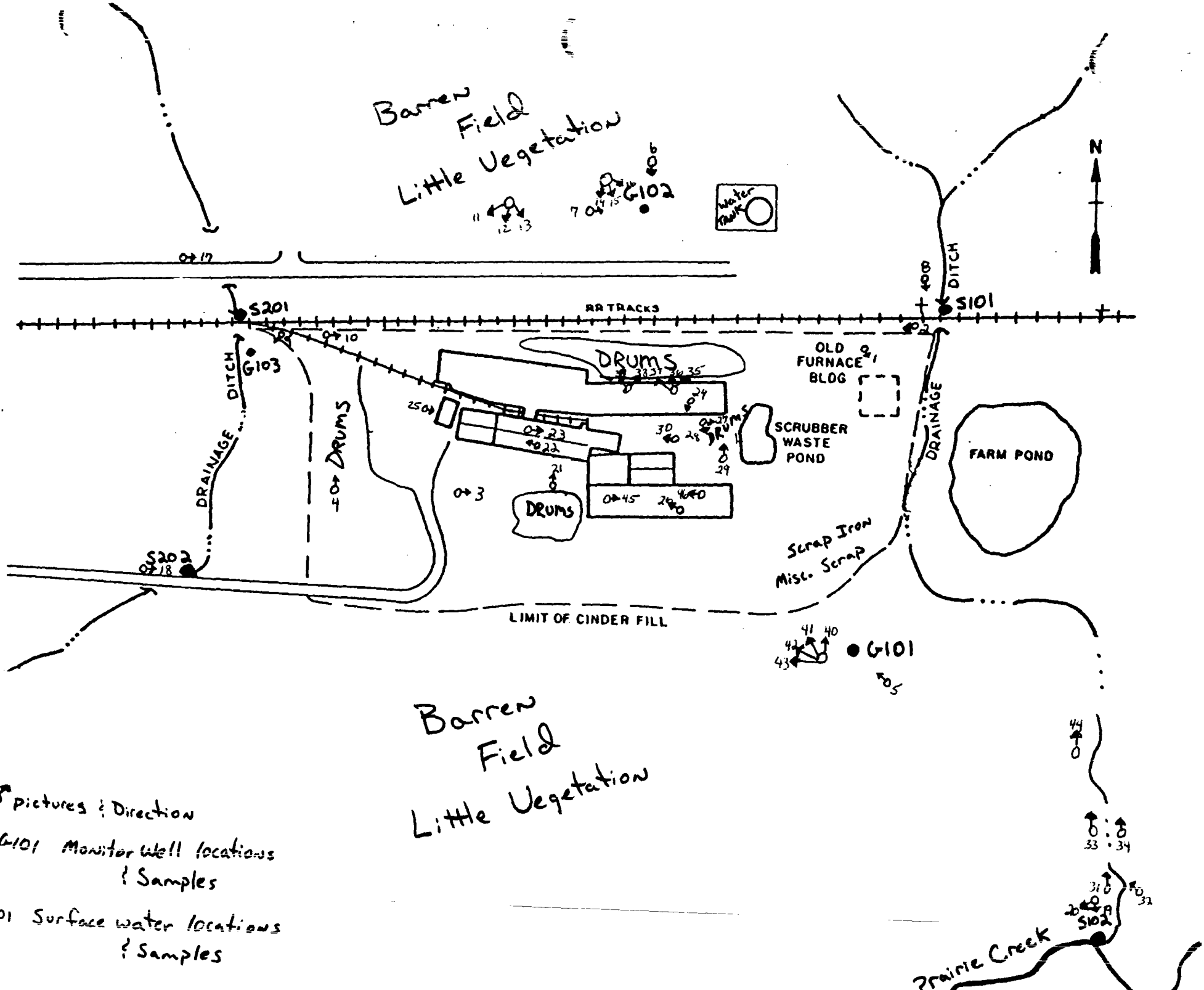
After the samples were taken and evidence taped, a walk through of all buildings was initiated. Every building, except the office, is easily accessible through open doors. Two drums, with an oily appearance, were found in the southernmost building on the southeastern part of the site. Other buildings contained crushed drums, old machinery and 3 to 4 inches of dust. Departure of the site was at 6:30 p.m.

Rich Lange of the PA/SI Unit returned to the site on May 23, 1987 to retrieve papers that were scattered on the floors. Among the collected papers are O.S.H.A. violations, employee blood level results for lead, and analyses on incoming or outgoing loads of materials.

An owner of the Sandoval Zinc Company has not yet been determined. According to the Marion County Clerk's office, only one land transaction occurred. The transaction was a quit claim deed in 1936 from M. Wheill Metals Company to Sandoval Zinc Company. A corporate history search may be needed to determine owners name.

GD:kh/e-1

cc: Don Josif
Southern Region



pictures & Direction

G101 Monitor well locations & Samples

S101 Surface water locations & Samples

87-384

121050002 Marion
Sandoval Zinc
SF/Ind

ENVIRODYNE ENGINEERS

12161 Lackland Road,
St. Louis, Missouri 63146
(314) 434-6960

July 1, 1987
3132-00010

Ms. Sue Doubet
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Dear Sue:

Enclosed are the analytical data and associated QC information for the soil and water samples received May 14, 1987 from the Sandoval Zinc Facility (Site #1210500002). The analyses requested are as shown on the attached May 18, 1987 Sample Acknowledgement form.

While analyzing the soils for the semi-volatile organics, the method blank had low recovery of the 2-Fluorophenol surrogate. The sample lot was extracted and analyzed two additional times; the same surrogate being low in each case. In the interest of time, a fourth extraction was not ordered. The data provided herein for these samples are from the third extraction lot; however, the surrogate recoveries of the second extracted method blank are also provided. This problem has been investigated by the organic section manager and corrective action has been taken.

All water samples were extracted and analyzed twice due to high bis (2-ethylhexyl) phthalate contamination in the method blank. Only the results from the second extraction lot are provided. The 2-Fluorophenol surrogate was low in water sample G103. However, this was the sample used for spiking and the same surrogate was low in G103 MS and G103 MSD. Since the matrix spike and the matrix spike duplicate of sample G103 represent a second and third extraction of that sample, no additional extractions were ordered.

The following soil and water sample lots were digested and analyzed twice due to poor matrix spike recoveries. The MS was out of QC range in both cases.

1. Antimony (soils)
2. Selenium (soils and water)
3. Silver (soils and water)
4. Sulfide (soils)
5. Thallium (waters

Based upon the recoveries of the furnace AA bench spikes, samples S101, S101MS, and S202 were calibrated by MSA for Antimony; sample S201 was calibrated by MSA for Arsenic. The Atimony MSA for samples S101 MS and S202

RECEIVED
JUL - 2 1987
IEPA/DLPC

ENVIRODYNE
ENGINEERS

were done twice due to a correlation coefficient less than 0.995. In addition, samples S101, S201, S202, G101, G102, and G103 were determined to have sample interferences for Selenium (based upon bench spike recoveries) and the data have been flagged accordingly.

Please survey this package upon receipt. There should be two volumes each for Inorganic and BNA; there should be one volume each for VOAS, Pest/PCB, QC Summary, and Data Summary.

If you have any questions about these data, please call. Thank you for selecting Envirodyne Engineers, Inc. for this assignment.

Sincerely,

John J. Coniglio
Project Manager

JJC/smb:190
Enclosure

Ms. Sue Doubet
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Date: May 18, 1987

SAMPLE ACKNOWLEDGEMENT

FACILITY: Sandoval/Zinc
SAMPLE(S) REC'D: Waters G101, G102, and G103
Soils S101, S102, S201, and S202
Trip Blank

DATE OF RECEIPT: May 14, 1987
EEI PROJECT #: 3132-00010
SCHEDULED DATE OF COMPLETION: June 15, 1987
EST. COST (EXCLUDING QC): $10910

ANALYSES REQUESTED:

Samples G101, G102, G103, S102, and S202
- Pesticides/PCB's
- Cyanide
- Metals
- Sulfide
- Sulfate
- VOA by GCMS (with library search)
- BNA (with library search)

Samples S101 and S201
- Pesticides/PCB's
- Cyanide
- Metals
- Sulfide
- VOA by GCMS (with library search)
- BNA (with library search)

Trip Blank
- VOA by GCMS (with library search)

Metals = Al, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Ni, Se, Ag, Tl, Sn, V, Zn, Ca, Mg, K, and Na.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
CHAIN OF CUSTODY

I certify that the samples listed below were collected in my presence and that each sample bottle was sealed intact by me and that I wrote my initials and the date on the seal of each bottle.

Site Inventory No. 1210500002 County Marion

Federal I.D. No. ILD 053980454 Sandoval Zinc Co. (Facility Name)

SAMPLING TEAM

Sample No.	Initials	Consisting of the Indicated No. of Bottles	Date Collected	Time Sealed
G101	GWD	10	05/12/87	11:47 AM/PM
G102	GWD	10	05/12/87	2:20 AM/PM
G103	GWD	10	05/12/87	3:50 AM/PM
S101	GWD	7	05/12/87	1:42 AM/PM
S102	GWD	7	05/12/87	5:45 AM/PM
S201	GWD	7	05/12/87	4:30 AM/PM
S202	GWD	7	05/12/87	5:00 AM/PM
				AM/PM
				AM/PM
				AM/PM

Sealer's Signature Gregory W. Dam Date 5/13/87 Time 4:30 AM/PM

Sampler(s) R M Tangel Gregory W. Dam

CARRIERS

I certify I received the above samples, with each seal on each bottle intact and the sealer's initials written on each sample seal.

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM

LAB CUSTODIAN

I certify I received the above samples with each seal on each bottle intact, and the sealer's initials written on each sample seal. After recording these samples in the official record book, these same samples will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature [illegible] Date 5-14-87 Time 3:00 A.M. P.M.

Lab Location ST. LOUIS (City)

IEPA -- CLP
CHAIN OF CUSTODY

Seal #: 2443

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/ZINC
Region: SOUTHERN
County: MARION

Site Inventory #: 1210500002
Site Billing Code: SA-06
Project Manager: GREG DUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002407	S202	5/12/87	16:50

Sample Appearance: Sandy/ Oily Sheen on surface

Collector Comments: 30 Day turnaround

Sampler Signature: Gregory W. Dunn Division/Company: IEPA PA/SI

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
1	5	32oz.	—	BNA	N	5/12/87	16:50
1	5	32oz	—	PEST/PCB	N	5/12/87	16:50
1	5	32oz	—	TOTAL METALS	N	5/12/87	16:50
1	5	32oz	—	MERCURY	N	5/12/87	16:50
1	5	32oz	—	CYANIDE	N	5/12/87	16:50
1	12	2oz	—	VOA	N	5/12/87	16:50
1		32oz	—	Sulfide/Sulfate GWD 5/12/87	N	5/12/87	16:50

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/12/87 Time: 4:40 pm Seal #: 2443 Intact?: (Y) / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2444

Courier - sample pickup: EEI D. Sira

Courier - sample delivery: DALE CIRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): BERT MURPHY Signature: [illegible]

Date: 5-14-87 Time: 11:30 Seal #: 2444 Intact?: (Y) / N

Lab Name: EEI Comments: GOOD CONDITION

IEPA - CLP
CHAIN OF CUSTODY

Seal #: 2441

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/ZINC
Site Inventory #: 12 0500002
Region: SOUTHERN
Site Billing Code: SA-06
County: MARION
Project Manager: GREG DUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002406	S201	5/12/87	4:20 pm

Sample Appearance: Sandy / Clay

Collector Comments: 30 Day Turnaround

Sampler Signature: Gregory W. Dunn Division/Company: IEPA PA/SE

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
1	5	32oz	—	BNA	N	5/12/87	4:20pm
1	5	32oz	—	PEST/PCB	N	5/12/87	4:20pm
1	5	32oz	—	TOTAL METALS	N	5/12/87	4:20pm
1	5	32oz	—	MERCURY	N	5/12/87	4:20pm
1	5	32oz	—	CYANIDE	N	5/12/87	4:20pm
1	12	2oz	—	VOA	N	5/12/87	4:20pm
1		32oz	—	Sulfide GWD 5/12/87	N	5/12/87	4:20pm

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/12/87 Time: 1:11 pm Seal #: 2441 Intact?: Y / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2442

Courier - sample pickup: D. Sica

Courier - sample delivery: DALE CIRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Rec'd by (print): BERT MURPHY Signature: [signature]

Date: 5-14-87 Time: 3:00 Seal #: 2442 Intact?: Y / N

Lab Name: EEI Comments: ~~GOOD CONDITION~~
None of the bottles are labelled S201

IEPA - CLP
CHAIN OF CUSTODY

Seal #: 2443

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/ZINC
Region: SOUTHERN
County: MARION

Site Inventory #: 1210500002
Site Billing Code: SA-06
Project Manager: GREG NUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002405	S102	5/12/87	17:30

Sample Appearance: Clay/Sand

Collector Comments: 30 Day Turnaround

Sampler Signature: Gregory W. Dunn Division/Company: IEPA/PA&I

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
1	5	32oz	—	BNA	N	5/12/87	17:30
1	5	32oz	—	PEST/PCB	N	5/12/87	17:30
1	5	32oz	—	TOTAL METALS	N	5/12/87	17:30
1	5	32oz	—	MERCURY	N	5/12/87	17:30
1	5	32oz	—	CYANIDE	N	5/12/87	17:30
1	12	2oz	—	VOA	N	5/12/87	17:30
1	3	32oz	—	Sulfide/Sulfate GWD 5/12/87	N	5/12/87	17:30

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/12/87 Time: 4:40 pm Seal #: 2443 Intact?: (Y) / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2444

Courier - sample pickup: EEI D. Sira

Courier - sample delivery: DALE CIRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): BERT MURPHY Signature: [illegible]

Date: 5-14-87 Time: 11:30 Seal #: 2444 Intact?: (Y) / N

Lab Name: EEI Comments: GOOD CONDITION

I PA - CLP
CHAIN OF CUSTODY

Seal #: 2441

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/ZINC
Region: SOUTHERN
County: MARION

Site Inventory #: 1210500002
Site Billing Code: SA-06
Project Manager: GREG DUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002404	S101	05/12/87	1:25-1:34 pm

Sample Appearance: Soil/Sediment Sandy/Clay

Collector Comments: 30 Day Turnaround

Sampler Signature: Gregory W. Dunn Division/Company: IEPA PA/SI

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
1	5	32oz.	—	BNA	N	5/12/87	1:33 pm
1	5	32oz.	—	PEST/PCB	N	5/12/87	1:22 pm
1	5	32oz	—	TOTAL METALS	N	5/12/87	1:26 pm
1	5	32oz	—	MERCURY	N	5/12/87	1:30 pm
1	5	32oz	—	CYANIDE	N	5/12/87	1:28 pm
1	12	2oz	—	VOA	N	5/12/87	1:34 pm
1		32oz	—	Sulfide GWD 5/12/87	N	5/12/87	1:31 pm

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/12/87 Time: 1:11 Seal #: 2441 Intact?: (Y) / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2442

Courier - sample pickup: D. Sira

Courier - sample delivery: DALE GRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): BETTI MURPHY Signature: [illegible]

Date: 5-14-87 Time: 800 Seal #: 2442 Intact?: (Y) / N

Lab Name: EEI Comments: GOOD CONDITION

IEPA - CLP
CHAIN OF CUSTODY

Seal #: 2439

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/ZINC
Region: SOUTHERN
County: MARION

Site Inventory #: 12105 0D002
Site Billing Code: SA-06
Project Manager: GREG DUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002403	G103	5/12/87	3:26pm

Sample Appearance: Clear

Collector Comments: 30 Day Turnaround

Sampler Signature: Richard Sange Division/Company: IEPA PA/ST

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
2	9	1/2 GAL	—	PEST/PCB	N	5/12/87	3:45pm
2	9	1/2 GAL	—	BNA	N	5/12/87	3:45pm
1	3	1L	NaOH	CYANIDE	N	5/12/87	3:52pm
1	3	1L	HNO_3	TOTAL METALS	Y	5/12/87	3:26pm
1	10	250ml	HNO_3 $K_2Cr_2O_7$	MERCURY	Y	5/12/87	3:29pm
1	8	40ml	—	VOA	N	5/12/87	3:40pm
1		1L	—	Sulfide/Sulfate GWD 5/12/87	N	5/12/87	3:30pm

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W Dunn

Date: 5/12/87 Time: 2:45pm Seal #: 2439 Intact?: Y / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2440

Courier - sample pickup: EEI D. Sira

Courier - sample delivery: DALE CIRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): BERT MURPHY Signature: [illegible]

Date: 5-14-87 Time: 2:30 Seal #: 2440 Intact?: Y / N

Lab Name: EEE Comments: GOOD CONDITION

I_PA - CLF
CHAIN OF CUSTODY

Seal #: 2435

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/21NC
Region: SOUTHERN
County: MARION

Site Inventory #: 1210500002
Site Billing Code: SA-06
Project Manager: GREG DUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002402	G102	5/12/87	2:00 pm

Sample Appearance: ~~Sol~~ Clear

Collector Comments: 30 Day turnaround

Sampler Signature: Richard Lange Division/Company: IEPA PA/SC

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
2	9	1/2 GAL	-	PEST/PCB	N	5/12/87	2:15 pm
2	9	1/2 GAL	-	BNA	N	5/12/87	2:10 pm
1	3	1 L	NaOH	CYANIDE	N	5/12/87	1:37 pm
1	3	1 L	HNO_3	TOTAL METALS	Y	5/12/87	1:32 pm
1	10	250ml	HNO_3 $K_2Cr_2O_7$	MERCURY	Y	5/12/87	1:34 pm
1	8	40ml	—	VOA	N	5/12/87	2:00 pm
1		1 L	—	Sulfide/Sulfate GWD 5/12/87	N	5/12/87	1:39 pm

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/12/87 Time: 12:50 pm Seal #: 2435 Intact?: (Y) / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2436

Courier - sample pickup: EEI D. Sira

Courier - sample delivery: DALE LIRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): BERT MURPHY Signature: Bert Murphy

Date: 5-14-87 Time: 11:40 Seal #: 2436 Intact?: (Y) / N

Lab Name: EEI Comments: GOOD CONDITION

IEPA - CLP
CHAIN OF CUSTODY

Seal #: 2433

Date Sealed: _____ By: AWW

Facility Name: SANDOVAL/ZINC
Site Inventory #: 12ID500002
Region: SOUTHERN
Site Billing Code: SA-06
County: MARION
Project Manager: GREG DUNN

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
87002401	G-101	5/12/87	11.05

Sample Appearance: Clear

Collector Comments: E 30 Day turnaround

Sampler Signature: _____ Division/Company: IEPA PA/SE

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
2	9	1/2 GAL	—	PEST/PCB	N	5/12/87	11.43 AM
2	9	1/2 GAL	—	BNA	N	5/12/87	11:42 AM
1	3	1 L	$NaOH$	CYANIDE	N	5/12/87	11:44 AM
1	3	1 L	HNO_3	TOTAL METALS	Y	5/12/87	11.46 AM
1	10	250ml	HNO_3 $K_2Cr_2O_7$	MERCURY	Y	5/12/87	11:12 AM
1	8	40ml	—	VOA	N	5/12/87	11:28 AM
1		1 L	—	Sulfide/Sulfate GWD 5/12/87	N	5/12/87	11:16 AM

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/12/87 Time: 10:50 AM Seal #: 2433 Intact?: (Y) / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Greg Dunn Signature: Gregory W. Dunn

Date: 5/13/87 Time: 16:30 Seal #: 2434

Courier - sample pickup: EEI D. Sira

Courier - sample delivery: DALE CIRA

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): BERT MURPHY Signature: [illegible]

Date: 5-14-87 Time: 11:15 AM Seal #: 2434 Intact?: (Y) / N

Lab Name: EEI Comments: GOOD CONDITION

There is only 1 VOA listed here, but two were found.

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : TRIP BLANK
Sample # : 87002408

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Chloromethane	U	10	1
Bromomethane	U	10	1
Vinyl Chloride	U	10	1
Chloroethane	U	10	1
Methylene Chloride	B	12	1
Acetone	B	40	1
Carbon Disulfide	U	5	1
1,1-Dichloroethene	U	5	1
1,1-Dichloroethane	U	5	1
t-1,2-Dichloroethene	U	5	1
1,2-Dichloropropane	U	5	1
Chloroform	U	5	1
1,2-Dichloroethane	U	5	1
2-Butanone	U	10	1
1,1,1-Trichloroethane	U	5	1
Carbon Tetrachloride	U	5	1
Vinyl Acetate	U	10	1
Dichlorobromomethane	U	5	1
c-1,3-Dichloropropene	U	5	1
Trichloroethene	U	5	1
Benzene	U	5	1
Chlorodibromomethane	U	5	1
1,1,2-Trichloroethane	U	5	1
t-1,3-Dichloropropene	U	5	1
2-Chloroethyl Vinyl Ether	U	10	1
Bromoform	U	5	1
2-Hexanone	U	10	1
4-Methyl-2-pentanone	U	10	1
1,1,2,2-Tetrachloroethane	U	5	1
Tetrachloroethene	U	5	1
Toluene	U	5	1
Chlorobenzene	U	5	1
Ethylbenzene	U	5	1
Styrene	U	5	1
Total Xylenes	U	15	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
TRIP BLANK

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
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IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : MB#1
Sample # : B5948

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Chloromethane	U	10	1
Bromomethane	U	10	1
Vinyl Chloride	U	10	1
Chloroethane	U	10	1
Methylene Chloride	B	8	1
Acetone	B	14	1
Carbon Disulfide	U	5	1
1,1-Dichloroethene	U	5	1
1,1-Dichloroethane	U	5	1
t-1,2-Dichloroethene	U	5	1
1,2-Dichloropropane	U	5	1
Chloroform	U	5	1
1,2-Dichloroethane	U	5	1
2-Butanone	U	10	1
1,1,1-Trichloroethane	U	5	1
Carbon Tetrachloride	U	5	1
Vinyl Acetate	U	10	1
Dichlorobromomethane	U	5	1
c-1,3-Dichloropropene	U	5	1
Trichloroethene	U	5	1
Benzene	U	5	1
Chlorodibromomethane	U	5	1
1,1,2-Trichloroethane	U	5	1
t-1,3-Dichloropropene	U	5	1
2-Chloroethyl Vinyl Ether	U	10	1
Bromoform	U	5	1
2-Hexanone	U	10	1
4-Methyl-2-pentanone	U	10	1
1,1,2,2-Tetrachloroethane	U	5	1
Tetrachloroethene	U	5	1
Toluene	BJ	1	1
Chlorobenzene	U	5	1
Ethylbenzene	U	5	1
Styrene	U	5	1
Total Xylenes	U	15	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
MB#1

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
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IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : MB#1
Sample # : A7018

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	10	1
1,3-Dichlorobenzene	U	10	1
1,4-Dichlorobenzene	U	10	1
Benzyl Alcohol	U	10	1
1,2-Dichlorobenzene	U	10	1
bis(2-Chloroisopropyl)Ether	U	10	1
N-Nitroso-Di-n-propylamine	U	10	1
Hexachloroethane	U	10	1
Nitrobenzene	U	10	1
Isophorone	U	10	1
bis(2-Chloroethoxy)Methane	U	10	1
1,2,4-Trichlorobenzene	U	10	1
Naphthalene	U	10	1
4-Chloroaniline	U	10	1
Hexachlorobutadiene	U	10	1
2-Methylnaphthalene	U	10	1
Hexachlorocyclopentadiene	U	10	1
2-Chloronaphthalene	U	10	1
2-Nitroaniline	U	50	1
Dimethyl Phthalate	U	10	1
Acenaphthylene	U	10	1
3-Nitroaniline	U	50	1
Acenaphthene	U	10	1
Dibenzofuran	U	10	1
2,4-Dinitrotoluene	U	10	1
2,6-Dinitrotoluene	U	10	1
Diethylphthalate	U	10	1
4-Chlorophenyl-phenylether	U	10	1
Fluorene	U	10	1
4-Nitroaniline	U	50	1
N-Nitrosodiphenylamine	U	10	1
4-Bromophenylphenylether	U	10	1
Hexachlorobenzene	U	10	1
Phenanthrene	U	10	1
Anthracene	U	10	1
Di-N-Butylphthalate	U	10	1
Fluoranthene	U	10	1
Pyrene	U	10	1
Butylbenzylphthalate	U	10	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : MB#1
Sample # : A7018

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	20	1
Benzo(a)Anthracene	U	10	1
bis(2-Ethylhexyl)Phthalate	B	43	1
Chrysene	U	10	1
Di-N-Octyl Phthalate	U	10	1
Benzo(b)fluoranthene	U	10	1
Benzo(k)fluoranthene	U	10	1
Benzo(a)pyrene	U	10	1
Indeno(1,2,3-cd)pyrene	U	10	1
Dibenzo(a,h)anthracene	U	10	1
Benzo(g,h,i)perylene	U	10	1
Phenol	U	10	1
2-Chlorophenol	U	10	1
2-Methylphenol	U	10	1
4-Methylphenol	U	10	1
2-Nitrophenol	U	50	1
2,4-Dimethylphenol	U	10	1
Benzoic Acid	U	50	1
2,4-Dichlorophenol	U	10	1
4-Chloro-3-methylphenol	U	10	1
2,4,6-Trichlorophenol	U	10	1
2,4,5-Trichlorophenol	U	50	1
2,4-Dinitrophenol	U	50	1
4-Nitrophenol	U	50	1
4,6-Dinitro-2-methylphenol	U	50	1
Pentachlorophenol	U	50	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER

MB#1

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1	123795	Hexanedioic acid, dioctyl ester	BNA	30.13	49
2					
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IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : MB41 RX
Sample # : 7197
Moisture : 0.0

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	330	1
1,3-Dichlorobenzene	U	330	1
1,4-Dichlorobenzene	U	330	1
Benzyl Alcohol	U	330	1
1,2-Dichlorobenzene	U	330	1
bis(2-Chloroisopropyl)Ether	U	330	1
N-Nitroso-Di-n-propylamine	U	330	1
Hexachloroethane	U	330	1
Nitrobenzene	U	330	1
orone	U	330	1
-Chloroethoxy)Methane	U	330	1
1,2,4-Trichlorobenzene	U	330	1
Naphthalene	U	330	1
4-Chloroaniline	U	330	1
Hexachlorobutadiene	U	330	1
2-Methylnaphthalene	U	330	1
Hexachlorocyclopentadiene	U	330	1
2-Chloronaphthalene	U	330	1
2-Nitroaniline	U	1600	1
Dimethyl Phthalate	U	330	1
Acenaphthylene	U	330	1
3-Nitroaniline	U	1600	1
Acenaphthene	U	330	1
Dibenzofuran	U	330	1
2,4-Dinitrotoluene	U	330	1
2,6-Dinitrotoluene	U	330	1
Diethylphthalate	U	330	1
4-Chlorophenyl-phenylether	U	330	1
Fluorene	U	330	1
4-Nitroaniline	U	1600	1
N-Nitrosodiphenylamine	U	330	1
4-Bromophenylphenylether	U	330	1
Hexachlorobenzene	U	330	1
Phenanthrene	U	330	1
acene	U	330	1
butylphthalate	BJ	200	1
Fluoranthene	U	330	1
Pyrene	U	330	1
Butylbenzylphthalate	U	330	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : MB81 RX
Sample # : 7197
Moisture : 0.0

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	660	1
Benzo(a)Anthracene	U	330	1
bis(2-Ethylhexyl)Phthalate	B	380	1
Chrysene	U	330	1
Di-N-Octyl Phthalate	U	330	1
Benzo(b)fluoranthene	U	330	1
Benzo(k)fluoranthene	U	330	1
Benzo(a)pyrene	U	330	1
Indeno(1,2,3-cd)pyrene	U	330	1
[illegible]o(a,h)anthracene	U	330	1
[illegible](g,h,i)perylene	U	330	1
Phenol	U	330	1
2-Chlorophenol	U	330	1
2-Methylphenol	U	330	1
4-Methylphenol	U	330	1
2-Nitrophenol	U	1600	1
2,4-Dimethylphenol	U	330	1
Benzoic Acid	U	1600	1
2,4-Dichlorophenol	U	330	1
4-Chloro-3-methylphenol	U	330	1
2,4,6-Trichlorophenol	U	330	1
2,4,5-Trichlorophenol	U	1600	1
2,4-Dinitrophenol	U	1600	1
4-Nitrophenol	U	1600	1
4,6-Dinitro-2-methylphenol	U	1600	1
Pentachlorophenol	U	1600	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
MB01 RX

ORGANICS ANALYSIS DATA SHEET
SOIL SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/kg)
1	96480	2(3H)-Furanone, dihydro-	BNA	7.14	569
2		Unknown	BNA	7.24	780
3		Unknown	BNA	7.37	306
4		A Phthalate	BNA	24.1	1308
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IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : MB#/
Sample # : MB 94329

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
gamma-BHC	U	0.05	1
Heptachlor	U	0.05	1
Aldrin	U	0.05	1
Heptachlor Epoxide	U	0.05	1
Endosulfan I	U	0.05	1
Dieldrin	U	0.1	1
Endosulfan II	U	0.1	1
DDT	U	0.1	1
Endrin Aldehyde	U	0.1	1
Methoxychlor	U	0.5	1
Toxaphene	U	0.5	1
Chlordane	U	0.5	1
alpha-BHC	U	0.05	1
beta-BHC	U	0.05	1
delta-BHC	U	0.05	1
DDE	U	0.1	1
adrin	U	0.1	1
DDD	U	0.1	1
Endosulfan Sulfate	U	0.1	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : MB#1
Sample # : MB 94329

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
PCB - A1221	U	0.5	1
PCB - A1016	U	1	1
PCB - A1232	U	0.5	1
PCB - A1242	U	0.5	1
PCB - A1248	U	0.5	1
PCB - A1254	U	1	1
PCB - A1260	U	1	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : MB#2
Sample # : B5958
Moisture : 0.0

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Chloromethane	U	10	1
Bromomethane	U	10	1
Vinyl Chloride	U	10	1
Chloroethane	U	10	1
Methylene Chloride	B	6	1
Acetone	U	10	1
Carbon Disulfide	U	5	1
1,1-Dichloroethene	U	5	1
1,1-Dichloroethane	U	5	1
t-1,2-Dichloroethene	U	5	1
1,2-Dichloropropane	U	5	1
Chloroform	U	5	1
1,2-Dichloroethane	U	5	1
2-Butanone	U	10	1
1,1,1-Trichloroethane	U	5	1
Carbon Tetrachloride	U	5	1
Vinyl Acetate	U	10	1
Dichlorobromomethane	U	5	1
c-1,3-Dichloropropene	U	5	1
Trichloroethene	U	5	1
Benzene	U	5	1
Chlorodibromomethane	U	5	1
1,1,2-Trichloroethane	U	5	1
t-1,3-Dichloropropene	U	5	1
2-Chloroethyl Vinyl Ether	U	10	1
Bromoform	U	5	1
2-Hexanone	U	10	1
4-Methyl-2-pentanone	U	10	1
1,1,2,2-Tetrachloroethane	U	5	1
Tetrachloroethene	U	5	1
Toluene	U	5	1
Chlorobenzene	U	5	1
Ethylbenzene	U	5	1
Styrene	U	5	1
Total Xylenes	U	15	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
MB02

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
7					
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29					
30					

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : G101
Sample # : 87002401

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Chloromethane	U	10	1
Bromomethane	U	10	1
Vinyl Chloride	U	10	1
Chloroethane	U	10	1
Methylene Chloride	B	5	1
Acetone	B	13	1
Carbon Disulfide	U	5	1
1,1-Dichloroethene	U	5	1
1,1-Dichloroethane	U	5	1
t-1,2-Dichloroethene	U	5	1
1,2-Dichloropropane	U	5	1
Chloroform	U	5	1
1,2-Dichloroethane	U	5	1
2-Butanone	U	10	1
1,1,1-Trichloroethane	U	5	1
Carbon Tetrachloride	U	5	1
Vinyl Acetate	U	10	1
Dichlorobromomethane	U	5	1
c-1,3-Dichloropropene	U	5	1
Trichloroethene	U	5	1
Benzene	U	5	1
Chlorodibromomethane	U	5	1
1,1,2-Trichloroethane	U	5	1
t-1,3-Dichloropropene	U	5	1
2-Chloroethyl Vinyl Ether	U	10	1
Bromoform	U	5	1
2-Hexanone	U	10	1
4-Methyl-2-pentanone	U	10	1
1,1,2,2-Tetrachloroethane	U	5	1
Tetrachloroethene	U	5	1
Toluene	U	5	1
Chlorobenzene	U	5	1
Ethylbenzene	U	5	1
Styrene	U	5	1
Total Xylenes	U	15	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
G101

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
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IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : 6101
Sample # : 87002401

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	10	1
1,3-Dichlorobenzene	U	10	1
1,4-Dichlorobenzene	U	10	1
Benzyl Alcohol	U	10	1
1,2-Dichlorobenzene	U	10	1
bis(2-Chloroisopropyl)Ether	U	10	1
N-Nitroso-Di-n-propylamine	U	10	1
Hexachloroethane	U	10	1
Nitrobenzene	U	10	1
Isophorone	U	10	1
bis(2-Chloroethoxy)Methane	U	10	1
1,2,4-Trichlorobenzene	U	10	1
Naphthalene	U	10	1
4-Chloroaniline	U	10	1
Hexachlorobutadiene	U	10	1
2-Methylnaphthalene	U	10	1
Hexachlorocyclopentadiene	U	10	1
2-Chloronaphthalene	U	10	1
2-Nitroaniline	U	50	1
Dimethyl Phthalate	U	10	1
Acenaphthylene	U	10	1
3-Nitroaniline	U	50	1
Acenaphthene	U	10	1
Dibenzofuran	U	10	1
2,4-Dinitrotoluene	U	10	1
2,6-Dinitrotoluene	U	10	1
Diethylphthalate	J	2	1
4-Chlorophenyl-phenylether	U	10	1
Fluorene	U	10	1
4-Nitroaniline	U	50	1
N-Nitrosodiphenylamine	U	10	1
4-Bromophenylphenylether	U	10	1
Hexachlorobenzene	U	10	1
Phenanthrene	U	10	1
Anthracene	U	10	1
Di-N-Butylphthalate	J	2	1
Fluoranthene	U	10	1
Pyrene	U	10	1
Butylbenzylphthalate	U	10	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : G101
Sample # : 87002401

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	20	1
Benzo(a)Anthracene	U	10	1
bis(2-Ethylhexyl)Phthalate	B	68	1
Chrysene	U	10	1
Di-N-Octyl Phthalate	U	10	1
Benzo(b)fluoranthene	U	10	1
Benzo(k)fluoranthene	U	10	1
Benzo(a)pyrene	U	10	1
Indeno(1,2,3-cd)pyrene	U	10	1
Dibenzo(a,h)anthracene	U	10	1
Benzo(g,h,i)perylene	U	10	1
Phenol	U	10	1
2-Chlorophenol	U	10	1
2-Methylphenol	U	10	1
4-Methylphenol	U	10	1
2-Nitrophenol	U	50	1
2,4-Dimethylphenol	U	10	1
Benzoic Acid	U	50	1
2,4-Dichlorophenol	U	10	1
4-Chloro-3-methylphenol	U	10	1
2,4,6-Trichlorophenol	U	10	1
2,4,5-Trichlorophenol	U	50	1
2,4-Dinitrophenol	U	50	1
4-Nitrophenol	U	50	1
4,6-Dinitro-2-methylphenol	U	50	1
Pentachlorophenol	U	50	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER

G101

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1	123795	Hexanedioic acid, dioctyl ester	BNA	30.14	62
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
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28					
29					
30					

IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : G101
Sample # : 87002401

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
gamma-BHC	U	0.05	1
Heptachlor	U	0.05	1
Aldrin	U	0.05	1
Heptachlor Epoxide	U	0.05	1
Endosulfan I	U	0.05	1
Dieldrin	U	0.1	1
Endosulfan II	U	0.1	1
DDT	U	0.1	1
Endrin Aldehyde	U	0.1	1
Methoxychlor	U	0.5	1
Toxaphene	U	0.5	1
Chlordane	U	0.5	1
alpha-BHC	U	0.05	1
beta-BHC	U	0.05	1
delta-BHC	U	0.05	1
DDE	U	0.1	1
Endrin	U	0.1	1
DDD	U	0.1	1
Endosulfan Sulfate	U	0.1	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : G101
Sample # : 87002401

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
PCB - A1221	U	0.5	1
PCB - A1016	U	1	1
PCB - A1232	U	0.5	1
PCB - A1242	U	0.5	1
PCB - A1248	U	0.5	1
PCB - A1254	U	1	1
PCB - A1260	U	1	1

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Water Samples

Site ID: G101
Sample #: 87002401

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Aluminum	U	65	1
Antimony	U	20	1
Arsenic	U	2	1
Barium	U	50	1
Beryllium	U	5	1
Cadmium	U	5	1
Calcium		2300	1
Chromium	U	10	1
Cobalt	U	20	1
Copper	U	20	1
Iron		140	1
Lead		2	1
Magnesium		15700	1
Manganese		30	1
Mercury	U	0.2	1
Nickel	U	20	1
Potassium		5000	1
Selenium	ER	5	1
Silver	UR	2	1
Sodium		290000	10
Thallium	UR	2	1
Tin	U	100	1
Vanadium	U	20	1
Zinc		36	1
Cyanide	U	5.0	1
Sulfate		276000	1
Sulfide	U	1000	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : G102
Sample # : 87002402

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Chloromethane	U	10	1
Bromomethane	U	10	1
Vinyl Chloride	U	10	1
Chloroethane	U	10	1
Methylene Chloride	B	10	1
Acetone	B	50	1
Carbon Disulfide	J	2	1
1,1-Dichloroethene	U	5	1
1,1-Dichloroethane	U	5	1
t-1,2-Dichloroethene	U	5	1
1,2-Dichloropropane	U	5	1
Chloroform	U	5	1
1,2-Dichloroethane	U	5	1
2-Butanone	U	10	1
1,1,1-Trichloroethane	U	5	1
Carbon Tetrachloride	U	5	1
Vinyl Acetate	U	10	1
Dichlorobromomethane	U	5	1
c-1,3-Dichloropropene	U	5	1
Trichloroethene	U	5	1
Benzene	J	3	1
Chlorodibromomethane	U	5	1
1,1,2-Trichloroethane	U	5	1
t-1,3-Dichloropropene	U	5	1
2-Chloroethyl Vinyl Ether	U	10	1
Bromoform	U	5	1
2-Hexanone	U	10	1
4-Methyl-2-pentanone	U	10	1
1,1,2,2-Tetrachloroethane	U	5	1
Tetrachloroethene	U	5	1
Toluene	U	5	1
Chlorobenzene	U	5	1
Ethylbenzene	U	5	1
Styrene	U	5	1
Total Xylenes	U	15	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER: 6102

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
7					
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IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : G102
Sample # : 87002402

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	10	1
1,3-Dichlorobenzene	U	10	1
1,4-Dichlorobenzene	U	10	1
Benzyl Alcohol	U	10	1
1,2-Dichlorobenzene	U	10	1
bis(2-Chloroisopropyl)Ether	U	10	1
N-Nitroso-Di-n-propylamine	U	10	1
Hexachloroethane	U	10	1
Nitrobenzene	U	10	1
Isophorone	U	10	1
bis(2-Chloroethoxy)Methane	U	10	1
1,2,4-Trichlorobenzene	U	10	1
Naphthalene	U	10	1
4-Chloroaniline	U	10	1
Hexachlorobutadiene	U	10	1
2-Methylnaphthalene	U	10	1
Hexachlorocyclopentadiene	U	10	1
2-Chloronaphthalene	U	10	1
2-Nitroaniline	U	50	1
Dimethyl Phthalate	U	10	1
Acenaphthylene	U	10	1
3-Nitroaniline	U	50	1
Acenaphthene	U	10	1
Dibenzofuran	U	10	1
2,4-Dinitrotoluene	U	10	1
2,6-Dinitrotoluene	U	10	1
Diethylphthalate	J	7	1
4-Chlorophenyl-phenylether	U	10	1
Fluorene	U	10	1
4-Nitroaniline	U	50	1
N-Nitrosodiphenylamine	U	10	1
4-Bromophenylphenylether	U	10	1
Hexachlorobenzene	U	10	1
Phenanthrene	U	10	1
Anthracene	U	10	1
Di-N-Butylphthalate	J	2	1
Fluoranthene	U	10	1
Pyrene	U	10	1
Butylbenzylphthalate	U	10	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : G102
Sample # : 87002402

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	20	1
Benzo(a)Anthracene	U	10	1
bis(2-Ethylhexyl)Phthalate	B	57	1
Chrysene	U	10	1
Di-N-Octyl Phthalate	J	3	1
Benzo(b)fluoranthene	U	10	1
Benzo(k)fluoranthene	U	10	1
Benzo(a)pyrene	U	10	1
Indeno(1,2,3-cd)pyrene	U	10	1
Dibenzo(a,h)anthracene	U	10	1
Benzo(g,h,i)perylene	U	10	1
Phenol	U	10	1
2-Chlorophenol	U	10	1
2-Methylphenol	U	10	1
4-Methylphenol	U	10	1
2-Nitrophenol	U	50	1
2,4-Dimethylphenol	U	10	1
Benzoic Acid	U	50	1
2,4-Dichlorophenol	U	10	1
4-Chloro-3-methylphenol	U	10	1
2,4,6-Trichlorophenol	U	10	1
2,4,5-Trichlorophenol	U	50	1
2,4-Dinitrophenol	U	50	1
4-Nitrophenol	U	50	1
4,6-Dinitro-2-methylphenol	U	50	1
Pentachlorophenol	U	50	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER: G102

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1	96480	2(3H)-Furanone, dihydro-	BNA	6.92	9
2		Unknown	BNA	11.72	4
3	60322	Hexanoic acid, 6-amino-	BNA	14.27	12
4	123795	Hexanedioic acid, dioctyl ester	BNA	30.13	98
5					
6					
7					
8					
9					
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IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : G102
Sample # : 87002402

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
gamma-BHC	U	0.05	1
Heptachlor	U	0.05	1
Aldrin	U	0.05	1
Heptachlor Epoxide	U	0.05	1
Endosulfan I	U	0.05	1
Dieldrin	U	0.1	1
Endosulfan II	U	0.1	1
DDT	U	0.1	1
Endrin Aldehyde	U	0.1	1
Methoxychlor	U	0.5	1
Toxaphene	U	0.5	1
Chlordane	U	0.5	1
alpha-BHC	U	0.05	1
beta-BHC	U	0.05	1
delta-BHC	U	0.05	1
DDE	U	0.1	1
Endrin	U	0.1	1
DDD	U	0.1	1
Endosulfan Sulfate	U	0.1	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : G102
Sample # : 87002402

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
PCB - A1221	U	0.5	1
PCB - A1016	U	1	1
PCB - A1232	U	0.5	1
PCB - A1242	U	0.5	1
PCB - A1248	U	0.5	1
PCB - A1254	U	1	1
PCB - A1260	U	1	1

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Water Samples

Site ID: G102
Sample #: 87002402

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Aluminum	U	65	1
Antimony	U	20	1
Arsenic	U	2	1
Barium		120	1
Beryllium	U	5	1
Cadmium	U	5	1
Calcium		160000	10
Chromium	U	10	1
Cobalt	U	20	1
Copper	U	20	1
Iron	U	50	1
Lead	U	3	1
Magnesium		75000	10
anese		400	1
cury	U	0.2	1
Nickel	U	20	1
Potassium		1400	1
Selenium	URE	3	1
Silver	UR	2	1
Sodium		130000	10
Thallium	UR	2	1
Tin	U	100	1
Vanadium	U	20	1
Zinc		24	1
Cyanide	U	5.0	1
Sulfate		89600	1
Sulfide	U	1000	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : G103
Sample # : 87002403

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Chloromethane	U	10	1
Bromomethane	U	10	1
Vinyl Chloride	U	10	1
Chloroethane	U	10	1
Methylene Chloride	B	24	1
Acetone	B	68	1
Carbon Disulfide	U	5	1
1,1-Dichloroethene	U	5	1
1,1-Dichloroethane	U	5	1
t-1,2-Dichloroethene	U	5	1
1,2-Dichloropropane	U	5	1
Chloroform	U	5	1
1,2-Dichloroethane	U	5	1
2-Butanone	U	10	1
1,1,1-Trichloroethane	U	5	1
Carbon Tetrachloride	U	5	1
Vinyl Acetate	U	10	1
Dichlorobromomethane	U	5	1
c-1,3-Dichloropropene	U	5	1
Trichloroethene	U	5	1
Benzene	J	1	1
Chlorodibromomethane	U	5	1
1,1,2-Trichloroethane	U	5	1
t-1,3-Dichloropropene	U	5	1
2-Chloroethyl Vinyl Ether	U	10	1
Bromoform	U	5	1
2-Hexanone	U	10	1
4-Methyl-2-pentanone	U	10	1
1,1,2,2-Tetrachloroethane	U	5	1
Tetrachloroethene	U	5	1
Toluene	U	5	1
Chlorobenzene	U	5	1
Ethylbenzene	U	5	1
Styrene	U	5	1
Total Xylenes	U	15	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
G103

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
7					
8					
9					
10					
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IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : G103
Sample # : 87002403

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	10	1
1,3-Dichlorobenzene	U	10	1
1,4-Dichlorobenzene	U	10	1
Benzyl Alcohol	U	10	1
1,2-Dichlorobenzene	U	10	1
bis(2-Chloroisopropyl)Ether	U	10	1
N-Nitroso-Di-n-propylamine	U	10	1
Hexachloroethane	U	10	1
Nitrobenzene	U	10	1
Isophorone	U	10	1
bis(2-Chloroethoxy)Methane	U	10	1
1,2,4-Trichlorobenzene	U	10	1
Naphthalene	U	10	1
4-Chloroaniline	U	10	1
Hexachlorobutadiene	U	10	1
2-Methylnaphthalene	U	10	1
Hexachlorocyclopentadiene	U	10	1
2-Chloronaphthalene	U	10	1
2-Nitroaniline	U	50	1
Dimethyl Phthalate	U	10	1
Acenaphthylene	U	10	1
3-Nitroaniline	U	50	1
Acenaphthene	U	10	1
Dibenzofuran	U	10	1
2,4-Dinitrotoluene	U	10	1
2,6-Dinitrotoluene	U	10	1
Diethylphthalate	U	10	1
4-Chlorophenyl-phenylether	U	10	1
Fluorene	U	10	1
4-Nitroaniline	U	50	1
N-Nitrosodiphenylamine	U	10	1
4-Bromophenylphenylether	U	10	1
Hexachlorobenzene	U	10	1
Phenanthrene	U	10	1
Anthracene	U	10	1
Di-N-Butylphthalate	J	3	1
Fluoranthene	U	10	1
Pyrene	U	10	1
Butylbenzylphthalate	U	10	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : G103
Sample # : 87002403

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	20	1
Benzo(a)Anthracene	U	10	1
bis(2-Ethylhexyl)Phthalate	B	63	1
Chrysene	U	10	1
Di-N-Octyl Phthalate	U	10	1
Benzo(b)fluoranthene	U	10	1
Benzo(k)fluoranthene	U	10	1
Benzo(a)pyrene	U	10	1
Indeno(1,2,3-cd)pyrene	U	10	1
Dibenzo(a,h)anthracene	U	10	1
Benzo(g,h,i)perylene	U	10	1
Phenol	U	10	1
2-Chlorophenol	U	10	1
2-Methylphenol	U	10	1
4-Methylphenol	U	10	1
2-Nitrophenol	U	50	1
2,4-Dimethylphenol	U	10	1
Benzoic Acid	U	50	1
2,4-Dichlorophenol	U	10	1
4-Chloro-3-methylphenol	U	10	1
2,4,6-Trichlorophenol	U	10	1
2,4,5-Trichlorophenol	U	50	1
2,4-Dinitrophenol	U	50	1
4-Nitrophenol	U	50	1
4,6-Dinitro-2-methylphenol	U	50	1
Pentachlorophenol	U	50	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER: G103

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		Unknown	BNA	6.99	44
2		Unknown	BNA	11.72	10
3		Unknown	BNA	12.13	7
4					
5					
6					
7					
8					
9					
10					
11					
12					
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29					
30					

IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : G103
Sample # : 87002403

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
gamma-BHC	U	0.05	1
Heptachlor	U	0.05	1
Aldrin	U	0.05	1
Heptachlor Epoxide	U	0.05	1
Endosulfan I	U	0.05	1
Dieldrin	U	0.1	1
Endosulfan II	U	0.1	1
DDT	U	0.1	1
Endrin Aldehyde	U	0.1	1
Methoxychlor	U	0.5	1
Toxaphene	U	0.5	1
Chlordane	U	0.5	1
alpha-BHC	U	0.05	1
beta-BHC	U	0.05	1
delta-BHC	U	0.05	1
DDE	U	0.1	1
Endrin	U	0.1	1
DDD	U	0.1	1
Endosulfan Sulfate	U	0.1	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : G103
Sample # : 87002403

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
PCB - A1221	U	0.5	1
PCB - A1016	U	1	1
PCB - A1232	U	0.5	1
PCB - A1242	U	0.5	1
PCB - A1248	U	0.5	1
PCB - A1254	U	1	1
PCB - A1260	U	1	1

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Water Samples

Site ID: G103
Sample #: 87002403

PARAMETER	REMARKS (see inst.)	VALUE (ug/l)	DILUTION FACTOR
Aluminum		82	1
Antimony	U	20	1
Arsenic	U	2	1
Barium		93	1
Beryllium	U	5	1
Cadmium	U	5	1
Calcium		490000	10
Chromium	U	10	1
Cobalt	U	20	1
Copper	U	20	1
Iron		61	1
Lead	U	2	1
Magnesium		180000	10
[illegible]anese		1600	1
[illegible]ury	U	0.2	1
Nickel	U	20	1
Potassium		3900	1
Selenium	URE	3	1
Silver	UR	2	1
Sodium		120000	10
Thallium	UR	2	1
Tin	U	100	1
Vanadium	U	20	1
Zinc		110	1
Cyanide	U	5.0	1
Sulfate		273300	1
Sulfide		1600	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : S101
Sample # : 87002404
Moisture : 28.5

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Chloromethane	U	14	1
Bromomethane	U	14	1
Vinyl Chloride	U	14	1
Chloroethane	U	14	1
Methylene Chloride	B	35	1
Acetone		63	1
Carbon Disulfide	U	7	1
1,1-Dichloroethene	U	7	1
1,1-Dichloroethane	U	7	1
t-1,2-Dichloroethene	U	7	1
1,2-Dichloropropane	U	7	1
Chloroform	U	7	1
1,2-Dichloroethane	U	7	1
2-Butanone	U	14	1
1,1,1-Trichloroethane	U	7	1
Carbon Tetrachloride	U	7	1
Vinyl Acetate	U	14	1
Dichlorobromomethane	U	7	1
c-1,3-Dichloropropene	U	7	1
Trichloroethene	U	7	1
Benzene	U	7	1
Chlorodibromomethane	U	7	1
1,1,2-Trichloroethane	U	7	1
t-1,3-Dichloropropene	U	7	1
2-Chloroethyl Vinyl Ether	U	14	1
Bromoform	U	7	1
2-Hexanone	U	14	1
4-Methyl-2-pentanone	U	14	1
1,1,2,2-Tetrachloroethane	U	7	1
Tetrachloroethene	U	7	1
Toluene	U	7	1
Chlorobenzene	U	7	1
Ethylbenzene	U	7	1
Styrene	U	7	1
Total Xylenes	U	21	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S101
Sample # : 87002404
Moisture : 28.5

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	920	1
Benzo(a)Anthracene	U	460	1
bis(2-Ethylhexyl)Phthalate	B	1900	1
Chrysene	U	460	1
Di-N-Octyl Phthalate	U	460	1
Benzo(b)fluoranthene	U	460	1
Benzo(k)fluoranthene	U	460	1
Benzo(a)pyrene	U	460	1
Indeno(1,2,3-cd)pyrene	U	460	1
[illegible]zo(a,h)anthracene	U	460	1
[illegible]g,h,i)perylene	U	460	1
Phenol	U	460	1
2-Chlorophenol	U	460	1
2-Methylphenol	U	460	1
4-Methylphenol	U	460	1
2-Nitrophenol	U	2200	1
2,4-Dimethylphenol	U	460	1
Benzoic Acid	U	2200	1
2,4-Dichlorophenol	U	460	1
4-Chloro-3-methylphenol	U	460	1
2,4,6-Trichlorophenol	U	460	1
2,4,5-Trichlorophenol	U	2200	1
2,4-Dinitrophenol	U	2200	1
4-Nitrophenol	U	2200	1
4,6-Dinitro-2-methylphenol	U	2200	1
Pentachlorophenol	U	2200	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S101

ORGANICS ANALYSIS DATA SHEET
SOIL SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/kg)
1	96480	2(3H)-Furanone, dihydro-	BNA	7.19	1456
2		Unknown	BNA	7.27	1302
3		Unknown	BNA	7.98	1999
4		Unknown	BNA	8.97	737
5		Unknown	BNA	10.19	1316
		Unknown	BNA	14.49	738
	74381401	Propanoic acid, 2-methyl-,1-(1,1-dimethylethyl)-2methyl-1,3-propanediyl ester	BNA	20.29	802
8		A Phthalate	BNA	24.1	4323
9		Unknown	BNA	35.64	1649
10	123284	Propanoic acid,3,3'-thiobis-, didodecyl ester	BNA	35.88	2811
11		Unknown	BNA	36.56	2152
12		Unknown	BNA	37.6	2788
13		Unknown	BNA	38.8	1031
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					

IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : S101
Sample # : 87002404
Moisture : 28.5

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
gamma-BHC	U	11	1
Heptachlor	U	11	1
Aldrin	U	11	1
Heptachlor Epoxide	U	11	1
Endosulfan I	U	11	1
Dieldrin	U	22	1
Endosulfan II	U	22	1
DDT	U	22	1
Endrin Aldehyde	U	22	1
Methoxychlor	U	110	1
Toxaphene	U	110	1
Chlordane	U	110	1
alpha-BHC	U	11	1
beta-BHC	U	11	1
delta-BHC	U	11	1
DDE	U	22	1
Endrin	U	22	1
DDD	U	22	1
Endosulfan Sulfate	U	22	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : S101
Sample # : 87002404
Moisture : 28.5

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
PCB - A1221	U	110	1
PCB - A1016	U	220	1
PCB - A1232	U	110	1
PCB - A1242	U	110	1
PCB - A1248	U	110	1
PCB - A1254	U	220	1
PCB - A1260	U	220	1

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Soil Samples

Site ID : S101
Sample # : 87002404

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Aluminum		10500000	1
Antimony	RS	43600	1
Arsenic		27500	10
Barium		398000	1
Beryllium	U	1000	1
Cadmium		49000	1
Calcium		2320000	1
Chromium		18600	1
Cobalt		23400	1
Copper		446000	10
Iron		32100000	1
Lead		1226000	1
Magnesium		1450000	1
Manganese		3500000	10
Mercury	U	200	1
Potassium		638000	1
Nickel		199000	1
Selenium	UER	620	1
Silver	UR	400	1
Thallium	U	400	1
Tin		65000	1
Sodium		314000	1
Vanadium		53800	1
Zinc		10300000	10
Cyanide		350	1
Sulfide	UR	5000	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : S102
Sample # : 87002405
Moisture : 47.6

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Chloromethane	U	19	1
Bromomethane	U	19	1
Vinyl Chloride	U	19	1
Chloroethane	U	19	1
Methylene Chloride	B	31	1
Acetone		160	1
Carbon Disulfide	U	10	1
1,1-Dichloroethene	U	10	1
1,1-Dichloroethane	U	10	1
t-1,2-Dichloroethene	U	10	1
1,2-Dichloropropane	U	10	1
Chloroform	U	10	1
1,2-Dichloroethane	U	10	1
2-Butanone		21	1
1,1,1-Trichloroethane	U	10	1
Carbon Tetrachloride	U	10	1
Vinyl Acetate	U	19	1
Dichlorobromomethane	U	10	1
c-1,3-Dichloropropene	U	10	1
Trichloroethene	U	10	1
Benzene	U	10	1
Chlorodibromomethane	U	10	1
1,1,2-Trichloroethane	U	10	1
t-1,3-Dichloropropene	U	10	1
2-Chloroethyl Vinyl Ether	U	19	1
Bromoform	U	10	1
2-Hexanone	U	19	1
4-Methyl-2-pentanone	U	19	1
1,1,2,2-Tetrachloroethane	U	10	1
Tetrachloroethene	U	10	1
Toluene		15	1
Chlorobenzene	U	10	1
Ethylbenzene	U	10	1
Styrene	U	10	1
Total Xylenes	U	29	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S102

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
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26					
27					
28					
29					
30					

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S102
Sample # : 87002405
Moisture : 47.6

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	630	1
1,3-Dichlorobenzene	U	630	1
1,4-Dichlorobenzene	U	630	1
Benzyl Alcohol	U	630	1
1,2-Dichlorobenzene	U	630	1
bis(2-Chloroisopropyl)Ether	U	630	1
N-Nitroso-Di-n-propylamine	U	630	1
Hexachloroethane	U	630	1
Nitrobenzene	U	630	1
Isophorone	U	630	1
bis(2-Chloroethoxy)Methane	U	630	1
1,2,4-Trichlorobenzene	U	630	1
Naphthalene	U	630	1
4-Chloroaniline	U	630	1
Hexachlorobutadiene	U	630	1
2-Methylnaphthalene	U	630	1
Hexachlorocyclopentadiene	U	630	1
2-Chloronaphthalene	U	630	1
2-Nitroaniline	U	3100	1
Dimethyl Phthalate	U	630	1
Acenaphthylene	U	630	1
3-Nitroaniline	U	3100	1
Acenaphthene	U	630	1
Dibenzofuran	U	630	1
2,4-Dinitrotoluene	U	630	1
2,6-Dinitrotoluene	U	630	1
Diethylphthalate	U	630	1
4-Chlorophenyl-phenylether	U	630	1
Fluorene	U	630	1
4-Nitroaniline	U	3100	1
N-Nitrosodiphenylamine	U	630	1
4-Bromophenylphenylether	U	630	1
Hexachlorobenzene	U	630	1
Phenanthrene	U	630	1
Anthracene	U	630	1
Di-n-Butylphthalate	B	500	1
Fluoranthene	U	630	1
Pyrene	U	630	1
Butylbenzylphthalate	U	630	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S102
Sample # : 87002405
Moisture : 47.6

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	1300	1
Benzo(a)Anthracene	U	630	1
bis(2-Ethylhexyl)Phthalate	B	570	1
Chrysene	U	630	1
Di-N-Octyl Phthalate	U	630	1
Benzo(b)fluoranthene	U	630	1
Benzo(k)fluoranthene	U	630	1
Benzo(a)pyrene	U	630	1
Indeno(1,2,3-cd)pyrene	U	630	1
[illegible]zo(a,h)anthracene	U	630	1
[illegible](g,h,i)perylene	U	630	1
Phenol	U	630	1
2-Chlorophenol	U	630	1
2-Methylphenol	U	630	1
4-Methylphenol	U	630	1
2-Nitrophenol	U	3100	1
2,4-Dimethylphenol	U	630	1
Benzoic Acid	U	3100	1
2,4-Dichlorophenol	U	630	1
4-Chloro-3-methylphenol	U	630	1
2,4,6-Trichlorophenol	U	630	1
2,4,5-Trichlorophenol	U	3100	1
2,4-Dinitrophenol	U	3100	1
4-Nitrophenol	U	3100	1
4,6-Dinitro-2-methylphenol	U	3100	1
Pentachlorophenol	U	3100	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S102

ORGANICS ANALYSIS DATA SHEET
SOIL SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/kg)
1		Unknown	BNA	7.07	1779
2	96480	2(3H)-Furanone, dihydro-	BNA	7.14	1856
3		Unknown	BNA	7.73	2263
4		Unknown	BNA	8.2	4585
5		Unknown	BNA	13.5	291
		Unknown	BNA	14.46	2141
		Unknown	BNA	15.71	1544
8		Unknown	BNA	20.28	614
9		A Phthalate	BNA	24.08	3216
10		A saturated Hydrocarbon	BNA	33.21	1478
11		A saturated Hydrocarbon	BNA	35.03	3503
12	123284	Propanoic acid, 3,3'-thiobis-, didodecyl ester	BNA	35.9	2861
13		A saturated Hydrocarbon	BNA	36.87	2418
14		Unknown	BNA	38.72	1521
15		A steriod	BNA	39.16	2105
16		Unknown	BNA	39.35	3561
17		A steriod	BNA	39.98	6799
18					
19					
20					
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24					
25					
26					
27					
28					
29					

IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : S102
Sample # : 87002405
Moisture : 47.6

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
gamma-BHC	U	15	1
Heptachlor	U	15	1
Aldrin	U	15	1
Heptachlor Epoxide	U	15	1
Endosulfan I	U	15	1
Dieldrin	U	31	1
Endosulfan II	U	31	1
DDT	U	31	1
Endrin Aldehyde	U	31	1
Methoxychlor	U	150	1
Toxaphene	U	150	1
Chlordane	U	150	1
alpha-BHC	U	15	1
beta-BHC	U	15	1
delta-BHC	U	15	1
DDE	U	31	1
Endrin	U	31	1
DDD	U	31	1
Endosulfan Sulfate	U	31	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : S102
Sample # : 87002405
Moisture : 47.6

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
PCB - A1221	U	150	1
PCB - A1016	U	310	1
PCB - A1232	U	150	1
PCB - A1242	U	150	1
PCB - A1248	U	150	1
PCB - A1254	U	310	1
PCB - A1260	U	310	1

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Soil Samples

Site ID : S102
Sample # : 87002405

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Aluminum		15300000	1
Antimony	URS	4000	1
Arsenic		14300	5
Barium		116000	1
Beryllium	U	1000	1
Cadmium		44600	1
Calcium		2630000	1
Chromium		14400	1
Cobalt		8000	1
Copper		129000	1
Iron		15300000	1
Lead		272000	1
Magnesium		1770000	1
Manganese		498000	1
Mercury	U	200	1
Potassium		1160000	1
Nickel		40000	1
Selenium	UR	3100	5
Silver	UR	400	1
Thallium		620	1
Tin		21400	1
Sodium		382000	1
Vanadium		26000	1
Zinc		6030000	10
Cyanide	U	250	1
Sulfate		2600	1
Sulfide	R	7600	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : S201
Sample # : 87002406
Moisture : 50.1

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Chloromethane	U	20	1
Bromomethane	U	20	1
Vinyl Chloride	U	20	1
Chloroethane	U	20	1
Methylene Chloride	B	22	1
Acetone		76	1
Carbon Disulfide	U	10	1
1,1-Dichloroethene	U	10	1
1,1-Dichloroethane	U	10	1
t-1,2-Dichloroethene	U	10	1
1,2-Dichloropropane	U	10	1
Chloroform	U	10	1
1,2-Dichloroethane	U	10	1
2-Butanone	J	7	1
1,1,1-Trichloroethane	U	10	1
Carbon Tetrachloride	U	10	1
Vinyl Acetate	U	20	1
Dichlorobromomethane	U	10	1
c-1,3-Dichloropropene	U	10	1
Trichloroethene	U	10	1
Benzene	U	10	1
Chlorodibromomethane	U	10	1
1,1,2-Trichloroethane	U	10	1
t-1,3-Dichloropropene	U	10	1
2-Chloroethyl Vinyl Ether	U	20	1
Bromoform	U	10	1
2-Hexanone	U	20	1
4-Methyl-2-pentanone	U	20	1
1,1,2,2-Tetrachloroethane	U	10	1
Tetrachloroethene	U	10	1
Toluene	U	10	1
Chlorobenzene	U	10	1
Ethylbenzene	U	10	1
Styrene	U	10	1
Total Xylenes	U	30	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S201

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S201
Sample # : 87002406
Moisture : 50.1

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	660	1
1,3-Dichlorobenzene	U	660	1
1,4-Dichlorobenzene	U	660	1
Benzyl Alcohol	U	660	1
1,2-Dichlorobenzene	U	660	1
bis(2-Chloroisopropyl)Ether	U	660	1
N-Nitroso-Di-n-propylamine	U	660	1
Hexachloroethane	U	660	1
Nitrobenzene	U	660	1
orone	U	660	1
-Chloroethoxy)Methane	U	660	1
1,2,4-Trichlorobenzene	U	660	1
Naphthalene	U	660	1
4-Chloroaniline	U	660	1
Hexachlorobutadiene	U	660	1
2-Methylnaphthalene	U	660	1
Hexachlorocyclopentadiene	U	660	1
2-Chloronaphthalene	U	660	1
2-Nitroaniline	U	3200	1
Dimethyl Phthalate	U	660	1
Acenaphthylene	U	660	1
3-Nitroaniline	U	3200	1
Acenaphthene	U	660	1
Dibenzofuran	U	660	1
2,4-Dinitrotoluene	U	660	1
2,6-Dinitrotoluene	U	660	1
Diethylphthalate	U	660	1
4-Chlorophenyl-phenylether	U	660	1
Fluorene	U	660	1
4-Nitroaniline	U	3200	1
N-Nitrosodiphenylamine	U	660	1
4-Bromophenylphenylether	U	660	1
Hexachlorobenzene	U	660	1
Phenanthrene	U	660	1
racene	U	660	1
-Butylphthalate	B	590	1
Fluoranthene	U	660	1
Pyrene	U	660	1
Butylbenzylphthalate	U	660	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S201
Sample # : 87002406
Moisture : 50.1

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	1300	1
Benzo(a)Anthracene	U	660	1
bis(2-Ethylhexyl)Phthalate	B	640	1
Chrysene	U	660	1
Di-N-Octyl Phthalate	U	660	1
Benzo(b)fluoranthene	U	660	1
Benzo(k)fluoranthene	U	660	1
Benzo(a)pyrene	U	660	1
Indeno(1,2,3-cd)pyrene	U	660	1
[illegible]zo(a,h)anthracene	U	660	1
[illegible](g,h,i)perylene	U	660	1
Phenol	U	660	1
2-Chlorophenol	U	660	1
2-Methylphenol	U	660	1
4-Methylphenol	U	660	1
2-Nitrophenol	U	3200	1
2,4-Dimethylphenol	U	660	1
Benzoic Acid	U	3200	1
2,4-Dichlorophenol	U	660	1
4-Chloro-3-methylphenol	U	660	1
2,4,6-Trichlorophenol	U	660	1
2,4,5-Trichlorophenol	U	3200	1
2,4-Dinitrophenol	U	3200	1
4-Nitrophenol	U	3200	1
4,6-Dinitro-2-methylphenol	U	3200	1
Pentachlorophenol	U	3200	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S201

ORGANICS ANALYSIS DATA SHEET
SOIL SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/kg)
1	96480	2(3H)-Furanone, dihydro-	BNA	7.11	1608
2		Unknown	BNA	7.19	1337
3		Unknown	BNA	7.86	716
4		Unknown	BNA	8.9	1618
5		Unknown	BNA	10.16	2888
6		Unknown	BNA	14.39	1040
7	74381401	Propanoic acid,2-methyl-,1-(1,1-dimethylethyl)-2-methane 1,3-propanediyl ester	BNA	20.21	713
8		A phthalate	BNA	23.99	3276
9	10544500	Molecular Sulfur	BNA	26.3	1571
10		Unknown	BNA	33.07	1322
11		Unknown	BNA	33.76	1644
12		A saturated Hydrocarbon	BNA	34.94	3042
13	123284	Propanoic acid,3,3'-thiobis-, didodecyl ester	BNA	35.83	2704
14		A saturated Hydrocarbon	BNA	36.79	2194
15		Unknown	BNA	38.9	2079
16		Unknown	BNA	39.25	2791
17		A steriod	BNA	39.87	3336
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					

IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : S201
Sample # : 87002406
Moisture : 50.1

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
gamma-BHC	U	16	1
Heptachlor	U	16	1
Aldrin	U	16	1
Heptachlor Epoxide	U	16	1
Endosulfan I	U	16	1
Dieldrin	U	32	1
Endosulfan II	U	32	1
DDT	U	32	1
Endrin Aldehyde	U	32	1
Methoxychlor	U	160	1
Toxaphene	U	160	1
Chlordane	U	160	1
alpha-BHC	U	16	1
beta-BHC	U	16	1
delta-BHC	U	16	1
DDE	U	32	1
Endrin	U	32	1
DDD	U	32	1
Endosulfan Sulfate	U	32	1

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : S201
Sample # : 87002406
Moisture : 50.1

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
PCB - A1221	U	160	1
PCB - A1016	U	320	1
PCB - A1232	U	160	1
PCB - A1242	U	160	1
PCB - A1248	U	160	1
PCB - A1254	U	320	1
PCB - A1260	U	320	1

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Soil Samples

Site ID : S201
Sample # : 87002406

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Aluminum		15200000	1
Antimony	UR	4000	1
Arsenic	S	5670	2.5
Barium		173000	1
Beryllium	U	1000	1
Cadmium		23200	1
Calcium		3600000	1
Chromium		16600	1
Cobalt		8800	1
Copper		67200	1
Iron		18500000	1
Lead		139000	1
Magnesium		2020000	1
Manganese		799000	1
Mercury	U	200	1
Potassium		942000	1
Nickel		20600	1
Selenium	URE	620	1
Silver	UR	400	1
Thallium	U	400	1
Tin		28400	1
Sodium		484000	1
Vanadium		32600	1
Zinc		3770000	10
Cyanide	U	250	1
Sulfide	R	34200	1

IEPA ANALYSIS PROGRAM
Report of VOA Results

Site ID : S202
Sample # : 87002407
Moisture : 36.4

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Chloromethane	U	16	1
Bromomethane	U	16	1
Vinyl Chloride	U	16	1
Chloroethane	U	16	1
Methylene Chloride	B	27	1
Acetone	U	16	1
Carbon Disulfide	U	8	1
1,1-Dichloroethene	U	8	1
1,1-Dichloroethane	U	8	1
t-1,2-Dichloroethene	U	8	1
1,2-Dichloropropane	U	8	1
Chloroform	J	6	1
1,2-Dichloroethane	U	8	1
2-Butanone	U	16	1
1,1,1-Trichloroethane	U	8	1
Carbon Tetrachloride	U	8	1
Vinyl Acetate	U	16	1
Dichlorobromomethane	U	8	1
c-1,3-Dichloropropene	U	8	1
Trichloroethene	U	8	1
Benzene	U	8	1
Chlorodibromomethane	U	8	1
1,1,2-Trichloroethane	U	8	1
t-1,3-Dichloropropene	U	8	1
2-Chloroethyl Vinyl Ether	U	16	1
Bromoform	U	8	1
2-Hexanone	U	16	1
4-Methyl-2-pentanone	U	16	1
1,1,2,2-Tetrachloroethane	U	8	1
Tetrachloroethene	U	8	1
Toluene	U	8	1
Chlorobenzene	U	8	1
Ethylbenzene	U	8	1
Styrene	U	8	1
Total Xylenes	U	24	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S202

ORGANICS ANALYSIS DATA SHEET
WATER SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/l)
1		No library search peaks	VOA		
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Date: 06-29-1987 Page: 1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S202
Sample # : 87002407
Moisture : 36.4

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
bis(2-Chloroethyl)Ether	U	520	1
1,3-Dichlorobenzene	U	520	1
1,4-Dichlorobenzene	U	520	1
Benzyl Alcohol	U	520	1
1,2-Dichlorobenzene	U	520	1
bis(2-Chloroisopropyl)Ether	U	520	1
N-Nitroso-Di-n-propylamine	U	520	1
Hexachloroethane	U	520	1
Nitrobenzene	U	520	1
[illegible]orone	U	520	1
[illegible]-Chloroethoxy)Methane	U	520	1
1,2,4-Trichlorobenzene	U	520	1
Naphthalene		450	1
4-Chloroaniline	U	520	1
Hexachlorobutadiene	U	520	1
2-Methylnaphthalene		900	1
Hexachlorocyclopentadiene	U	520	1
2-Chloronaphthalene	U	520	1
2-Nitroaniline	U	2500	1
Dimethyl Phthalate	U	520	1
Acenaphthylene	U	520	1
3-Nitroaniline	U	2500	1
Acenaphthene	U	520	1
Dibenzofuran		190	1
2,4-Dinitrotoluene	U	520	1
2,6-Dinitrotoluene	U	520	1
Diethylphthalate	U	520	1
4-Chlorophenyl-phenylether	U	520	1
Fluorene	U	520	1
4-Nitroaniline	U	2500	1
N-Nitrosodiphenylamine	U	520	1
4-Bromophenylphenylether	U	520	1
Hexachlorobenzene	U	520	1
Phenanthrene		1100	1
[illegible]acene		220	1
[illegible]-Butylphthalate	B	1200	1
Fluoranthene		1100	1
Pyrene		1400	1
Butylbenzylphthalate	U	520	1

IEPA ANALYSIS PROGRAM
Report of BNA Results

Site ID : S202
Sample # : 87002407
Moisture : 36.4

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
3,3'-Dichlorobenzidine	U	1000	1
Benzo(a)Anthracene		570	1
bis(2-Ethylhexyl)Phthalate	B	830	1
Chrysene		1300	1
Di-N-Octyl Phthalate	U	520	1
Benzo(b)fluoranthene		710	1
Benzo(k)fluoranthene	U	520	1
Benzo(a)pyrene	U	520	1
Indeno(1,2,3-cd)pyrene	U	520	1
[illegible]zo(a,h)anthracene	U	520	1
[illegible](g,h,i)perylene	U	520	1
Phenol	U	520	1
2-Chlorophenol	U	520	1
2-Methylphenol	U	520	1
4-Methylphenol	U	520	1
2-Nitrophenol	U	2500	1
2,4-Dimethylphenol	U	520	1
Benzoic Acid	U	2500	1
2,4-Dichlorophenol	U	520	1
4-Chloro-3-methylphenol	U	520	1
2,4,6-Trichlorophenol	U	520	1
2,4,5-Trichlorophenol	U	2500	1
2,4-Dinitrophenol	U	2500	1
4-Nitrophenol	U	2500	1
4,6-Dinitro-2-methylphenol	U	2500	1
Pentachlorophenol	U	2500	1

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Services

LAB NAME : Envirodyne Engineers, Inc.

CASE # : 3132-00010

SAMPLE NUMBER
S202

ORGANICS ANALYSIS DATA SHEET
SOIL SAMPLES
Tentatively Identified Compounds

	CAS NUMBER	COMPOUND NAME	FRACTION	RT (min.)	ESTIMATED CONC. (ug/kg)
1	96480	2(3H)-Furanone, dihydro-	BNA	7.05	1831
2		Unknown	BNA	7.12	1161
3		Unknown	BNA	7.88	3681
4		Benzaldehyde with L.S.#3 background	BNA	8.05	622
5		Unknown	BNA	8.89	803
6		A C12H12 aromatic hydrocarbon	BNA	17.1	745
		A C12H12 aromatic hydrocarbon	BNA	17.37	860
8		Unknown	BNA	18.65	1038
9		Unknown	BNA	20.23	1389
10		A saturated hydrocarbon	BNA	21.78	1201
11		A phthalate	BNA	24.03	2253
12		A C16H14 aromatic hydrocarbon	BNA	26.1	1686
13	10544500	A C16H14 aromatic hydrocarbon	BNA	26.3	1675
14		Molecular Sulfur	BNA	26.38	3103
15		A C17H16 aromatic hydrocarbon	BNA	27.76	1621
16		A C17H12 aromatic hydrocarbon	BNA	29.01	1625
17		Unknown	BNA	35.66	1250
18		Unknown	BNA	36.59	2325
19		Unknown	BNA	37.67	2699
20		Unknown	BNA	38.87	1455
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

IEPA ANALYSIS PROGRAM
Report of PEST Results

Site ID : S202
Sample # : 87002407
Moisture : 36.4

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
gamma-BHC	U	130	10
Heptachlor	U	130	10
Aldrin	U	130	10
Heptachlor Epoxide	U	130	10
Endosulfan I	U	130	10
Dieldrin	U	250	10
Endosulfan II	U	250	10
DDT	U	250	10
Endrin Aldehyde	U	250	10
Methoxychlor	U	1300	10
Toxaphene	U	1300	10
Chlordane	U	1300	10
alpha-BHC	U	130	10
beta-BHC	U	130	10
delta-BHC	U	130	10
DDE	U	250	10
Endrin	U	250	10
DDD	U	250	10
Endosulfan Sulfate	U	250	10

IEPA ANALYSIS PROGRAM
Report of PCB Results

Site ID : S202
Sample # : 87002407
Moisture : 36.4

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
PCB - A1221	U	1300	10
PCB - A1016	U	2500	10
PCB - A1232	U	1300	10
PCB - A1242	U	1300	10
PCB - A1248	U	1300	10
PCB - A1254	U	2500	10
PCB - A1260	U	2500	10

Date: 05/12/87

Time: 6:10 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the East. In locker Room. Shows Past Employee Names.

(25)

Date: 05/12/87

Time: 6:15 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Northwest in the Central Portion of the South Building. The drums full of unknown liquid.

(26)

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 5:50 A.M. P.M

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the Southeast.

(23)

Date: 05/12/87

Time: 5:50 A.M. P.M

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the Southwest in the Northeast Corner of the Northeast building.

(24)

Date: 05/12/87

Time: 6:00 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval /Sandoval Zinc

Comments: Photograph taken toward the North, Just West of Southern most building. (21)

Date: 05/12/87

Time: 6:00 A.M. P.M.

Photograph By:

Greg Dunn

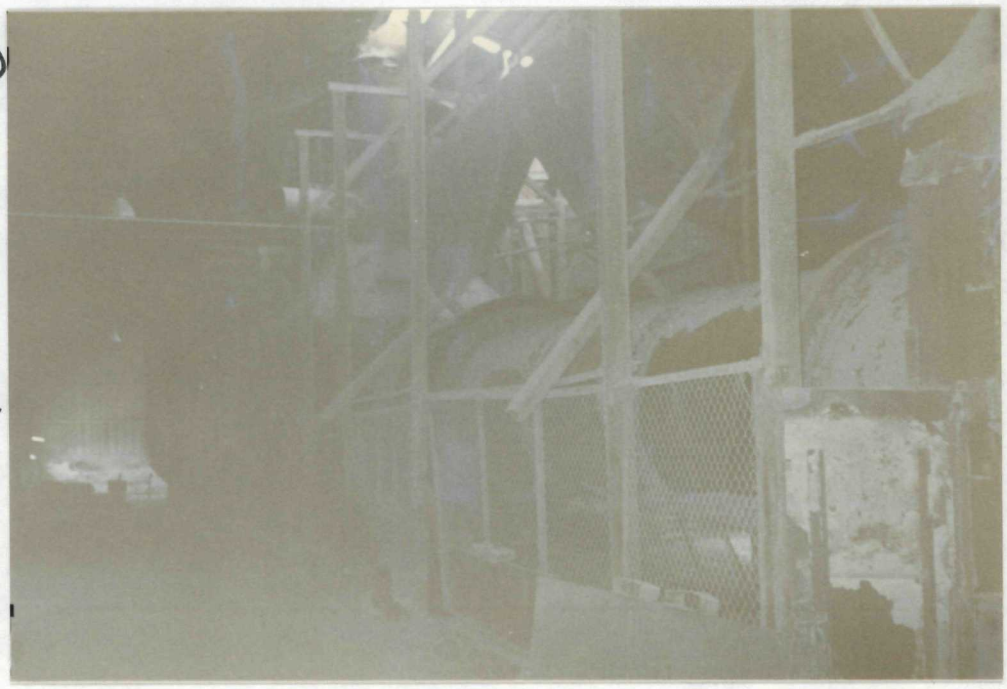
Location: LPC- 1210500002

Marion Co.

Sandoval /Sandoval Zinc

Comments: Photograph taken toward the Northwest inside building

(22)



IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 5:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the South from S102. Sample taken from where the creek that runs through the site reaches Prairie Creek. (19)

Date: 05/12/87

Time: 5:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Southwest from S102 Looking down Prairie Creek (20)

Date: 05/12/87

Time: 4:20 A.M. P.M.

Photograph By:
Greg Dunn

Location: LPC-1210500002
Marion Co.
Sandoval/Sandoval Zinc

Comments: Photograph taken toward the East from S201 North of RR tracks on West side of Site

(17)

Date: 05/12/87

Time: 4:50 A.M. P.M.

Photograph By:
Greg Dunn

Location: LPC-1210500002
Marion Co.
Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Northeast from S202 Just North of access road.

(18)

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 1:30 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the South, South Southeast, and Southeast Respectively All pictures taken from Monitor Well G102 - North of the Site.

(14) (15) (16)

Date:

Time: A.M. P.M.

Photograph By:

Location: LPC-

Co.

/

Comments: Photograph taken toward the

16 15 14

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 1:30 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the West, Southwest, & South Respectively. All Pictures taken from monitor Well G102 North of the Site

11 12 13

Date:

Time: A.M. P.M.

Photograph By:

Location: LPC-

Co.

/

Comments: Photograph taken toward the

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 2:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken

toward the Southwest

toward Monitor Well

G103 (9)

Date: 05/12/87

Time: 2:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval

Comments: Photograph taken

toward the East from

West Side of Site.

(10)

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 12:50 A.M. P.M.

Photograph By:

Rich Lange

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the East. Monitor Well location G-102

(7)

Date: 05/12/87

Time: 1:36 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the South - Sample location S101 North of Railroad tracks - East C Site. (8)

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 11:50 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken

toward the North Northwest

from Monitor Well

G101 (5)

Date: 05/12/87

Time: 2:15 A.M. (P.M.)

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken

toward the South from

Monitor Well G102

(6)

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 9:50 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the East. from West Side of Site. Mid-Site (3)

Date: 05/12/87

Time: 9:55 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the North from West Side of Site. (4)

Date: 05/12/87

Time: 9:35 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken

toward the Southeast

East Edge of Site

(1)

Date: 05/12/87

Time: 9:35 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval / Sandoval Zinc

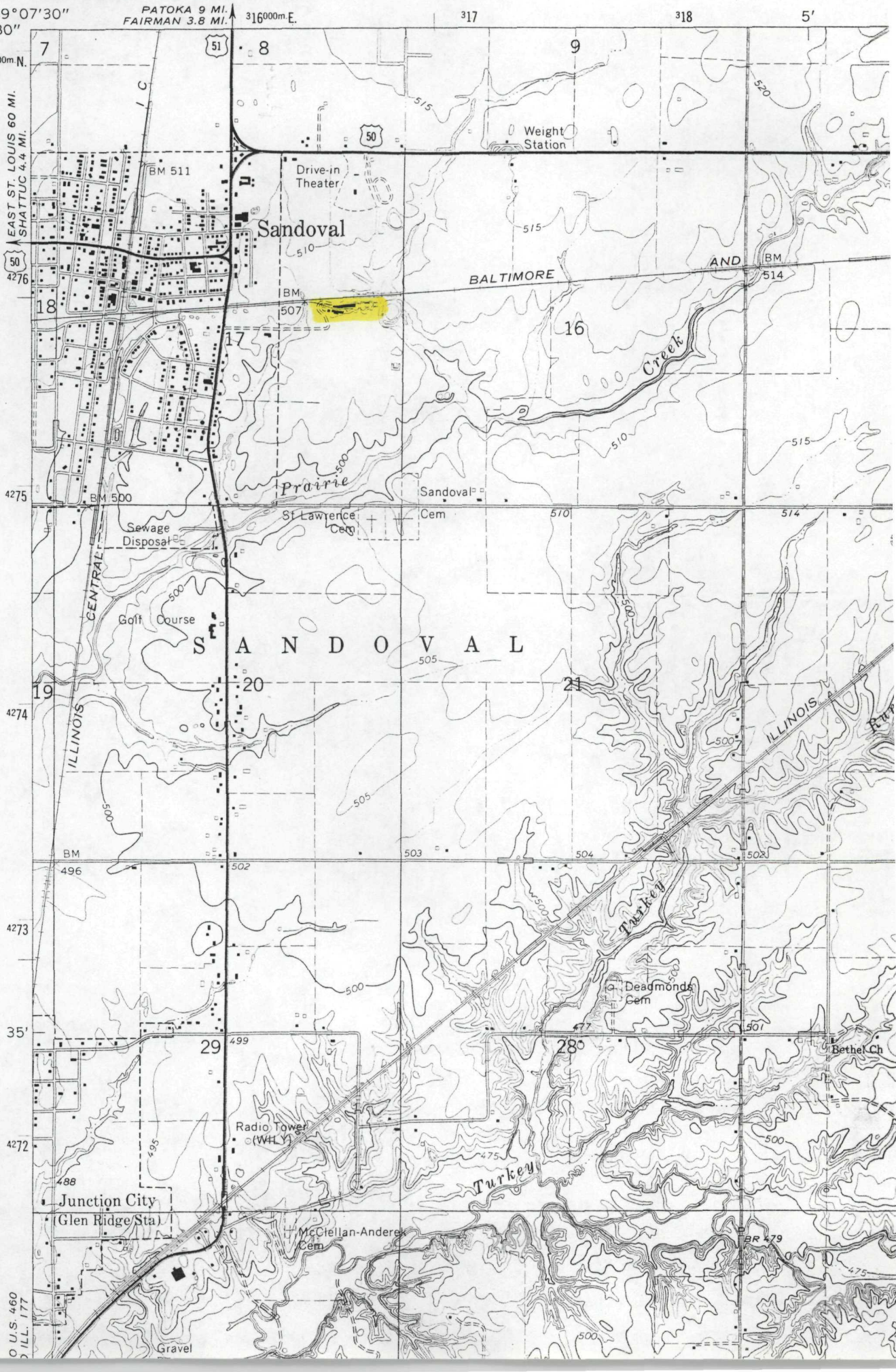
Comments: Photograph taken

toward the West from

North Side of Site

(2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Soil Samples

Site ID : S202
Sample # : 87002407

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Aluminum		10300000	1
Antimony	URS+	76000	3
Arsenic		24900	5
Barium		301000	1
Beryllium	U	1000	1
Cadmium		11200	1
Calcium		18100000	10
Chromium		41400	1
Cobalt		10600	1
Copper		1370000	10
Iron		41600000	1
Lead		4662000	10
Magnesium		2140000	1
Manganese		749000	1
Mercury		670	1
Potassium		738000	1
Nickel		334000	1
Selenium	URE	620	1
Silver	R	1500	1
Thallium		890	1
Tin		373000	1
Sodium		738000	1
Vanadium		33800	1
Zinc		44700000	40
Cyanide	U	250	1
Sulfate		110200	1
Sulfide	U	5000	1

Date: 05/12/87

Time: 5:55 A.M. (P.M.)

Photograph By:
Greg Dunn

Location: LPC-1210500002
Marion Co.
Sandoval/Sandoval Zinc

Comments: Photograph taken toward the East from the East Side of the North Building (27)

Date: 05/12/87

Time: 5:55 A.M. (P.M.)

Photograph By:
Greg Dunn

Location: LPC-1210500002
Marion Co.
Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Southeast from the East Side of the North Building (28)

Date: 05/12/87

Time: 6:05 A.M. (P.M.)

Photograph By:
Greg Dunn

Location: LPC-1210500002
Marion Co.
Sandoval/Sandoval Zinc

Comments: Photograph taken toward the North from the South Side of the North Building. Shows the past lagoon on the Right of the Picture.

(29)

Date: 05/12/87

Time: 6:00 A.M. (P.M.)

Photograph By:
Greg Dunn

Location: LPC-1210500002
Marion Co.
Sandoval/Sandoval Zinc

Comments: Photograph taken toward the West from Between the North & South Buildings.

(30)

IL 532-0603
L/NPC 24 6/78

Date: 05/12/87

Time: 5:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Northeast from S102. Looking upstream of the small stream

(31)

Date: 05/12/87

Time: 5:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the North, from North of S102, Picture of Swampy area.

(32)

Date: 05/12/87

Time: 5:45 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval / Sandoval Zinc

Comments: Photograph taken toward the North - Picture of Swampy area Southeast of Site

(33)

Date: 5/12/87

Time: 5:45 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the North - Picture of Swampy are SE of Site. This Marsh area is Not on the Topo Map.

(34)

Date: 5/12/87

Time: 6:10 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 12105 00002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken

toward the (35) Toward East

(36) Toward the Northeast

(37) Toward the North from the

North side of the North

Building

Date:

Time: A.M. P.M.

Photograph By:

Location: LPC-

Co.

/

Comments: Photograph taken

toward the

(37)

(36)

(35)

L/NPC 24 6/78

Date: 5/12/87

Time: 6:10 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken

toward the 38 to the North

39 Toward the Northeast

from the North side of the

North Building

Date:

Time: A.M. P.M.

Photograph By:

Location: LPC-

Co.

/

Comments: Photograph taken

toward the

39

38

L/NPC 24 6/78

Date: 5/12/87

Time: 11:00 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the North from Monitor Well G-101

(40)

41

Date: 5/12/87

Time: 11:00 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the North-Northwest from Monitor Well G-101

(41)

40

Date: 5/12/87

Time: 11:00 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken

toward the Northwest from

Monitor Well G101

(42)

Date: 5/12/87

Time: 11:00 (A.M.) P.M.

Photograph By:

Greg Dunn

Location: LPC- 1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken

toward the West-Northwest

from Monitor Well G101

(43)

42

43

L/NPC 24 6/78

Date: 5/12/87

Time: 5:40 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the North from the Swamp SE of Site

(44)

Date: 5/12/87

Time: 6:20 A.M. P.M.

Photograph By:

Greg Dunn

Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Northeast from inside South Building

(45)

Date: 5/12/87

Time: 6:15 A.M. P.M.

Photograph By:

Greg Dunn

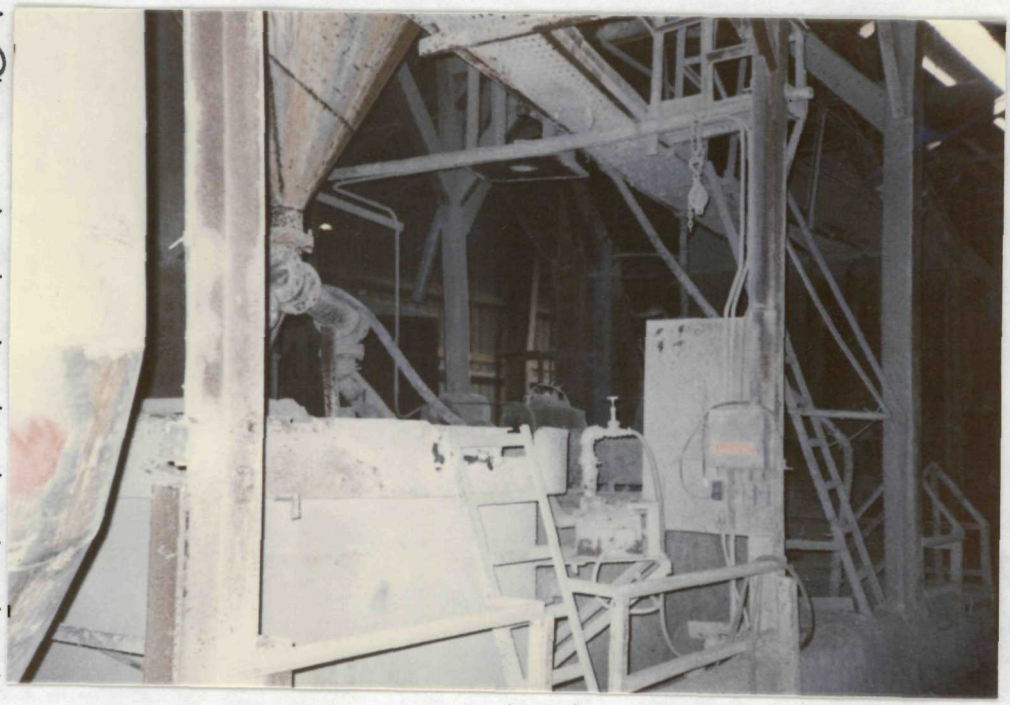
Location: LPC-1210500002

Marion Co.

Sandoval/Sandoval Zinc

Comments: Photograph taken toward the Northeast from inside South Building

(46)



Date:

Time: A.M. P.M.

Photograph By:

Location: LPC-

Co.

/

Comments: Photograph taken toward the

No Picture

L/NPC 24 6/78