SCREENING SITE INSPECTION REPORT
FOR
WABASH PAPER COATINGS
WABASH, INDIANA
U.S. EPA ID: IND981961501
SS ID: NONE
TDD: F05-8802-004
PAN: FIN0662SB

EPA Region 5 Records Ctr.
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OCTOBER 29, 1991

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment
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SIGNATURE PAGE
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Prepared by: _____ Date: 10/28/91
Deborah Epstein
FIT Team Leader
Ecology and Environment, Inc.

Reviewed by: _____ Date: 10-28-91
Michael Dieckhaus
FIT Unit Manager
Ecology and Environment, Inc.

Approved by: _____ Date: 10/29/91
Jerome D. Oskvarek
FIT Office Manager
Ecology and Environment, Inc.

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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Wabash Paper Coatings (WPC) site (aka Mafcote-Wabash Paper Coatings, Inc.) under contract number 68-01-7347.

The site was discovered by the Office of Solid and Hazardous Waste Management (OSHWM), Indiana Department of Environmental Management (IDEM), in October 1987. Allegations of sewer discharge high in metals and suspended solids by the Wabash Public Works as well as the old age and condition of the facility prompted IDEM to evaluate the site (Wonderly 1987).

The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by Mary Anne Hunter, OSHWM, IDEM, and is dated October 15, 1987 (U.S. EPA 1987).

FIT prepared an SSI work plan for the WPC site under technical directive document (TDD) F05-8802-004, issued on December 3, 1987. The SSI work plan was approved by U.S. EPA on March 26, 1991. The SSI of the WPC site was conducted on April 17, 1991, under amended TDD F05-8802-004, issued on March 26, 1991.

The FIT SSI included an interview with a site representative, a reconnaissance inspection of the site, and the collection of seven soil samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section presents information obtained from SSI work plan preparation, the site representative interview, and the reconnaissance inspection of the site.

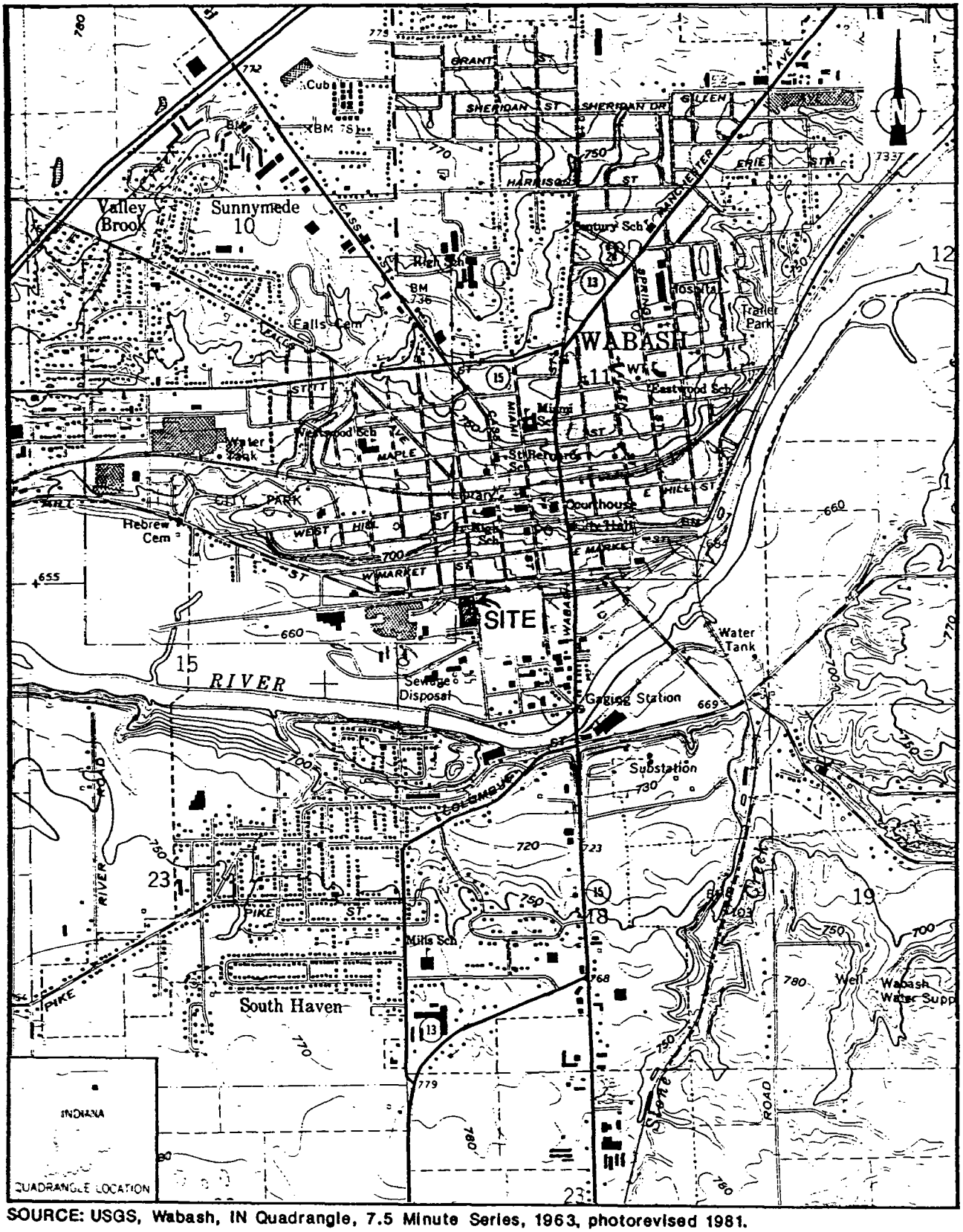
2.2 SITE DESCRIPTION

The WPC site consists of an active paper coating facility situated on an approximately 1 1/4-acre lot located at 410 South Carroll Street in Wabash, Wabash County, Indiana (SW1/4SW1/4NE1/4 sec. 14. T.27N., R.6E.) (see Figure 2-1 for site location). The site is located in a moderately populated area near the center of the city of Wabash. Land use in the immediate vicinity of the site is mixed industrial, commercial, and residential. The Wabash River is located approximately 1/4 mile south of the site.

A 4-mile radius map of the WPC site is provided in Appendix A.

2.3 SITE HISTORY

The WPC site is currently owned by Mafcote Industries (Mafcote) of Norwalk, Connecticut. Wabash Paper Coatings, Inc., of Wabash, Indiana, owned and operated the WPC site from 1965 until 1985, when Mafcote purchased the site and expanded the company name to Mafcote-Wabash Paper Coatings, Inc. (Mafcote-Wabash). Previous owners and operators of the site prior to 1965 include Ford Meter Box, a manufacturer of thermostats and metering devices; a foundry; a cabinet maker; and the city of



SOURCE: USGS, Wabash, IN Quadrangle, 7.5 Minute Series, 1963, photorevised 1981.

SCALE

0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION

Wabash. The exact dates of ownership and specific operations are not known (Evans 1991).

Mafcote-Wabash coats paper products such as tags with mixtures of Georgia clay, latex/polymer binders, and textile pigments comprised of metal oxides. Paper is only coated at the facility, not produced. The naturally occurring Georgia clay has a high zinc content and therefore is classified as a special waste that must undergo heavy metal treatment prior to disposal (Evans 1991). Chemicals such as latex/polymer binders, pigments, and brighteners that are used in the coating process at the WPC site are listed in Table 2-1.

Thirteen employees, working five days a week, perform the coating process. Paper stock is rolled through the coating mixture and then dried in a gas-fired infrared oven (Evans 1991). When a pigment color is changed, any excess coating mixture and pigment remaining from the previous coating process are pumped into a floor drain before a fresh pigment is used. The drain empties into a 5,000-gallon underground storage tank (UST) located on the south side of the paper coating building (Evans 1991). The exact date that this storage tank was installed or what material it is constructed of are not known. FIT file information indicates that proposed industrial waste treatment and disposal facilities for paper coating wastes at the WPC site were approved in March 1966 by the Indiana State Board of Health. The proposed facilities included a plan for a plant sewer, a holding tank, a 50-gallons-per-minute (gpm) diaphragm pump, and a tank trailer (Offutt 1966).

The contents of the 5,000-gallon UST are pumped into a treatment tank located inside the paper coating building where the coating waste, containing heavy metals, is treated and dewatered with B-22 polymer, aluminum sulfate, and lime (Evans 1991).

After the coating waste is dewatered, the residual sludge is mixed with sawdust and stored in an outdoor 20-cubic-yard dumpster along with general refuse generated at the WPC site. The dumpster is removed bi-monthly by Wabash Valley Refuse Removal, at which time its contents, including 6 1/4 cubic yards of treated sludge, is disposed of at Wabash Valley Landfill (IDEM 1991). Approval for the disposal of the sludge/

Table 2-1

CHEMICALS USED IN THE COATING PROCESS

CHEMICALS
Aqua Ammonia-26 Degrees
Hydrasperse Clay-Organic
Pro-Cote 150 Protein-Organic
Hydrocarb 30-Calcium Carbonate
Ti-Pure-LW Titanium Dioxide
Rhoplex P-554-Aqueous Acrylic Emulsion
Rhoplex B-85-Aqueous Acrylic Emulsion
Foamaster 1407-Calcium Stearate
Foamaster C-104 Calcium Stearate
Vitrofoss-Sodium Hexametaphosphate
Latex-2149-Resin Emulsion
COLORS
Permanent Violet
Phthalo Blue
Aqua Black
Red-BL
Aquafine Green-B
Aquafine Orange-RB
Yellow P-2G
* Copper Phthalozyanine
Naphthol
Diaralid Yellow

Source: Evans 1991.

refuse waste by OSHWM, IDEM, requires that no freestanding liquids be dumped into the Wabash Valley Landfill (Evans 1991).

In July 1988, Edglo Laboratories, Inc. (Edglo), of Fort Wayne, Indiana, conducted a one-time Extraction Procedure (EP) Toxicity test on a treated coating waste sample (Knott 1988). The coating waste was analyzed for arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and zinc. Edglo found that the treated coating waste sample did not contain levels of analytes considered hazardous according to EP Toxicity levels (Knott 1988).

Mafcote-Wabash discharges the wastewater generated during the dewatering treatment process to the city sewer. Problems with sewer discharges high in solids and metals were alleged in previous years and brought to the attention of IDEM (U.S. EPA 1987). However, FIT files have no documented evidence of any violations regarding sewer discharge. According to a schedule of compliance with the city of Wabash industrial wastewater treatment program, Mafcote-Wabash currently monitors wastewater that is discharged to the city sewer twice per year (Evans 1991). The most recent wastewater analysis available at the time of the SSI was performed by Edglo, and levels of metals in the wastewater were found to be below EP Toxicity levels.

The only remedial activity known to have taken place at the WPC site was a one-time-only asbestos removal conducted in September 1985 when Mafcote first purchased the site. The State of Indiana Environmental Management Board approved the removal of 55, 55-gallon bags of asbestos from a water pipe inside the facility by Asbestos Removal, Inc., of Wabash, Indiana, which disposed of the asbestos at the Spring Valley Landfill in Wabash, Indiana (Pickard 1985).

No further remedial action has taken place at the WPC site.

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the WPC site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the WPC site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Deborah Epstein, FIT team leader, conducted an interview with Daryl Evans, Operations Manager, Mafcote-Wabash. Also present at the interview were Mary Tierney and Mikhail Gumin, FIT team members. The interview was conducted on April 17, 1991, at 9:20 a.m. in Evans's office at Mafcote-Wabash, 410 South Carroll Street, Wabash, Indiana. The interview was conducted to gather information that would aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

Following the site representative interview, FIT conducted a reconnaissance inspection of the WPC site and surrounding area in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection began at 12:10 p.m. and included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities and to make

observations to aid in characterizing the site. FIT also determined sampling locations during the reconnaissance inspection. FIT was accompanied by Evans during the reconnaissance inspection.

Reconnaissance Inspection Observations. The WPC site includes two interconnected buildings, covering approximately 15,000 square feet on the northeastern portion of the 1 1/4-acre site. The site is bordered by Conrail Railroad tracks on the north, West Street on the south, Carroll Street on the east, and a manufacturing company on the west (see Figure 3-1 for site features). The topography of the site is generally level.

The immediate vicinity of the site consists of residences to the south and east, and industrial and commercial properties to the north and west.

There are two on-site brick buildings, an office/paper coating building and a warehouse, which are connected by a two-story aluminum walkway that is also used for storage of paper stock and coated paper cores. A drum storage shed and a maintenance shed are attached to the northern portion of the L-shaped paper coating building on the west side.

The drum storage shed is enclosed by three aluminum sides and a roof. The side of the shed facing south is open. Approximately 60, 55-gallon drums were observed inside the shed, which has a dirt floor. Most of the drums appeared to be empty. Several drums were labeled as flammable liquids such as paper protector and oil. Ten drums were observed next to the storage shed. A small patch of a crusty yellow substance resembling hardened epoxy was observed next to one of the 10 drums. Areas of dead grass were also observed near the drums stored outside the shed. A parking area is located adjacent to the drum storage shed.

Rusted metal and wooden scraps were observed next to the maintenance shed, which was undergoing roof repair at the time of the SSI.

A gravel access road extends west from Carroll Street near the southeast corner of the site, between the warehouse and West Street, then turns north and continues along the west side of the paper coating building to the drum storage shed. Approximately nine empty 55-gallon

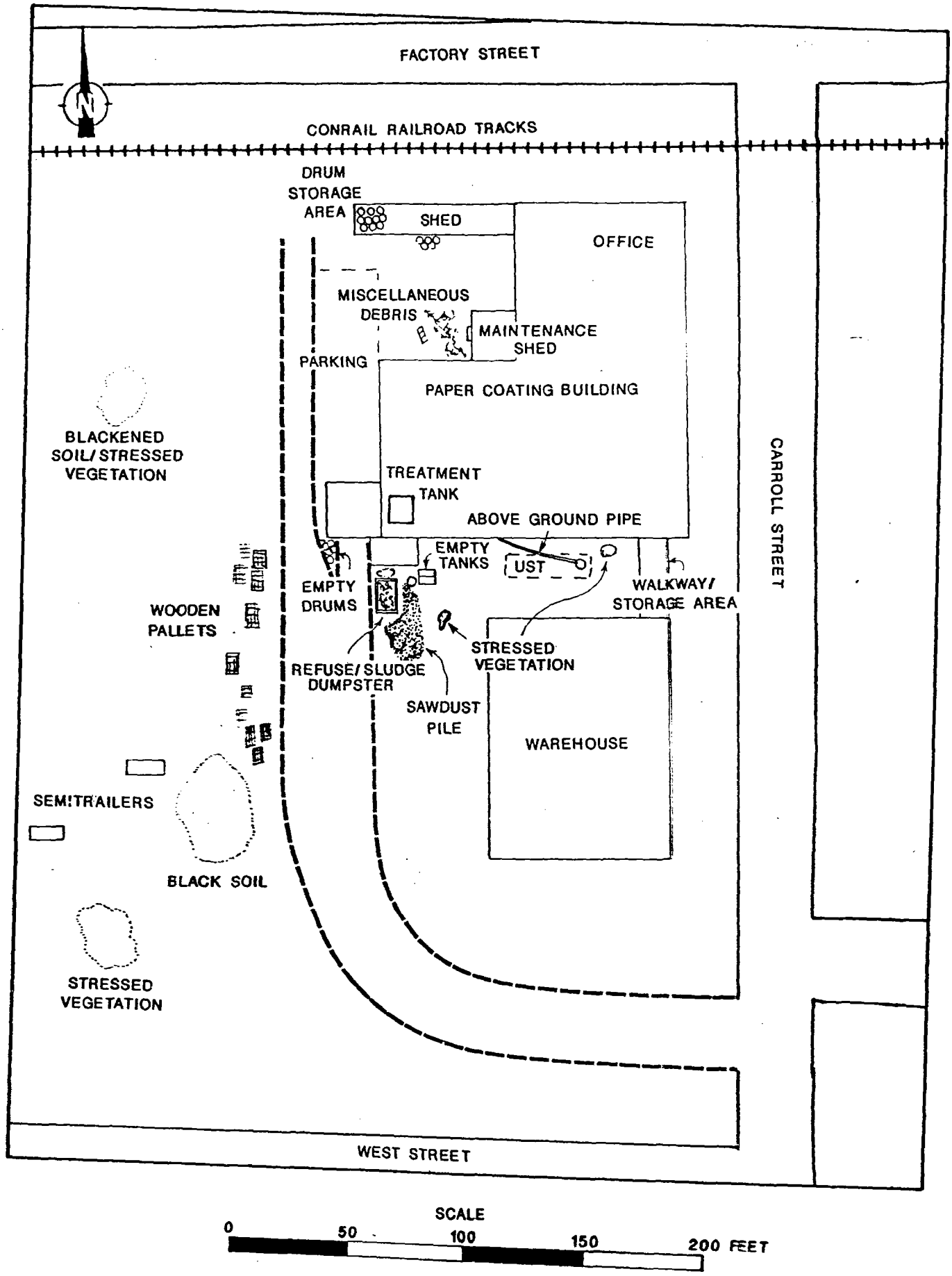


FIGURE 3-1 SITE FEATURES

drums that once contained pigment were observed at the southwest corner of the paper coating building, next to the gravel access road.

The 5,000-gallon UST is located between the two buildings, just west of the connective walkway. A pipe, attached to wooden stakes approximately 3 feet above the ground, leads from the cover of the UST to the waste treatment tank located inside the southwest corner of the paper coating building. An aboveground vent is located next to the UST cover. FIT observed a patch of stressed vegetation between the UST cover and the aboveground vent. During the SSI, a thick green-colored liquid, which was being drained from the paper coating building into the UST, flooded the ground surrounding the aboveground vent. Employees, alerted by FIT to the flooding, unclogged the vent and poured sawdust on the ground to soak up the green-colored liquid.

Two overturned empty tanks, a sawdust pile, and a 20-cubic-yard refuse/sludge dumpster are located approximately 20 feet west of the UST cover. At the time of the SSI, the dumpster was filled with sludge mixed with sawdust, scraps of paper, cardboard cores, and empty pigment drums. FIT observed that the dumpster was leaking, forming a puddle of pink and green-colored liquid at the north end of the dumpster. Patches of black-stained and stressed vegetation were observed in several areas next to the dumpster and the UST.

Several piles of wooden pallets were located on the west side of the gravel access road. Also, two semitrailers were stored approximately 75 feet southwest of the wooden pallets, near the edge of the west boundary of the site. Several areas of concrete were observed near the semitrailers. Blackened soil and stressed vegetation were observed next to the semitrailers and in various places north of the semi-trailers.

FIT photographs from the SSI of the WPC site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine whether U.S. EPA Target Compound List (TCL) compounds or Target Analyte List (TAL) analytes were present

at the site. The TCL compounds and TAL analytes are included with corresponding quantitation/detection limits in Appendix D.

On April 17, 1991, FIT collected seven surface and subsurface soil samples, including one potential background sample. The site representative accepted offered portions of the FIT-collected samples.

Soil Sampling Procedures. Surface soil sample S1 was collected from an area of blackened soil and stressed vegetation located approximately 15 feet southeast of the cover of the UST (see Figure 3-2 for on-site soil sampling locations). Surface soil sample S2 was collected from an area of stressed vegetation next to the UST cover. Soil samples S1 and S2 were collected to characterize the soil that may be exposed to untreated coating waste overflowing or leaking from the vent and pipes leading to the UST.

Surface soil sample S3 was collected from soil in a puddle of pink and green-colored liquid that was observed leaking from the northern edge of the refuse/sludge dumpster during the SSI. Sample S3 was collected in order to characterize the soil beneath the dumpster.

Surface soil sample S4 was collected beneath the layer of crusty, yellow substance that may have leaked from 55-gallon drums stored outside the south side of the drum storage shed. This sample was collected to determine whether chemicals that were once contained in the drums may have leaked into the soil.

Subsurface soil sample S5 was collected at an approximate depth of 2 1/2 feet, from an area of blackened soil and stressed vegetation located approximately 50 feet west of the parking area. An attempt to collect a deeper sample was hindered by the presence of hard rock below 2 1/2 feet. Surface soil sample S6 was collected from an area of stressed vegetation located approximately 20 feet south of the semi-trailers. Samples S5 and S6 were collected to determine whether TCL compounds and TAL analytes were present in their respective locations.

Surface soil sample S7 was collected as a potential background sample from an approximately 30-foot-high, grass- and tree-covered hill located in a residential area on the south side of the Wabash River, approximately 2,100 feet southwest of the WPC site at 184 Middle Street (see Figure 3-3 for off-site soil sampling location). The potential

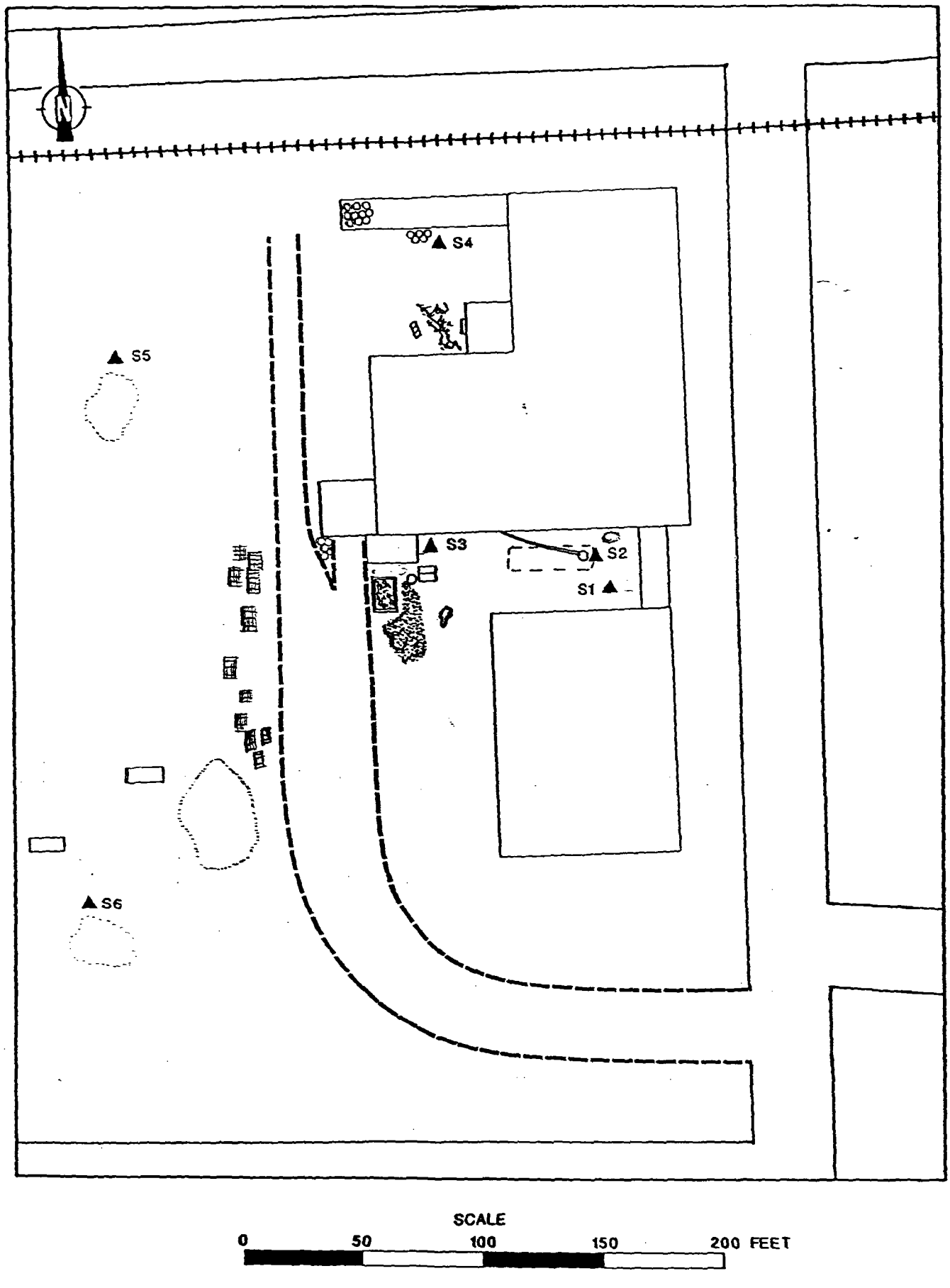
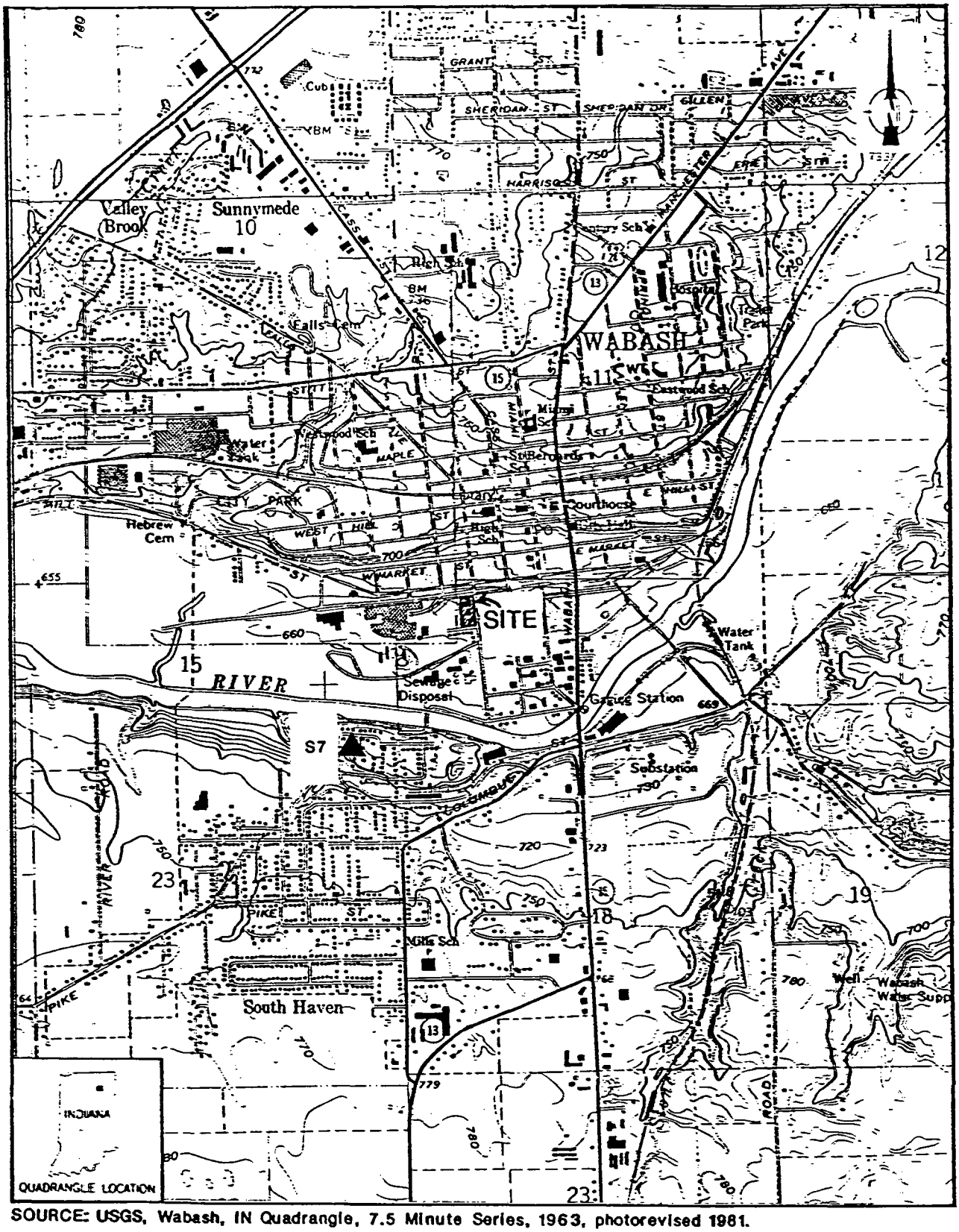


FIGURE 3-2 SOIL SAMPLING LOCATIONS



SOURCE: USGS, Wabash, IN Quadrangle, 7.5 Minute Series, 1963, photorevised 1981.

SCALE

0 ½ 1 MILE

FIGURE 3-3 OFF-SITE SOIL SAMPLING LOCATION

background sample was collected to determine the representative chemical content of the soil in the vicinity of the site.

All surface soil samples--S1, S2, S3, S4, S6, and S7--were collected with stainless steel trowels. Subsurface soil sample S5 was collected with a posthole digger. The sample portions collected for volatile organic analysis were transferred directly to sample bottles with a stainless steel spoon. The remaining sample portions were placed into a stainless steel bowl, mixed, and then transferred to the appropriate sample bottles, using a stainless steel spoon or a hand trowel (E & E 1987).

Standard E & E decontamination procedures were adhered to during the collection of all seven soil samples. The procedures included the scrubbing of all equipment (e.g., spoons, trowels, bowls, and posthole digger) with a solution of detergent (Alconox) and distilled water, and triple-rinsing the equipment with distilled water before the collection of each sample (E & E 1987). All seven soil samples were packaged and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, all seven soil samples were analyzed using the U.S. EPA Contract Laboratory Program (CLP).

4. ANALYTICAL RESULTS

This section presents results of the chemical analysis of soil samples collected by FIT during the SSI of the VPC site. All samples were analyzed for volatile organics, semivolatile organics, pesticides/polychlorinated biphenyls (PCBs), metals, and cyanide. Complete chemical analysis results of FIT-collected soil samples are provided in Table 4-1. In addition, significant tentatively identified compounds (TICs) detected in the analysis of FIT-collected samples are also provided in Table 4-1.

Quantitation/detection limits used in the analysis of FIT-collected samples are provided in Appendix D.

The analytical data from the chemical analysis of FIT-collected samples for this SSI have been reviewed under the direction of U.S. EPA for validity; the review has been approved by U.S. EPA. The analytical data have also been reviewed by FIT for usability. Any additions, deletions, or changes resulting from review of the data have been incorporated in the chemical analysis results table presented in this section.

Table 4-1
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL SAMPLES
FOR THE WPC SITE SSI

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7
Date	4/17/91	4/17/91	4/17/91	4/17/91	4/17/91	4/17/91	4/17/91
Time	1330	1340	1330	1407	1520	1452	1645
CLP Organic Traffic Report Number	EKN21	ENA49	ENA50	ENA51	EMW92	EMW93	EMW94
CLP Inorganic Traffic Report Number	MEMG76	MEMG77	MEMG78	MEMG79	MEMG80	MEMG81	MEMG82
Compound Detected (values in µg/kg)							
Volatile Organics							
methylene chloride	--	--	--	--	--	7	--
acetone	--	27	57,000	--	--	--	--
2-butanone (MEK)	--	--	1,500J	--	--	--	--
toluene	--	--	--	--	7	5J	--
Semivolatile Organics							
naphthalene	--	--	--	--	320J	--	--
2-methylnaphthalene	--	--	--	2,500J	400J	--	--
acenaphthene	--	--	--	--	90J	--	--
dibenzofuran	--	--	--	--	160J	--	--
hexachlorobenzene	--	--	--	--	--	51J	--
phenanthrene	--	120J	--	--	740	--	--
anthracene	--	--	--	--	130J	--	--
di-n-butylphthalate	--	--	--	--	--	--	510
fluoranthene	--	--	--	--	120J	--	--
pyrene	--	160J	--	--	1,600	74J	--
benzo[a]anthracene	--	--	--	--	700J	--	--
chrysene	--	--	--	--	890	--	--
bis(2-ethylhexyl)phthalate	310J	370J	--	--	--	--	190J
benzo[b]fluoranthene	240J	--	--	--	2,000	--	--
benzo[a]pyrene	210J	--	--	--	810	--	--

Table 4-1 (Cont.)

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7
indeno[1,2,3-cd]pyrene	--	--	--	--	240J	--	--
Pesticides/PCBs							
Aldrin	--	--	--	--	11	--	--
Aroclor 1248	--	--	--	--	--	410	--
Aroclor 1254	--	--	--	1,700	--	--	--
TICs†							
benzenesulfonamide, 4-methyl (70-55-3)	--	--	30,000J	--	--	--	--
11H-benzo[a]fluorene (238-84-6)	--	--	--	--	1,000J	--	--
benzo[e]pyrene (192-97-2)	--	--	--	--	3,000J	--	--
Analyte Detected (values in mg/kg)							
aluminum	5,200	12,900	11,400	3,230	4,110	25,800	14,700
antimony	231N*J	R	R	R	R	11.0BN*J	--
arsenic	7.6J	6.0J	7.2J	39.1J	8.0J	19.7J	10.9J
barium	33.9	204	63.8	132	68.8	24.7B	80.5
beryllium	0.37B	0.71B	0.42B	0.59B	--	0.79B	0.79B
cadmium	20.4N*J	8.4N*J	8.4N*J	42.6N*J	6.9N*J	12.3N*J	6.6N*J
calcium	8,300*	18,100*	84,900*	19,300*	35,000*	2,000*	27,900*
chromium	7.1N*J	179N*J	45.3N*J	123N*J	7.0N*J	105N*J	29.6N*J
cobalt	14.1	8.5B	5.5B	14.9	5.0B	4.0B	10.6B
copper	168,000*J	192*J	1,340*J	1,540*J	144*J	1,500*J	28.4*J
iron	20,900*J	25,600*J	15,600*J	181,000*J	25,100*J	10,900*J	22,100*J
lead	9,170*J	1,370*J	258*J	595*J	131*J	7,760*J	78.2*J
magnesium	2,820	7,570	21,900	2,540	6,910	1,120B	5,810
manganese	213	570	358	1,400	325	274	606
mercury	--	0.16NJ	0.98NJ	1.0NJ	--	0.18NJ	0.13NJ
nickel	942*J	21.3*J	35.3*J	43.2*J	13.5*J	60.9*J	21.9*J
potassium	547B	1,470	699B	520B	534B	328B	2,100
selenium	0.52B	0.65BWJ	0.67B	0.86B	0.58B	1.7	0.49B

Table 4-1 (Cont.)

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7
silver	13.2N*J	R	R	R	R	R	R
sodium	211BJ	157BJ	490B	144BJ	178BJ	370B	99.1BJ
thallium	0.48BWJ	--	--	0.46BWJ	0.36B	1.1B	0.55B
vanadium	17.6	26.4	11.1B	67.5	12.6	15.9	30.0
zinc	31,600*J	360*J	845*J	635*J	159*J	4,740*J	113*J
cyanide	--	--	--	0.97	--	--	--

-- Not detected.

† TIC Chemical Abstracts Service (CAS) numbers, if available, are provided in parentheses.

Table 4-1 (Cont.)

COMPOUND QUALIFIER	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semi-quantitative.
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section presents discussions of data and information pertaining to potential migration pathways and targets of TCL compounds and TAL analytes that are possibly attributable to the WPC site.

The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

In accordance with the U.S. EPA-approved work plan, groundwater samples were not collected during the SSI of the WPC site. TCL compounds were detected in on-site soil samples, including acetone (57,000 µg/kg in sample S3), benzo[b]fluoranthene (2,000 µg/kg in sample S5), 2-methylnaphthalene (2,500J µg/kg in sample S4), pyrene (1,600 µg/kg in sample S5), and the PCB Aroclor 1254 (1,700 µg/kg in sample S4).

TAL analytes were also detected in on-site soil samples including antimony (231N*J mg/kg), copper (168,000*J mg/kg), lead (9,170*J mg/kg), nickel (942*J mg/kg), and zinc (31,600*J mg/kg) in sample S1; and cyanide (0.97 mg/kg) and mercury (1.0NJ mg/kg) in sample S4.

In addition, several TICs were detected in on-site soil samples including benzo[e]pyrene (3,000J µg/kg in sample S5), 11H-benzo[a]-fluorene (1,000J µg/kg in sample S5), and benzenesulfonamide, 4-methyl (30,000J µg/kg in sample S3) (see Table 4-1 for definition and interpretation of the J qualifier).

The TCL compounds and TAL analytes detected in on-site soil samples are attributable to the site based on the following reasons.

- They were detected at levels above those of the background soil sample.

- TAL analytes were detected in surface soil sample S1, which was collected from an area where untreated coating waste was observed flowing onto the ground surface during the SSI.

- TCL compounds and TAL analytes were detected in soil samples collected near stressed vegetation and drums.

- The TCL compound acetone is a common constituent of the latex binders/polymers used in the coating process (E & E 1989).

- Heavy metals are constituents of the coating waste generated at the WPC site. The textile pigments used in the coating process contain metal compounds such as copper phthalozyanine (see Table 2-1) (Evans 1991).

- The Georgia clay used as the primary component in the coating mixture has a high zinc content (Evans 1991).

The potential exists for TCL compounds and TAL analytes detected in on-site soil samples to migrate to groundwater in the vicinity of the site, based on the following information.

- Mafcote-Wabash is currently using a 5,000-gallon UST to hold coating waste containing heavy metals prior to treatment (Evans 1991). The structural composition and condition of the UST are not known.

- During the SSI, FIT observed coating waste overflowing from an aboveground vent and cover of the UST onto the ground.

- During the SSI, FIT observed the open dumpster containing treated coating waste sludge leaking a liquid onto the ground surface.

The potential for TCL compounds and TAL analytes detected in on-site soil samples to migrate to groundwater in the vicinity of the site is also based on the geology of the area.

Glacial geology in the vicinity of the site is a result of Pleistocene-age Wisconsinan glaciation and consists of unconsolidated valley-train deposits of clay-rich till, gravel, sand, and silt. Till deposits north of the WPC site also include some ground moraine ice-contact stratified drift. Recent alluvial deposits of silt, sand, and gravel of the Martinsville Formation are present along the Wabash River (Indiana Department of Natural Resources [IDNR] 1971). Glacial geology south of the site and parallel to the Wabash River is part of the buried valley system known as the Teays Buried Valley (IDNR 1985). Bedrock in the vicinity of the WPC site is composed of Silurian-age limestone that forms the Liston Creek Limestone Member (IDNR 1971).

Area well logs indicate that glacial deposits range in thickness from approximately 3 feet to as much as 200 feet in the Teays Buried Valley, which is located approximately 2 1/2 miles south of the site. A well log for a well located directly west of the WPC site indicates that glacial deposits are approximately 31 feet in thickness (see Appendix E for well logs of the area of the site).

According to area well logs, the unconsolidated sand and gravel deposits and the limestone bedrock beneath the site each form an aquifer that is used for drinking water within a 3-mile radius of the WPC site. Municipal wells and some private wells draw drinking water from the sand and gravel deposits at depths ranging from 20 to 45 feet. Other private wells are set in and draw drinking water from the limestone unit at depths between 30 and 68 feet.

The area well logs also indicate the presence of impermeable clay layers within the unconsolidated deposits. However, these clay layers

are not laterally continuous within a 3-mile radius of the site. Therefore, the glacial drift aquifer is hydraulically connected to the bedrock aquifer and together they form a single aquifer of concern (AOC). The well log for an industrial well located 1/4 mile from the WPC site indicates that depth to the AOC is approximately 23 feet. The nearest drinking water well is located approximately 1 mile from the site.

Groundwater flow in the area is complex because of the hydraulic connection between the glacial drift and bedrock aquifers. However, flow through the unconsolidated deposits of the Wabash River floodplain is believed to be south toward the Wabash River (Clarke 1980).

The city of Wabash is served by the Indiana Cities Water Corporation municipal water system and obtains water from two well fields. One well field is located approximately 1 1/2 miles southeast of the site, approximately 2,000 feet east of Union Chapel Road, and consists of seven wells ranging in depth from 60 to 67 feet which draw from the sand and gravel glacial deposits (Heiner 1991). The second well field is located just over 3 miles southwest of the site, west of Yankee Road, and consists of two wells with depths of 187 feet and 203 feet, which draw from the Teays Buried Valley glacial deposits (Heiner 1991).

Water from the two well fields is blended before distribution and is supplied to all residents living within the corporate boundaries of the city of Wabash (Heiner 1991). Approximately 12,150 persons living within the city limits of Wabash are served by the municipal water system (Heiner 1991). In addition, approximately 850 persons are served by private wells screened in the AOC. The population using private wells was determined by counting the number of houses (308) within a 3-mile radius of the WPC site, but outside Wabash municipal water boundaries, on United States Geological Survey (USGS) topographic maps and multiplying that figure by 2.76, the persons-per-household average for Wabash County (U.S. Bureau of the Census 1982; USGS 1963, 1963a, 1969, 1969a). Therefore, the total potential target population is 13,000 persons.

5.3 SURFACE WATER

The surface water body most likely to be affected by the migration of TCL compounds and TAL analytes from the site is the Wabash River,

which flows from east to west approximately 1,500 feet south of the WPC site. However, a potential does not exist for TCL compounds and TAL analytes to migrate to surface water based on the following information.

- The intervening terrain between the site and the river has a downward slope of only approximately 1% (USGS 1963, 1963a, 1969, 1969a).

- FIT did not observe any drainage pathways leading from the site to the river.

The Wabash River is not used as a source of drinking water within 3 miles downstream of the site. The Wabash River is used for recreation, including fishing and boating, near the WPC site (Payne 1988).

5.4 AIR

A release of TCL compounds or TAL analytes to the air was not documented during the SSI of the WPC site. During the reconnaissance inspection, FIT site-entry instruments (OVA, explosimeter, and colorimetric monitoring tubes for hydrogen cyanide) did not detect levels that deviated from background concentrations at the site. In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential does exist for TCL compounds and TAL analytes to migrate from the site via windblown particulates, based on the following information.

- TCL compounds and TAL analytes were detected in on-site surface soil samples at concentrations above background.

- No natural or man-made wind barriers exist on-site.

- The ground near a dumpster containing sludge and a UST holding coating waste is only partially covered by vegetation. The grass is either stressed or dead in most of the area.

- Sawdust is mixed with coating waste sludge possibly containing heavy metals and is stored in an open dumpster on-site. The sawdust particles may become airborne and migrate off-site.

The population within a 4-mile radius of the site potentially affected by a release of TCL compounds and TAL analytes to the air is approximately 16,612 persons. This population includes the population of the city of Wabash (12,985) and the number of persons living outside the city limits but within a 4-mile radius of the site. The number of persons living outside the city limits was calculated by counting houses (1,314) within a 4-mile radius of the site on a USGS topographic map (USGS 1963, 1963a, 1969, 1969a) and multiplying this number by a persons-per-household value of 2.76 (U.S. Bureau of the Census 1982).

5.5 FIRE AND EXPLOSION

According to federal, state, and local file information reviewed by FIT, and an interview with Mike McMullet, Fire Chief, Wabash Fire Department, no documentation exists of an incident of fire or explosion at the site (McMullet 1990). According to FIT observations and site-entry equipment readings, no potential for fire or explosion existed at the site at the time of the SSI.

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, observations made during the SSI, and the interview with the site representative, no incidents of direct contact with TCL compounds or TAL analytes at the WPC site have been documented.

A potential exists for direct contact with TCL compounds or TAL analytes detected on-site based on the following information.

- TCL compounds and TAL analytes were detected in surface soil samples at concentrations above background.

- The site is currently active.

- There are no natural boundaries, fences, or other security measures to restrict access to the site.

- The site is located in a mixed residential, commercial, and industrial area, with residences located less than 500 feet from the site.

The population within a 1-mile radius of the site potentially affected through direct contact with TCL compounds and TAL analytes at the site is approximately 6,000 persons. This population was calculated by using a planimeter to determine the portion of the population that resides within the city limits of Wabash and within a 1-mile radius of the site. In addition, approximately 13 persons are employed at the WPC site.

6. REFERENCES

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7185:9

APPENDIX A

SITE 4-MILE RADIUS MAP

SDMS US EPA Region V

Imagery Insert Form

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OVERSIZE MAP – 4 MILE RADIUS MAP

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APPENDIX B

U.S. EPA FORM 2070-13

EPA

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

I. IDENTIFICATION
01 STATE: IN
02 SITE NUMBER: D981961501

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Wabash Paper Coating AKA Mafcote-Wabash Paper Coatings	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 410 S. Carroll St.

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Wabash	IN	46992	Wabash	169	05

09 COORDINATES: LATITUDE 40°47'33" LONGITUDE 85°49'55"

10 TYPE OF OWNERSHIP (Check one): ☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 4, 17, 91 (MONTH DAY YEAR)

02 SITE STATUS: ☒ ACTIVE ☐ INACTIVE

03 YEARS OF OPERATION: 1965 (BEGINNING YEAR), Present (ENDING YEAR) ☐ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ☒ B. EPA CONTRACTOR Ecology & Environment ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ☐ E. STATE ☐ F. STATE CONTRACTOR ☐ G. OTHER

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Deborah Epstein	Civil Engineer	E & E	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Scott Turek	Geologist	E & E	(312) 663-9415
Mary Tierney	Biologist	E & E	(312) 663-9415
Michael Dieckhaus	Biologist	E & E	(312) 663-9415
Patrick Soderberg	Botanist	E & E	(312) 663-9415
Mikhail Gumin	Mechanical Engineer	E & E	(312) 663-9415

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Daryl Evans	Operations Manager	410 S. Carroll St. Wabash, Indiana 46992	(219) 563-4181
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:15 am - 5:30 p.m.	Partly sunny ~67° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Harry Atkinson	IDEM/SHWM	(317) 32-8927

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Deborah Epstein	EPA-FIT	Ecology & Environment	(312) 663-9415	7, 8, 91 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	098196150

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES

- O A. SOLID
- ☒ B. POWDER, FINES
- ☒ C. SLUDGE
- O D. OTHER _____
- O E. SLURRY
- ☒ F. LIQUID
- O G. GAS

02 WASTE QUANTITY AT SITE

TONS: unknown

CUBIC YARDS: 6 1/4 yd³ bimonthly

NO. OF DRUMS: unknown

03 WASTE CHARACTERISTICS

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	6 1/4	yd³	bimonthly - treated coating waste sludge
OLW	OILY WASTE			
SOL	SOLVENTS	unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		
IOC	INORGANIC CHEMICALS	unknown		Cyanide, PAHs detected in soil samples
ACD	ACIDS			
BAS	BASES			waste water generated by paper coating process - contains heavy metals.
MES	HEAVY METALS	unknown		detected in soil samples

IV. HAZARDOUS SUBSTANCES

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	see section 4-1 Analytical Results				

V. FEEDSTOCKS

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Georgia Clay	unknown	FDS		
FDS			FDS		
FDS	See section 2, Table 2-1		FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION

FIT site inspection conducted on 4/17/91
State and FIT file information

EPA FORM 2070-13(7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	098196501

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~13,000 — 04 NARRATIVE DESCRIPTION

See section 5.2 for Groundwater information

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

See section 5.3 for surface water information

01 [X] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 16,612 — 04 NARRATIVE DESCRIPTION

See section 5.4 - Air Route

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

see section 5.5 - Fire and Explosion

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~6,000 — 04 NARRATIVE DESCRIPTION

See section 5.6 - Direct Contact

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 4/17/91) — [ ] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: ~1 1/4 (Acres) — 04 NARRATIVE DESCRIPTION

see section 5.2 and Table 4-1

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~13,000 — 04 NARRATIVE DESCRIPTION

See section 5.2 - Groundwater

01 [X] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 13 — 04 NARRATIVE DESCRIPTION

See section 5.6 - Direct Contact
~13 workers are employed at the site

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~16,612 — 04 NARRATIVE DESCRIPTION

see sections 5.2, 5.4 and 5.6 for potential population exposure.

EPA

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

I. IDENTIFICATION
01 STATE: IN
02 SITE NUMBER: 098196501

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] J. DAMAGE TO FLORA — 02 [X] OBSERVED (DATE: 4/17/91) — [ ] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Stressed vegetation observed on-site.

01 [X] K. DAMAGE TO FAUNA — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Damage to fauna could occur through contact with contaminated soil or by consuming contaminated flora.

01 [X] L. CONTAMINATION OF FOOD CHAIN — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Soil contaminants detected by FIT could potentially bioaccumulate in the food chain.

01 [X] M. UNSTABLE CONTAINMENT OF WASTES — 02 [X] OBSERVED (DATE: 4/17/91) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~16,612
04 NARRATIVE DESCRIPTION
sludge mixed with sawdust is stored in an open dumpster. Dumpster was leaking during SSI. untreated waste flowed onto the ground surface instead of draining into a 5,000 gallon UST.

01 [X] N. DAMAGE TO OFFSITE PROPERTY — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Potential for damage to off-site property through groundwater and air migration of contaminants detected on-site.

01 [X] O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 [ ] OBSERVED (DATE: ____) — [ ] POTENTIAL — [X] ALLEGED
04 NARRATIVE DESCRIPTION
Wastewater containing heavy metals is discharged to the sewer system. Allegations of high metal content in wastewater discharged to sewers, however, FIT has no documentation of sewer contamination.

01 [ ] P. ILLEGAL/UNAUTHORIZED DUMPING — 02 [ ] OBSERVED (DATE: ____) — [ ] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
None documented

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
55-gallon drums, allegedly empty, are stored in a shed that has a dirt floor. Some drums were labelled flammable.

III. TOTAL POPULATION POTENTIALLY AFFECTED: ~16,612

IV. COMMENTS
Asbestos insulated piping was removed from the site in 1985.

V. SOURCES OF INFORMATION
FIT and State File information
SSI conducted on April 17, 1991

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
IN	098196 1501

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES	unknown			
☐ B. UIC	N/A			
☐ C. AIR	N/A			
☐ D. RCRA	N/A			
☐ E. RCRA INTERIM STATUS	N/A			
☐ F. SPCC PLAN	N/A			IDEM/OSHWM
☒ G. STATE	00478	7/16/90	5/31/91	permit to dispose of 480 yd³
☐ H. LOCAL	unknown			of paper coating sludge generated
☐ I. OTHER	N/A			by Matrix-Wabash Paper Coatings
☐ J. NONE	N/A			at Wabash Valley Landfill.

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☒ C. DRUMS, ABOVE GROUND ~60	55 gallon drums	may be empty
☐ D. TANK, ABOVE GROUND		
☒ E. TANK, BELOW GROUND	5,000	gallon
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☒ I. OTHER dumpster	20	yd³

04 TREATMENT
☐ A. INCENERATION
☐ B. UNDERGROUND INJECTION
☒ C. CHEMICAL/PHYSICAL
☐ D. BIOLOGICAL
☐ E. WASTE OIL PROCESSING
☐ F. SOLVENT RECOVERY
☐ G. OTHER RECYCLING/RECOVERY
☐ H. OTHER

05 OTHER

☒ A. BUILDINGS ON SITE

2

06 AREA OF SITE

1¾

07 COMMENTS

Paper coating waste is treated with aluminum sulfate, B-22 polymer and lime. The sludge is mixed with sawdust and stored in a dumpster ~6¼ yd³ sludge is removed bimonthly. The wastewater is discharged to the sewer system. UST stores coating waste prior to treatment

IV. CONTAINMENT

01 CONTAINMENT OF WASTES

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

02 DESCRIPTION OF DRUMS, DIKES, LINERS, BARRIERS, ETC.

Containers were leaking and/or overflowing onto the ground surface. Drums, allegedly empty are stored in a dirt-floor shed.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

site is not fenced and no security or access restrictions exist. Waste is stored on-site in an open dumpster.

VI. SOURCES OF INFORMATION

FIT and State file information
SSI conducted on 4/17/91

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION
01 STATE: IN
02 SITE NUMBER: D981961501

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check one or more)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐	E. ☐	F. ☐ Unknown

03 DISTANCE TO SITE
A. 1 1/2 (mi)
B. ~1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one or more)
☒ A. ONLY SOURCE FOR DRINKING
☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (Other sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Drinking water sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUNDWATER: ~13,000
03 DISTANCE TO NEAREST DRINKING WATER WELL: ~1 (mi)

04 DEPTH TO GROUNDWATER: 20 (ft)
05 DIRECTION OF GROUNDWATER FLOW: Assumed South
06 DEPTH TO AQUIFER OF CONCERN: 20 (ft)
07 POTENTIAL YIELD OF AQUIFER: unknown (gpm)
08 SOLE SOURCE AQUIFER: ☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including number, type, depth, and information on any abandoned wells):
Two municipal well fields - 1 is located ~1 1/2 miles southeast of the site and contains 7 wells with depths ranging from 60 to 67 ft. A second well field is located ~3 miles southwest of the site and has 2 wells, one is 187 ft deep and the other is 203 ft deep. Both well fields draw from sand and gravel. Residential wells draw from limestone or sand and gravel

10 RECHARGE AREA
☒ YES ☐ NO
COMMENTS: permeable soils

11 DISCHARGE AREA
☒ YES ☐ NO
COMMENTS: Groundwater may recharge river

IV. SURFACE WATER

01 SURFACE WATER USE (Check one or more)
☒ A. RESERVOIR, RECREATION, DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
	☐	(mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN
ONE (1) MILE OF SITE: A. 6,000 (NO. OF PERSONS)
TWO (2) MILES OF SITE: B. ~12,700 (NO. OF PERSONS)
THREE (3) MILES OF SITE: C. ~13,000 (NO. OF PERSONS)

02 DISTANCE TO NEAREST POPULATION: ~50 ft. (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: ~4,600
04 DISTANCE TO NEAREST OFF-SITE BUILDING: ~50 ft (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site (e.g., rural, village, densely populated urban area)
Moderately populated residential, commercial area.
See Appendix A - 4 mile radius map

EPA

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

I. IDENTIFICATION
01 STATE: IN
02 SITE NUMBER: 098196150 1

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

O A. 10^{-6} – 10^{-8} cm/sec O B. 10^{-4} – 10^{-6} cm/sec O C. 10^{-4} – 10^{-3} cm/sec X D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

O A. IMPERMEABLE (Greater than 10^{-6} cm/sec) O B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) X C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) O D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
~30 (ft)	unknown (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
~3.68 (in)	2.2 (in)	0 %	N/A	~1 %

09 FLOOD POTENTIAL: SITE IS IN 100 YEAR FLOODPLAIN

10 O SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY
N/A

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. N/A (mi) OTHER: B. >3 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

>3. (mi)
ENDANGERED SPECIES: N/A

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. ~50 ft (mi)	B. ~50 ft (mi)	C. unknown (mi)	D. ~3/4 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Refer to 4-mile radius map in Appendix A.

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

FIT file information
SSI conducted on 4/17/91

EPA Form 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	098R61501

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER		ORGANIC SOIL SAMPLES	
WASTE		Wadsworth/Alert Laboratories	
AIR		4101 Shuffel Drive, N.W.	
RUNOFF		North Canton, Ohio 44720	
SPILL			
SOIL	7	INORGANIC SOIL SAMPLES	available
VEGETATION		Northern Laboratories	
OTHER		2400 Cumberland Drive Valparaiso, Indiana, 46383	

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA	No readings above background
radiation monitor	No readings above background
explosimeter/O_2 meter	No readings outside normal range
HCN monitor	No readings on-site

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Ecology & Environment, Chicago, IL

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS Ecology & Environment, Inc. Chicago, IL

V. OTHER FIELD DATA COLLECTED

None

VI. SOURCES OF INFORMATION

FIT SSI conducted on 4/17/91

Laboratory Analytical Data

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	D981961501

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Mafoote Industries	unknown	unknown	unknown	Norwalk	CT	unknown
N/A						
N/A						
N/A						

PARENT COMPANY

08 NAME	09 D+B NUMBER	10 STREET ADDRESS	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
N/A						
N/A						
N/A						

III. PREVIOUS OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Millen Industries	unknown	444 Park Avenue South	unknown	New York	NY	
N/A						
unknown						

IV. REALTY OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
N/A						
N/A						
N/A						

V. SOURCES OF INFORMATION

FIT and State File Information
FIT SSI conducted on 4/17/91

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	098196150 1

II. CURRENT OPERATOR

01 NAME: Mafcote Wabash Paper Coatings	02 D+B NUMBER: (219) 563-4181
03 STREET ADDRESS: 410 South Carroll street	04 SIC CODE:
05 CITY: Wabash	06 STATE: IN
07 ZIP CODE: 46992	
08 YEARS OF OPERATION: 1985-present	09 NAME OF OWNER: Mafcote Industries

OPERATOR'S PARENT COMPANY

10 NAME: Mafcote Industries	11 D+B NUMBER:
12 STREET ADDRESS:	13 SIC CODE:
14 CITY: Norwalk	15 STATE: CT
16 ZIP CODE: -	

III. PREVIOUS OPERATOR(S)

01 NAME: Wabash Paper Coatings	02 D+B NUMBER:
03 STREET ADDRESS: 410 South Carroll Street	04 SIC CODE:
05 CITY: Wabash	06 STATE: IN
07 ZIP CODE: 46992	
08 YEARS OF OPERATION: 1965-1985	09 NAME OF OWNER DURING THIS PERIOD: Millen Industries

PREVIOUS OPERATORS' PARENT COMPANIES

10 NAME: NA	11 D+B NUMBER:
12 STREET ADDRESS:	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME: Ford Meter Box	02 D+B NUMBER: unknown
03 STREET ADDRESS: unknown	04 SIC CODE:
05 CITY: unknown	06 STATE:
07 ZIP CODE:	
08 YEARS OF OPERATION:	09 NAME OF OWNER DURING THIS PERIOD:

10 NAME: NA	11 D+B NUMBER:
12 STREET ADDRESS:	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME: Foundry - unknown	02 D+B NUMBER:
03 STREET ADDRESS:	04 SIC CODE:
05 CITY:	06 STATE:
07 ZIP CODE:	
08 YEARS OF OPERATION:	09 NAME OF OWNER DURING THIS PERIOD:

10 NAME: NA	11 D+B NUMBER:
12 STREET ADDRESS:	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

IV. SOURCES OF INFORMATION

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	09B1961501

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Mafrole-Wabash Paper Coating	(219)563-4181
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
410 South Carroll Street	
05 CITY	06 STATE / 07 ZIP CODE
Wabash	IN / 46992

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	
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
N/A		N/A	
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
Wabash Valley Refuse Removal	unknown		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Box 406			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
Wabash	IN / 46992		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	
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)

FIT and state file information
SSI conducted on 4/17/91

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	098196150

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	0981361501

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

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

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

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

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

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

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

III. SOURCES OF INFORMATION

FIT file information

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	D981961501

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

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

Refer to Section 2-3 Site History

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

FIT File information

EPA FORM 2070-13 (7-81)

APPENDIX C

FIT SITE PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coatings, Inc. PAGE 1 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN0662SA

DATE: 4/17/91

TIME: 1330

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S1

DESCRIPTION: closeup of sample S1

DATE: 4/17/91

TIME: 1330

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S1

DESCRIPTION: perspective of sample S1; collected from an area of blackened and stressed vegetation located approximately 15 feet southeast of the manhole cover to the UST

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: - Wabash Paper Coatings, Inc. PAGE 2 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN0662SB

DATE: 4/17/91

TIME: 1340

DIRECTION OF PHOTOGRAPH: NW

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S2

DESCRIPTION: closeup of Sample S2

DATE: 4/17/91

TIME: 1340

DIRECTION OF PHOTOGRAPH: NW

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable):

DESCRIPTION: perspective of sample S2; collected from an area of stressed vegetation next to the manhole cover to the UST

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coatings, Inc. PAGE 3 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN0662SB

DATE: 4/17/91

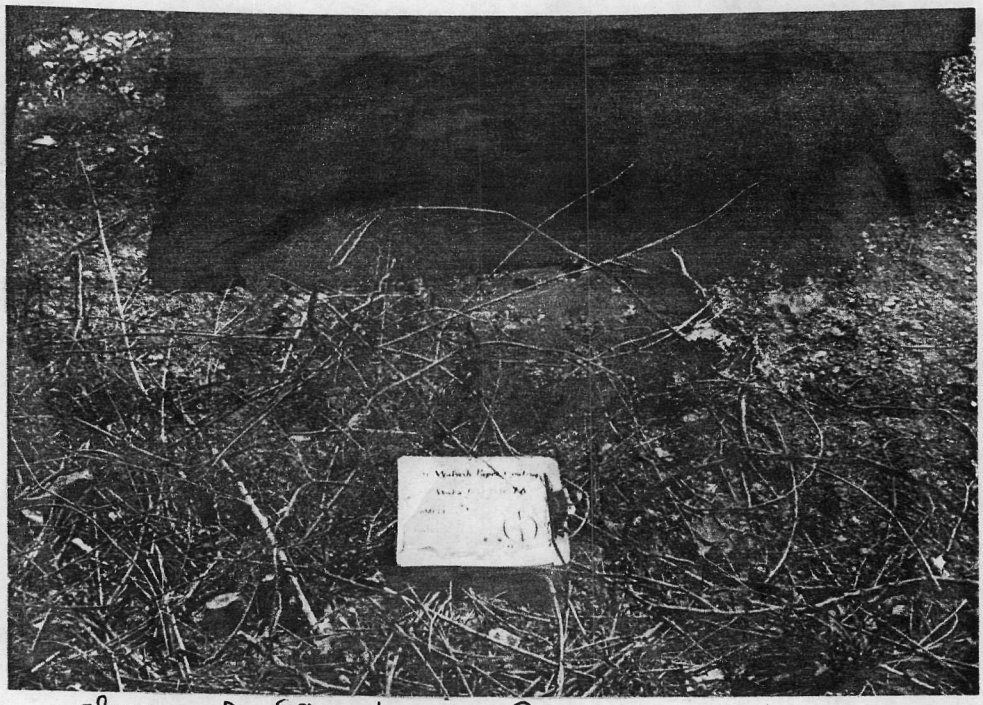
TIME: 1330

DIRECTION OF PHOTOGRAPH: S

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S3



DESCRIPTION: closeup of sample S3

DATE: 4/17/91

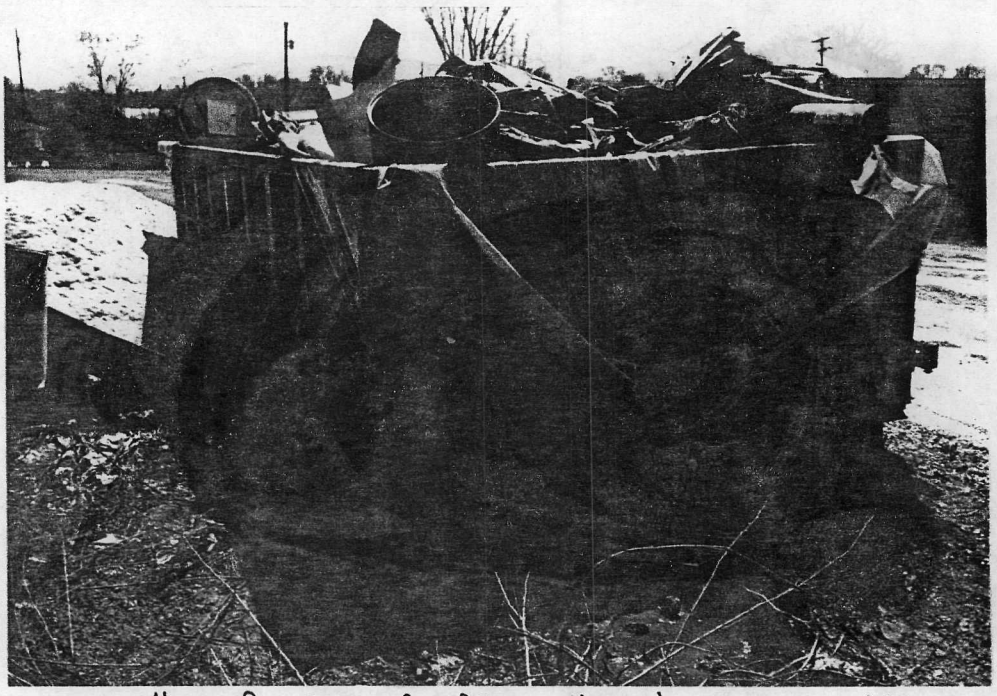
TIME: 1330

DIRECTION OF PHOTOGRAPH: S

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S3



DESCRIPTION: perspective of sample S3; collected from a puddle of a liquid leaking from the northern edge of the refuse/sludge dumpster.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating PAGE 4 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN06625B

DATE: 4/17/91

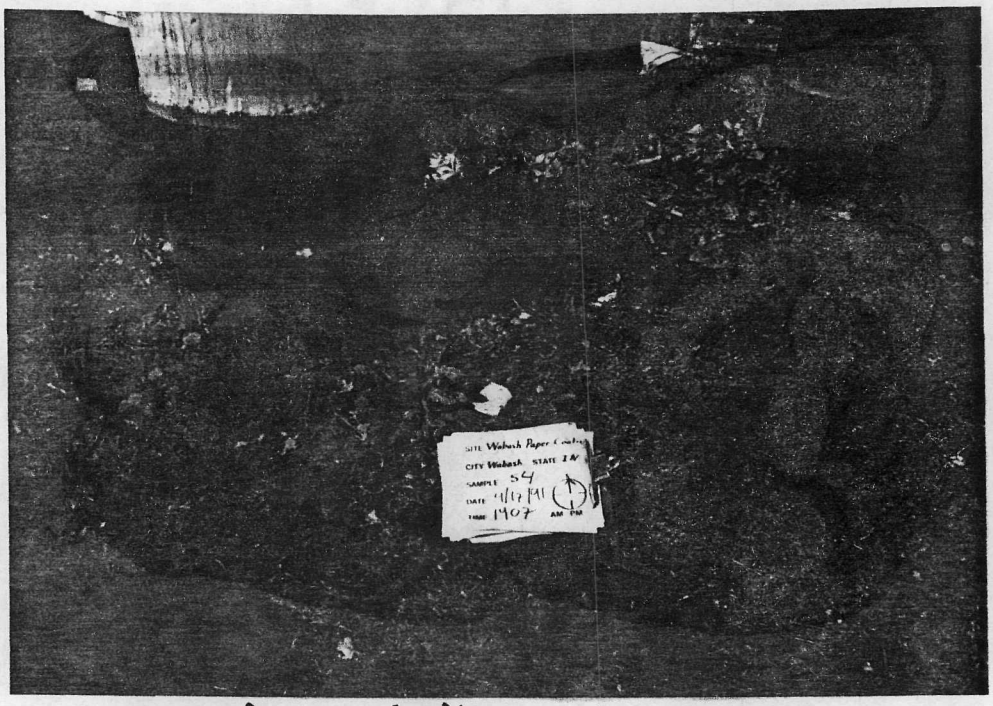
TIME: 1407

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S4



DESCRIPTION: closeup of sample S4

DATE: 4/17/91

TIME: 1407

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S4

DESCRIPTION: perspective of sample S4; collected from soil beneath a crusty, yellow substance and stressed vegetation.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: - Wabash Paper Coating PAGE 5 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-04 PAN: F1N0662SB

DATE: 4/17/91

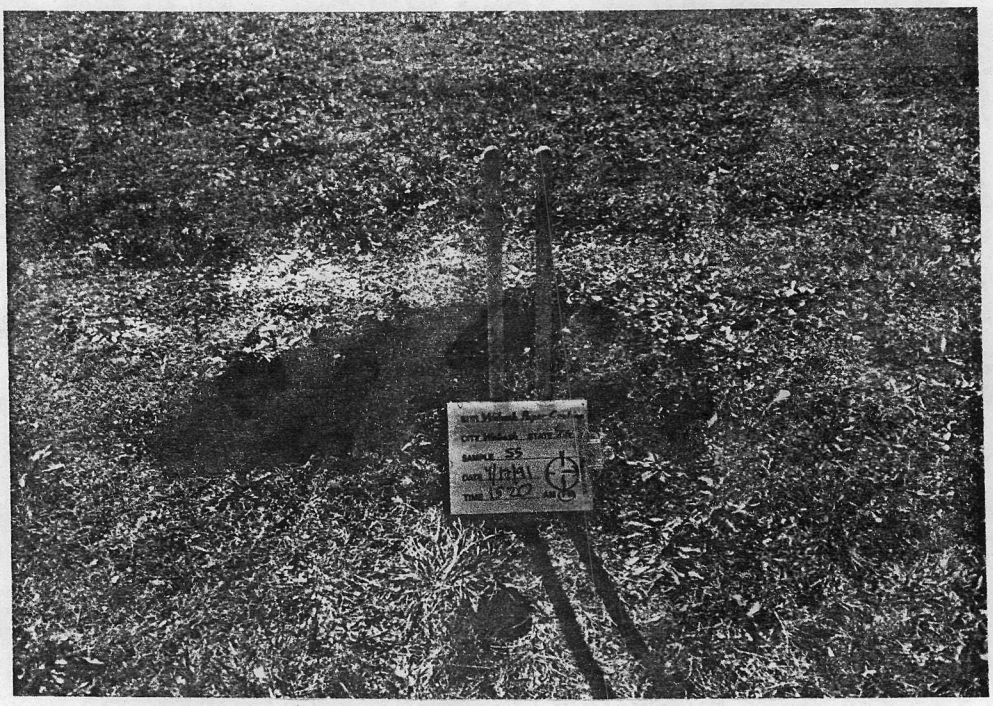
TIME: 1520

DIRECTION OF PHOTOGRAPH: E

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S5



DESCRIPTION: closeup of sample S5

DATE: 4/17/91

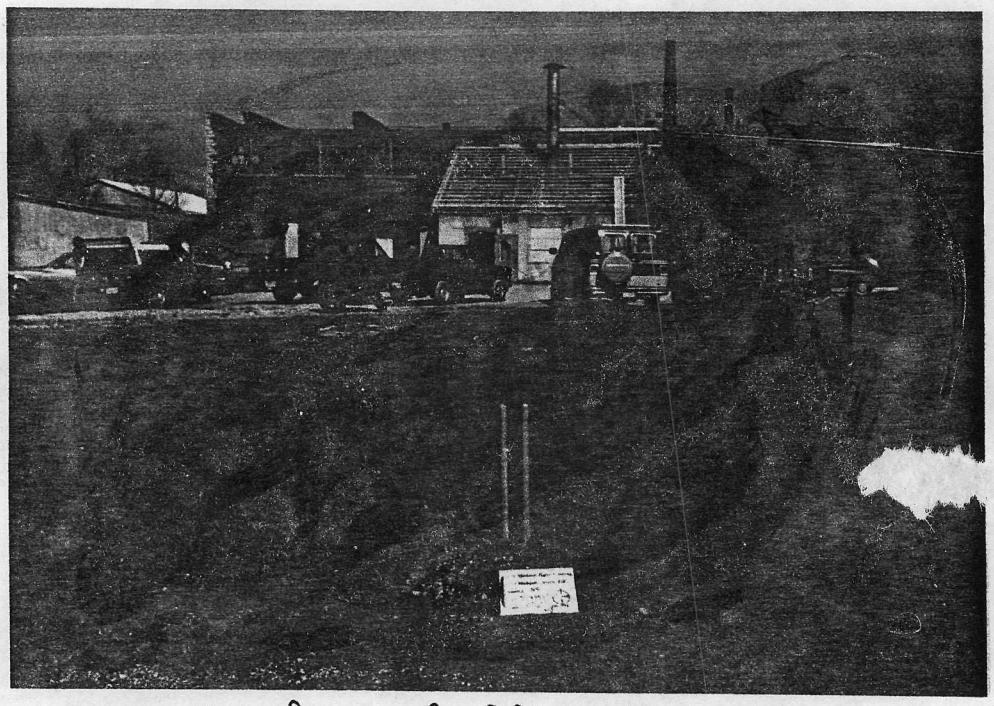
TIME: 1520

DIRECTION OF PHOTOGRAPH: E

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S5



DESCRIPTION: perspective of sample S5, collected from an area of blackened soil and stressed vegetation west of the parking lot at the north end of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Mafcote - Wabash Paper Coating PAGE 6 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: F1N0662

DATE: 4/17/91

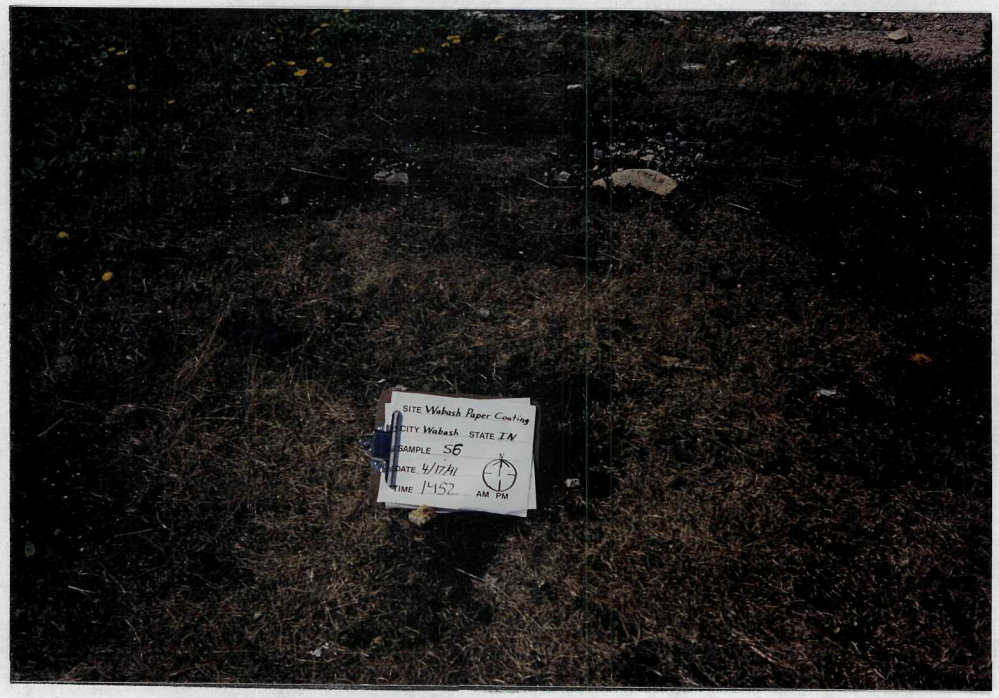
TIME: 1452

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S6



DESCRIPTION: closeup of sample S6

DATE: 4/17/91

TIME: 1452

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): S6

DESCRIPTION: perspective of sample S6; collected from an area of stressed vegetation approximately 20 feet southwest of the semitrailers.

SITE NAME: Wabash Paper Coating Inc PAGE 7 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN0662

DATE:

TIME:

DIRECTION OF PHOTOGRAPH:

WEATHER CONDITIONS:

PHOTOGRAPHED BY:

SAMPLE ID (if applicable):

DESCRIPTION: Closeup of sample 57 unavailable due to processing difficulties

DATE: 4/17/91

TIME: 1645

DIRECTION OF PHOTOGRAPH: S

WEATHER CONDITIONS: Partly Sunny ~67° F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable): 57

DESCRIPTION: Perspective of sample 57 (background) residential area; 184 Middle Street, Wabash, Indiana

SI011(2/25/89)

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating, Inc

PAGE 8 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN0662

DATE: > 4/17/91

TIME: > 1500

DIRECTION OF PHOTOGRAPH: > W

WEATHER CONDITIONS: > Partly Sunny

> ~67°F

PHOTOGRAPHED BY: > D. Epstein

SAMPLE ID (if applicable): >

DESCRIPTION: >

> Front of building facing Carroll Street

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coatings Inc.

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN06625B

DATE: 4/17/91 TIME: 1500 DIRECTION OF PHOTOGRAPH: S PHOTOGRAPHED BY: D. Epstein

WEATHER CONDITIONS: partly sunny ~67°F SAMPLE ID (if applicable):

DESCRIPTION: Northern side of building; foreground has visible train tracks

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: F1N0662SB

DATE: 4/17/91

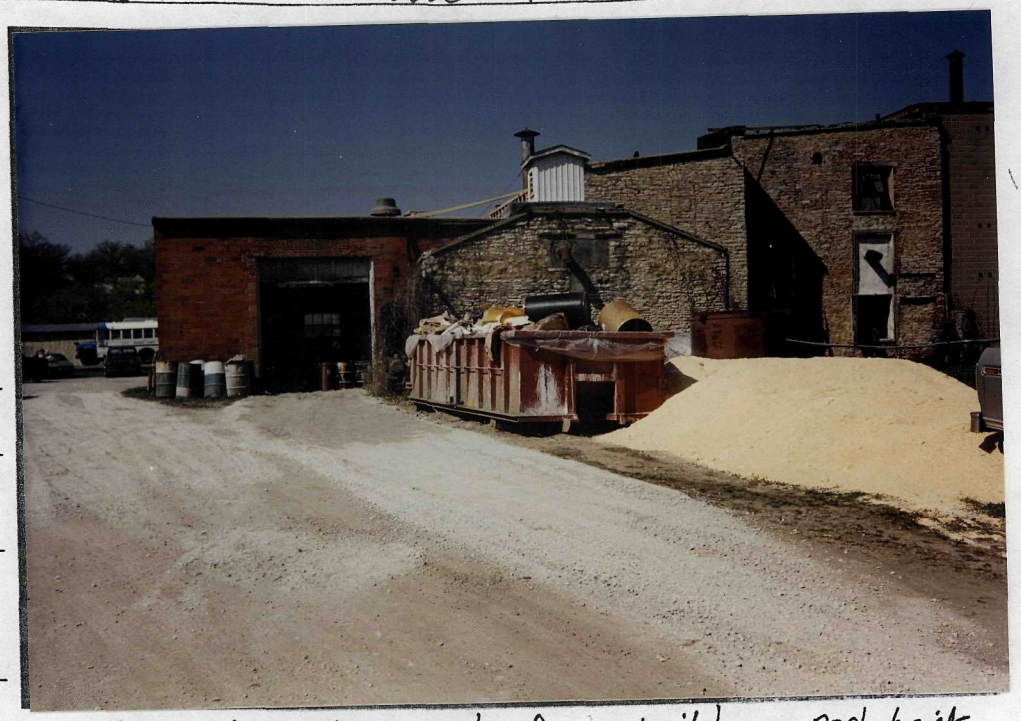
TIME: 1530

DIRECTION OF PHOTOGRAPH: N

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable):



DESCRIPTION: View of western end of building; red brick portion is paper-coating area. Refuse/sludge dumpster and sand for mixing with sludge are in foreground.

DATE: 4/17/91

TIME: 1535

DIRECTION OF PHOTOGRAPH: E

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable):

DESCRIPTION: maintenance shed; roof is being repaired.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Amoco Wabash Paper Coating PAGE 11 OF 16

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: F1N0662SB

DATE: 4/17/91

TIME: 1350

DIRECTION OF PHOTOGRAPH: E

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable):

DESCRIPTION: drain and pipes leading to underground storage tank.

DATE: 4/17/91

TIME: 1350

DIRECTION OF PHOTOGRAPH: E

WEATHER CONDITIONS: partly sunny ~67°F

PHOTOGRAPHED BY: D. Epstein

SAMPLE ID (if applicable):

DESCRIPTION: drain and pipes leading to underground storage tank. manhole cover is entrance to underground storage tank

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating

U.S. EPA ID: IND981961501

TDD: F05-8802-004

PAN: FIN0662SB

DATE: 4/17/91 TIME: 1350 DIRECTION OF PHOTOGRAPH: NE PHOTOGRAPHED BY: D. Epstein

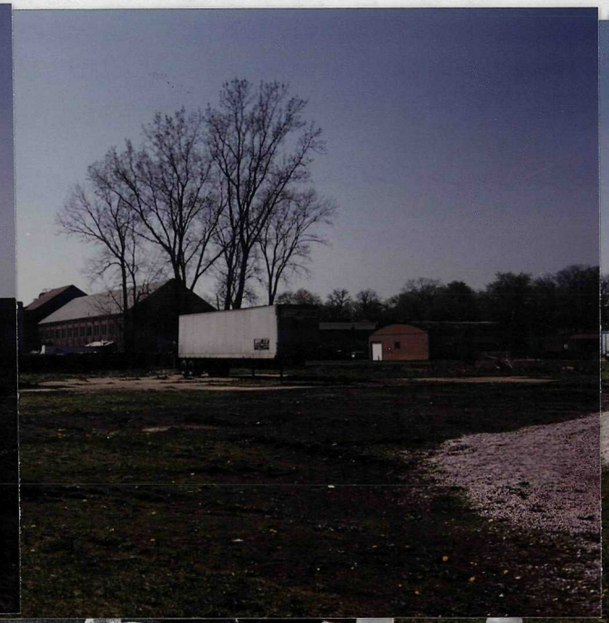
WEATHER CONDITIONS: partly sunny ~67°F SAMPLE ID (if applicable):

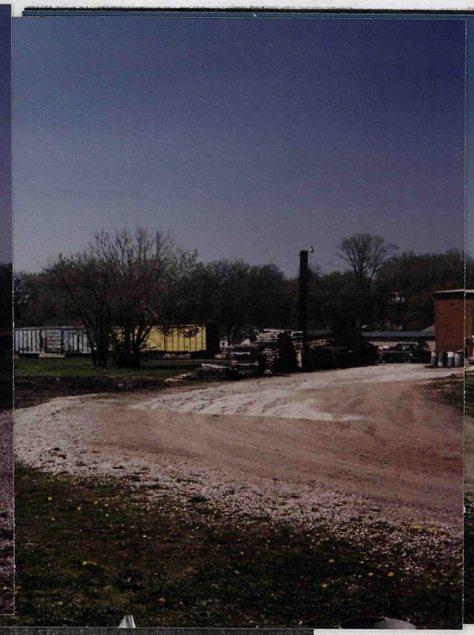
DESCRIPTION: drain and pipe leading from treatment sink inside building to underground storage tank. Bi-level portion of building is warehouse/storage area for paper cores and finished products

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: F1N0662SB





DATE: 4/17/91 TIME: 1500 DIRECTION OF PHOTOGRAPH: NW PHOTOGRAPHED BY: D. Epstein

WEATHER CONDITIONS: partly sunny ~67°F SAMPLE ID (if applicable):

DESCRIPTION: property boundary of Mafcote-Wabash Paper Coating is west of the semi-trailers. Dirt access road leads from Carroll St. to parking lot on north side of Mafcote-Wabash.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating

U.S. EPA ID: IND981961501

TDD: F05-8802-004

PAN: FIN0662SB

DATE: 4/17/91 TIME: 1500 DIRECTION OF PHOTOGRAPH: E PHOTOGRAPHED BY: D. Epstein

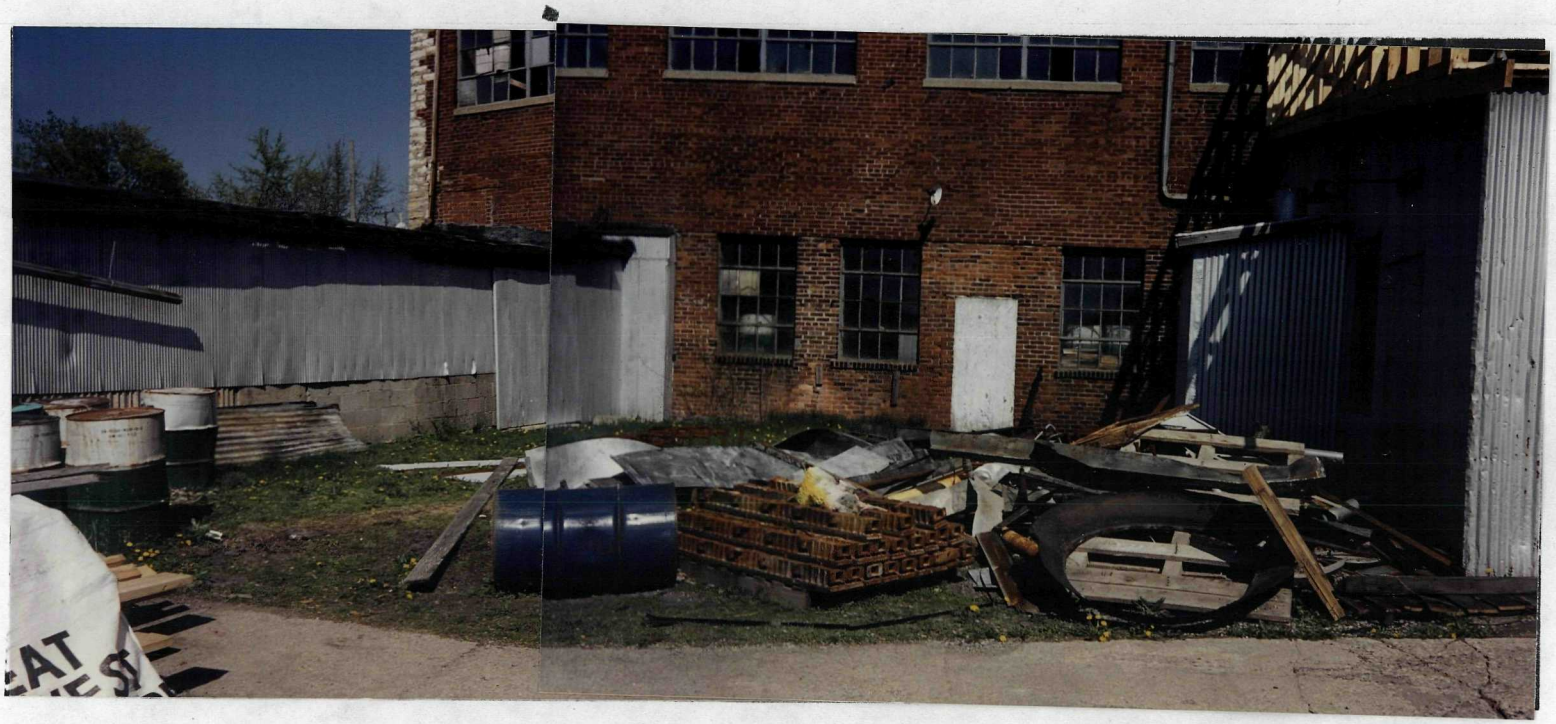
WEATHER CONDITIONS: partly sunny ~67°F SAMPLE ID (if applicable):

DESCRIPTION: view of Mafcote Wabash facing east showing refuse dumpster and wooden pallets.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: - Wabash Paper Coating

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: F1N0662SB



DATE: 4/17/91 TIME: 1530 DIRECTION OF PHOTOGRAPH: E PHOTOGRAPHED BY: D. Epstein

WEATHER CONDITIONS: partly sunny ~67°F SAMPLE ID (if applicable):

DESCRIPTION: Maintenance shed is on the south. Debris in foreground is from roof repair of the maintenance shed.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Wabash Paper Coating

U.S. EPA ID: IND981961501 TDD: F05-8802-004 PAN: FIN0662SB

DATE: 4/17/91 TIME: 1530 DIRECTION OF PHOTOGRAPH: N PHOTOGRAPHED BY: D. Epstein

WEATHER CONDITIONS: partly sunny ~67°F SAMPLE ID (if applicable):

DESCRIPTION: parking lot facing drum storage shed.

APPENDIX D

U.S. EPA TARGET COMPOUND LIST AND TARGET ANALYTE LIST QUANTITATION/DETECTION LIMITS

Contract Laboratory Program
Target Compound List
Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Chloromethane	74-87-3	10 ug/L	10 ug/Kg
Bromomethane	74-83-9	10	10
Vinyl chloride	75-01-4	10	10
Chloroethane	75-00-3	10	10
Methylene chloride	75-09-2	5	5
Acetone	67-64-1	10	5
Carbon disulfide	75-15-0	5	5
1,1-dichloroethene	75-35-4	5	5
1,1-dichloroethane	75-34-3	5	5
1,2-dichloroethene (total)	540-59-0	5	5
Chloroform	67-66-3	5	5
1,2-dichloroethane	107-06-2	5	5
2-butanone (MEK)	78-93-3	10	10
1,1,1-trichloroethane	71-55-6	5	5
Carbon tetrachloride	56-23-5	5	5
Vinyl acetate	108-05-4	10	10
Bromodichloromethane	75-27-4	5	5
1,2-dichloropropane	78-87-5	5	5
cis-1,3-dichloropropene	10061-01-5	5	5
Trichloroethene	79-01-6	5	5
Dibromochloromethane	124-48-1	5	5
1,1,2-trichloroethane	79-00-5	5	5
Benzene	71-43-2	5	5
Trans-1,3-dichloropropene	10061-02-6	5	5
Bromoform	75-25-2	5	5
4-Methyl-2-pentanone	108-10-1	10	10
2-Hexanone	591-78-6	10	10
Tetrachloroethene	127-18-4	5	5
Tolene	108-88-3	5	5
1,1,2,2-tetrachloroethane	79-34-5	5	5
Chlorobenzene	108-90-7	5	5
Ethyl benzene	100-41-4	5	5
Styrene	100-42-5	5	5
Xylenes (total)	1330-20-7	5	5

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Phenol	108-95-2	10 ug/L	330 ug/Kg
bis(2-Chloroethyl) ether	111-44-4	10	330
2-Chlorophenol	95-57-8	10	330
1,3-Dichlorobenzene	541-73-1	10	330
1,4-Dichlorobenzene	106-46-7	10	330
Benzyl Alcohol	100-51-6	10	330
1,2-Dichlorobenzene	95-50-1	10	330
2-Methylphenol	95-48-7	10	330
bis(2-Chloroisopropyl) ether	108-60-1	10	330
4-Methylphenol	106-44-5	10	330
N-Nitroso-di-n-dipropylamine	621-64-7	10	330
Hexachloroethane	67-72-1	10	330
Nitrobenzene	98-95-3	10	330
Isophorone	78-59-1	10	330
2-Nitrophenol	88-75-5	10	330
2,4-Dimethylphenol	105-67-9	10	330
Benzoic Acid	65-85-0	50	1600
bis(2-Chloroethoxy) methane	111-91-1	10	330
2,4-Dichlorophenol	120-83-2	10	330
1,2,4-Trichlorobenzene	120-82-1	10	330
Naphthalene	91-20-3	10	330
4-Chloroaniline	106-47-8	10	330
Hexachlorobutadiene	87-68-3	10	300
4-Chloro-3-methylphenol	59-50-7	10	330
2-Methylnaphthalene	91-57-6	10	330
Hexachlorocyclopentadiene	77-47-4	10	330
2,4,6-Trichlorophenol	88-06-2	10	330
2,4,5-Trichlorophenol	95-95-4	50	1600
2-Chloronaphthalene	91-58-7	10	330
2-Nitroaniline	88-74-4	50	1600
Dimethylphthalate	131-11-3	10	330
Acenaphthylene	208-96-8	10	330
2,6-Dinitrotoluene	606-20-2	10	330
3-Nitroaniline	99-09-2	50	1600
Acenaphthene	83-32-9	10	330
2,4-Dinitrophenol	51-28-5	50	1600
4-Nitrophenol	100-02-7	50	1600
Dibenzofuran	132-64-9	10	330
2,4-Dinitrotoluene	121-14-2	10	330
Diethylphthalate	84-66-2	10	330
4-Chlorophenyl-phenyl ether	7005-72-3	10	330

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SLUDGE SEDIMENT
Fluorene	86-73-7	10 ug/L	330 ug/Kg
4-Nitroaniline	100-01-6	50	1600
4,6-Dinitro-2-methylphenol	534-52-1	50	1600
N-nitrosodiphenylamine	86-30-6	10	330
4-Bromophenyl-phenylether	101-55-3	10	330
Hexachlorobenzene	118-74-1	10	330
Pentachlorophenol	87-86-5	50	1600
Phenanthrene	85-01-8	10	330
Anthracene	120-12-7	10	330
Di-n-butylphthalate	84-74-2	10	330
Fluoranthene	206-44-0	10	330
Pyrene	129-00-0	10	330
Butylbenzylphthalate	85-68-7	10	330
3,3'-Dichlorobenzidine	91-94-1	20	660
Benzo(a)anthracene	56-55-3	10	330
Chrysene	218-01-9	10	330
bis(2-Ethylhexyl)phthalate	117-81-7	10	330
Di-n-octylphthalate	117-84-0	10	330
Benzo(b)fluoranthene	205-99-2	10	330
Benzo(k)fluoranthene	207-08-9	10	330
Benzo(a)pyrene	50-32-8	10	330
Indeno(1,2,3-cd)pyrene	193-39-5	10	330
Dibenz(a,h)anthracene	53-70-3	10	330
Benzo(g,h,i)perylene	191-24-2	10	330

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
alpha-BHC	319-84-6	0.05 ug/L	8 ug/Kg
beta-BHC	319-85-7	0.05	8
delta-BHC	319-86-8	0.05	8
gamma-BHC (Lindane)	58-89-9	0.05	8
Heptachlor	76-44-8	0.05	8
Aldrin	309-00-2	0.05	8
Heptachlor epoxide	1024-57-3	0.05	8
Endosulfan I	959-98-8	0.05	8
Dieldrin	60-57-1	0.10	16
4,4'-DDE	72-55-9	0.10	16
Endrin	72-20-8	0.10	16
Endosulfan II	33213-65-9	0.10	16
4,4'-DDD	72-54-8	0.10	16
Endosulfan sulfate	1031-07-8	0.10	16
4,4'-DDT	50-29-3	0.10	16
Methoxychlor (Mariate)	72-43-5	0.5	80
Endrin ketone	53494-70-5	0.10	16
alpha-Chlordane	5103-71-9	0.5	80
gamma-chlordane	5103-74-2	0.5	80
Toxaphene	8001-35-2	1.0	160
AROCLOR-1016	12674-11-2	0.5	80
AROCLOR-1221	11104-28-2	0.5	80
AROCLOR-1232	11141-16-5	0.5	80
AROCLOR-1242	53469-21-9	0.5	80
AROCLOR-1248	12672-29-6	0.5	80
AROCLOR-1254	11097-69-1	1.0	160
AROCLOR-1260	11096-82-5	1.0	160

Table A (Cont.)

CONTRACT LABORATORY PROGRAM

TARGET ANALYTE LIST (TAL)

INORGANIC DETECTION LIMITS

Compound	Procedure	Detection Limits Water (µg/L)	Detection Limits Soil Sediment Sludge (mg/kg)
aluminum	ICP	200	40
antimony	furnace	60	2.4
arsenic	furnace	10	2
barium	ICP	200	40
beryllium	ICP	5	1
cadmium	ICP	5	1
calcium	ICP	5,000	1,000
chromium	ICP	10	2
cobalt	ICP	50	10
copper	ICP	25	5
iron	ICP	100	20
lead	furnace	5	1
magnesium	ICP	5,000	1,000
manganese	ICP	15	3
mercury	cold vapor	0.2	0.008
nickel	ICP	40	8
potassium	ICP	5,000	1,000
selenium	furnace	5	1
silver	ICP	10	2
sodium	ICP	5,000	1,000
thallium	furnace	10	2
tin	ICP	40	8
vanadium	ICP	50	10
zinc	ICP	20	4
cyanide	color	10	2

3767:1

APPENDIX E

WELL LOGS OF THE AREA OF THE SITE

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204

Telephone 317-232-4160

WL-1

State Form 35680

1063

WATER WELL RECORD

LOCATION

(Fill in completely - Refer to instruction sheet)

y in which well was drilled Wabash Civil Township Noble

g directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

250' southeast of plant and 150' west of end of Fulton Street

E OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner Container Corp. of America Address Wabash, Indiana

Building Contractor _____ Address _____

of Well Drilling Contractor: Peerless-Midwest, Inc.

ss 51255 Bittersweet Road, P. O. Box 26, Granger, IN 46530

o. Drilling Equipment Operator: John Kollar

L INFORMATION (RESCREENING OF WELL #6)

Originally drilled by others 1939

h of well: 31' Date well was completed: Rescreening - 6-27-84

eter of casing or drive pipe: 54" Total Length: 33'6"

eter of liner (if used): _____ Total Length: _____

eter of Screen: 12" 26" Length: 8' 7'6" Slot Size: .040" #4

of Well: Drilled ☐ Gravel Pack ☐ Driven ☐ Other _____

of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

od of Drilling: Cable Tools ☐ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Readings taken after chemical cleaning and development of well after rescreening
c water level in completed well (Distance from ground to water level) 23' feet

r Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

ping Test: Hours Tested 8 Rate 178 g.p.m. Drawdown 9 ft.

(Drawdown is the difference between static level and water level at end of test)

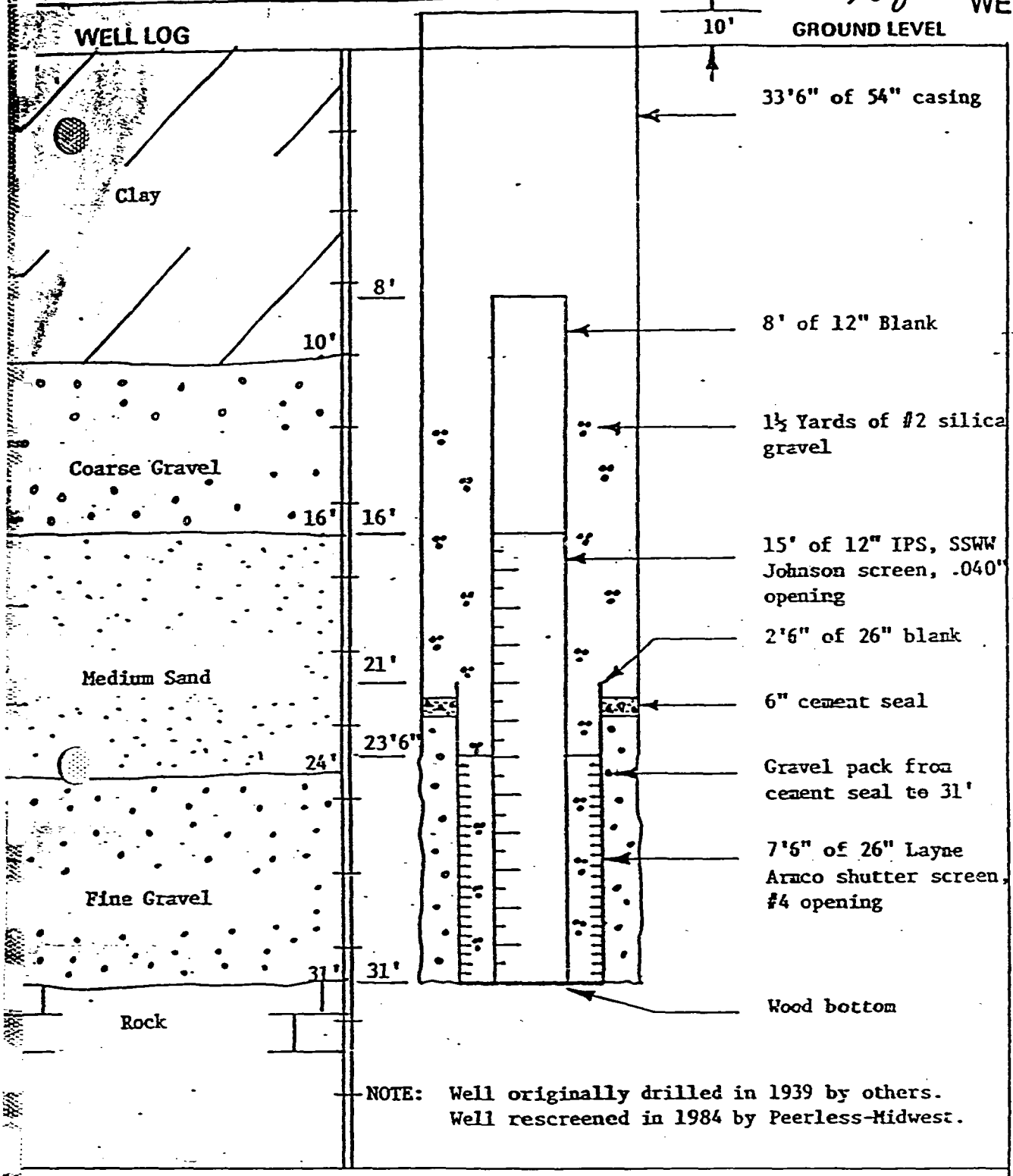
Signature R. J. Williams
R. J. Williams

Date September 13, 1984

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

WELL LOG #1

WELL LOG



NOTE: Well originally drilled in 1939 by others.
Well rescreened in 1984 by Peerless-Midwest.

Wabash State Indiana

ation 250' Southeast of Plant and 150' West of End of Fulton Street

nty Wabash Twp. Noble Section 10

il rescreened, treated for iron bacteria and chemically cleaned and developed.

t Capacity 178 GPM. Static Water
el 23 ft. Pumping Level 32 ft.
cific Capacity 19.7 GPM/Ft. D.D.
e Drilled 4-15-39, Rescreened 6-27-84
ler Rescreened by John Kollar
No.

Well No. 6

CONTAINER CORPORATION OF AMERICA
WABASH, INDIANA

PEERLESS-MIDWEST, INC.
Granger, Indiana

WELL LOG #1 3063

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
Clay	0'	10'
Coarse Gravel	10'	16'
Medium Sand	16'	24'
Fine Gravel	24'	31'
Rock	31'	

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

COUNTY [illegible] TWP. [illegible] RGE. [illegible] ¼ ___ ¼ ___ SEC 14 ___

Topo Map [illegible]

Field Located By TAB Date ___

Courthouse Location By ___ Date ___

Location accepted w/o verification by [illegible]

___ Ft W of EL. ___ Ft N of SL. ___ Ft E of WL. ___ Ft S of NL.

Ground Elevation 1060 ± Depth to bedrock ___ Bedrock elevation ___ Aquifer elevation ___

Subdivision Name ___ Lot Number ___

NOV 1984 RECEIVED DEPT. OF NATURAL RESOURCES DIVISION OF WATER

WL-2

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
311 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA

WATER WELL RECORD

INFORMATION ON WELL LOCATION

County in which well was drilled: Wabash Civil Township: Noble

Congressional township: _____ Range: 4 E Number of section: 12

(Fill in as completely as possible)

Describe in your own words the well location with respect to nearby towns, roads, streets or distinctive landmarks: about 1½ miles south east of Wabash on the water-works road

Name of owner: John Custer Address: R 4 Wabash Ind.

Name of Well Drilling Contractor: Virgil Hultz

Address: R 3 Wabash Ind.

Name of Drilling Equipment Operator: same

INFORMATION ON THE WELL

Completed depth of well: 102 ft. Date well was completed: Jan 28. '61

Diameter of outside casing or drive pipe: 4" Length: 42'.

Diameter of inside casing or liner: ✓ Length: ✓

Diameter of Screen: ✓ Length: ✓ Slot size: ✓

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☐ For industry ☐ For public supply ☐ Stock ☒

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 46 ft.

Bailer Test: Hours tested _____ Rate _____ g.p.m. Drawdown _____ ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested 2 Rate 15 g.p.m. Drawdown 15 ft.

Signature Virgil Hultz

Date Jan 28 1961

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

2

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
Clay	0	39
sand *3'	39	42
limestone	42	102
	—	

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
609 STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209
MElrose 3-6757

WL-3

MAR 1966
RECEIVED
Dept. of Nat. Resources
Division of Water

WATER WELL RECORD

INFORMATION ON WELL LOCATION

County in which well was drilled: Wabash Civil Township: Noble

Congressional township: 27N Range: 6E Number of section: 13

(Fill in as completely as possible)

Describe in your own words the well location with respect to nearby towns, roads, streets or distinctive landmarks: South out of wabash across river to first traffic light turn left and proceed under railroad. Bear left at fork and well is ½ mile up road on the right hand side. Well is on east side of home with pitless adapter on it.

Name of owner: Mr. Leroy Fieseler Address: Wabe Wabe Road Wabash

Name of Well Drilling Contractor: Empire Hellard Pump Corporation

Address: 27 Walnut St Wabash

Name of Drilling Equipment Operator: Mr. Warren J. Blair

INFORMATION ON THE WELL

Completed depth of well: 96 ft. Date well was completed: Feb 26, 1966

Diameter of outside casing or drive pipe: 4 inch Length: 18 feet

Diameter of inside casing or liner: _____ Length: _____

Diameter of Screen: _____ Length: _____ Slot size: _____

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☒ For industry ☐ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 45 ft.

Bailer Test: Hours tested 1 Rate 400 g.p.~~h~~ Drawdown 0 ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested 5 Rate 600 g.p.~~h~~ Drawdown 0 ft.

Signature Warren J. Blair

Date March 3, 1966

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
Brown clay	0	2
Sand with little gravel *61'	2	63
Sand very hard packed *32'	63	95
Limestone	95	96
715 95 620		
REMARKS:		

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

COUNTY: [illegible] TWP. 2 N RGE. 6 E SC. 13 ¼ NW ¼ NW ¼ SEC. 13

Topo Map: [illegible]

Well log classified By [illegible] Date [illegible]
Courthouse located By [illegible] Date [illegible]
Field located By [illegible] Date 8-17-64
Acc. w/o verification By [illegible] Date [illegible]

[illegible] Ft W of EL, Ground elevation 715
[illegible] Ft N of SL, Depth to bedrock 95
[illegible] Ft E of WL, Bedrock elevation 620
[illegible] Ft S of NL, Aquifer elevation 620

INSTRUCTIONS

This Water Well Record form is designed to record the most essential data concerning a water well. We request that you be as accurate as possible in recording this information as it may be of great assistance in the planning and development of new water supplies.

An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location.

As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water Resources, Indiana Department of Conservation.

WL-4

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209

RECEIVED 1970 DEPT. OF NATURAL RESOURCES DIVISION OF WATER

WATER WELL RECORD

INFORMATION ON WELL LOCATION

County in which well was drilled: Wabash Civil Township: Noble

Congressional township: _____ Range: _____ Number of section: _____

(Fill in as completely as possible)

Describe in your own words the well location with respect to nearby towns, roads, streets or distinctive landmarks: 1/8 mi E of Rt SR15 on Mere Rock

Name of owner: Roy Mecum Address: Wabash, Ind

Name of Well Drilling Contractor: Helvie & Sons Inc

Address: 5418 Lincoln Blvd Marion, Ind

Name of Drilling Equipment Operator: James Helvie

INFORMATION ON THE WELL

Completed depth of well: 61 ft. Date well was completed: 7-17-70

Diameter of outside casing or drive pipe: 4" Length: 55'

Diameter of inside casing or liner: _____ Length: _____

Diameter of Screen: _____ Length: _____ Slot size: _____

Type of Well: Drilled ☑ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☑ For industry ☐ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☑ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 30 ft.

Bailer Test: Hours tested _____ Rate _____ g.p.m. Drawdown _____ ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested 1 Rate 50 g.p.m. Drawdown 0 ft.

Signature Dwight C. Helvie

Date 7-31-70

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
yellow clay	0	13
yellow sand & gravel	13	41
brown clay	41	54
limestone	54	61
gravel	61	

Still more work
7/27/65
VG
Will not locate

WL-5

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
311 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA

SEP 1961
RECEIVED

WATER WELL RECORD

INFORMATION ON WELL LOCATION

County in which well was drilled: Wabash Civil Township: Noble.

Congressional township: 27N. Range: 6E Number of section: 15

(Fill in as completely as possible)

Describe in your own words the well location with respect to nearby towns, roads, streets or distinctive landmarks: 1 Mile West of Wabash Ind. - Located right along the Wabash River on West side of River road South side of River

Name of owner: J Allen Brown Address: RR-9 Wabash, Ind.

Name of Well Drilling Contractor: Wilbur Mower

Address: Roann, Ind.

Name of Drilling Equipment Operator: L. Vay Early

INFORMATION ON THE WELL

Completed depth of well: 105 ft. Date well was completed: 9-8-61

Diameter of outside casing or drive pipe: 4" Length: 10

Diameter of inside casing or liner: Length:

Diameter of Screen: Length: Slot size:

Type of Well: Drilled ☑ Gravel Pack ☐ Driven ☐ Other

Use of Well: For home ☑ For industry ☐ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☑ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 68 ft.

Bailer Test: Hours tested 1 Rate 10 g.p.m. Drawdown 10 ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested Rate g.p.m. Drawdown ft.

Signature Wilbur Mower

Date 9-8-61

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

WATER WELL LOG

COUNTY: Whitfield TWP. 22N RGE. 6E NE ¼ SW ¼ NW ¼ SEC. 15

Topo. Map: Walbridge Loc. accepted w/o verification Yes X No ___

El. of grnd. surface at well: 732 Courthouse Loc. By ___ Date 2-3-62

Depth to bedrock: ___ Field Located By ___ Date ___

Well Log processed by: JMN Placed in Master Well Log File Date ___

(Well Driller does not fill out)

906' W. of northeast cor. Rural Township on N. line

Rebuilt in field - Sloan

P.C. MC

FORMATIONS (Color, type of material, hardness, etc.)	From	To
Yellow Clay	0	3½
Limestone	3½	105

REMARKS:

INSTRUCTIONS

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An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location.

As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water Resources, Indiana Department of Conservation, 311 West Washington Street, Indianapolis, Indiana.

LAYNE-NORTHERN COMPANY

Incorporated

MISHAWAKA, INDIANA

WL-6

☐ TEST

☒ PERMANENT

Job No. M1C210

WELL LOG No. #4 — Wabash County Wabash

Owner General Tire & Rubber Company Township Noble

Section

Location State Indiana

From Land Description ft. East and ft. North of SW Corner of Section

From Street or Road approx. 300' E. of Charlie Creek and 75' N. of Wabash River - 1' North of old #3 well

FORMATION FOUND — DESCRIBE FULLY	FEET NATURAL GROUND LEVEL Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
Top Soil	0	1	1	
Brown Sandy Clay	1	5	4	
Fine Brown Sand Clean	5	15	10	
Clean Sand and Gravel	15	17	2	
Clean Gravel and Sand	17	21	4	
Some Clay Sand - Gravel	21	23	2	
Clean Coarse Sand	23	31	8	14'
Brown Lime Rock	31	31½	6	

31½ inch diameter hole drilled by ☐ Cable Tool ☐ Rotary ☐ Jetting

Pipe left in hole ~~35~~ 35' (20' below ground and 15' above ground)

Date Started 5/9/60 Finished 5/20/60 Millwell

DRILLER

APR 1965
RECEIVED
Div. of Conservation
Division of
Water Resources

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
609 STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209
MElrose 3-6757

STREMMEL & HILL
Phone 951-4191
LaFontaine, Indiana

WL-7

WATER WELL RECORD

INFORMATION ON WELL LOCATION

County in which well was drilled: Wabash Civil Township: Noble

Congressional township: 27N Range: 6E Number of section: 9
(Fill in as completely as possible)

Describe in your own words the well location with respect to nearby towns, roads, streets or distinctive landmarks: approximately ½ mile East of junction of Indiana 115 and U S 24 Bypass, North West of Wabash, Indiana— on South side of U S Road 24. Well in front of building about 10' W. of N E corner and about 1' from front

Name of owner: Cashway Lumber Company Address: 3404 South Western Avenue ~~Marion, Indiana~~

Name of Well Drilling Contractor: Stremmel & Hill

Address: 105 West Kendall Street LaFontaine, Indiana 46940

Name of Drilling Equipment Operator: Cecil Siders

INFORMATION ON THE WELL

Completed depth of well: 115 ft. Date well was completed: 3/26/65

Diameter of outside casing or drive pipe: Length:

Diameter of inside casing or liner: 4" Length: 21'

Diameter of Screen: Length: Slot size:

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other

Use of Well: For home ☐ For industry ☒ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 30 ft.

Bailer Test: Hours tested ½ Rate 15 g.p.m. Drawdown ____ ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested 2 Rate 18 g.p.m. Drawdown 0 ft.

Signature STREMMEL & HILL by Jerry T. Hill

Date April 12, 1965

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
Fill	0	3
Very hard yellow limestone	3	25
medium hard grey limestone	25	40
soft blue water-bearing stone	40	115

REMARKS:

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

COUNTY: [illegible] TWP. 27 N RGE. 6 E NE ¼ SE ¼ SW ¼ SEC. 9

Topo Map: [illegible]

Well log classified By [illegible] Date 11/13/65
Courthouse located By [illegible] Date [illegible]
Field located By [illegible] Date 7/23/76
Acc. w/o verification By [illegible] Date [illegible]

1000 Ft W of EL, Ground elevation 715-+
2000 Ft N of SL, Depth to bedrock 30
Ft E of WL, Bedrock elevation 712
Ft S of NL, Aquifer elevation

PC
MC

INSTRUCTIONS

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As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water Resources, Indiana Department of Conservation.

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
311 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA

WL-8

WATER WELL RECORD

INFORMATION ON WELL LOCATION

ounty in which well was drilled: Miami Civil Township: Pleasant

ongressional township: 27 N Range: 6 E Number of section: 1

(Fill in as completely as possible)

escribe in your own words the well location with respect to nearby towns, roads, streets r distinctive landmarks: 2 miles N.E. of N. Manchester

ame of owner: Old Manchester Cemetery Address:

ame of Well Drilling Contractor: Ralph Klutz & Son

ddress:

ame of Drilling Equipment Operator:

INFORMATION ON THE WELL

ompleted depth of well: 64 ft. Date well was completed: July 12/62

iameter of outside casing or drive pipe: 2 Length: 47'

iameter of inside casing or liner: Length:

iameter of Screen: 1¼ Length: 3 ft Slot size: 12

ype of Well: Drilled ☐ Gravel Pack ☐ Driven ☐ Other

se of Well: To water flowers & plants For home ☐ For industry ☐ For public supply ☐ Stock ☐

ethod of Drilling: Cable Tools ☐ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

tatic water level in completed well (Distance from ground to water level) 20 ft.

ailer Test: Hours tested ____ Rate ____ g.p.m. Drawdown ____ ft. (Difference between static level and water level at end of test)

umping Test: Hours tested ____ Rate 300 g.p.H. Drawdown ____ ft.

Signature Ralph Klutz

Date

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

①

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
Silt + sandy clay	1	16
sandy pink gravel #18'	16	27
[illegible] sand #32'	27	60
pink gravel + sand #41'	60	69

REMARKS: This is not a good water gravel but will supply time needs

COUNTY: _____ TWP. _____ RGE. _____ NW ¼ NW ¼ NW ¼ SEC. 1

Topo. Map: _____ Loc. accepted w/o verification Yes No

El. of grnd. surface at well: 790

Depth to bedrock: 795

Well Log processed by: _____

Courthouse Loc. By _____ Date _____

Field Located By _____ Date _____

Placed in Master Well Log File Date _____

FOR ADMINISTRATIVE USE ONLY
(Well Driller does not fill out)

INSTRUCTIONS

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WELLFIELD NO. 2

WELL NO. 1

LAYNE-NORTHERN COMPANY

Incorporated

MISHAWAKA, INDIANA

EST

ERMANENT

Job No. M11,393

L LOG No. Smith #1 CITY Wabash County Wabash

er Indiana Water Corp. Township Noble

Section 33 Z. 8

State Indiana

ation

From Land Description _____ ft. East and _____ ft. North of SW Corner of Section.

From Street or Road 595' W. of Yankee Rd. 100' N. of Wolfe Rd.

FORMATION FOUND — DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
Brown Clay	0	5	5	
Brown Clay with Sand and gravel	5	17	12	
Grey Clay with Sand and gravel	17	40	23	
Grey Sand	40	46	6	
Brown Gravel	46	48	2	
Grey Clay with sand and gravel	48	83	35	
[illegible]	83	119	36	
Grey Gravel	119	133	14	
Brown Clay	133	137	4	
Grey Gravel	137	206	69	41'

12 inch diameter hole drilled by ☒ Cable Tool ☐ Rotary ☐ Jetting

Pipe left in hole 163' 7" - 42' 6" Brass Cook Screen

Date Started 3/29/65 Finished 4-30-65 Schoon

Driller

Pipe extends 0 feet above ground level.

Job No. 11393

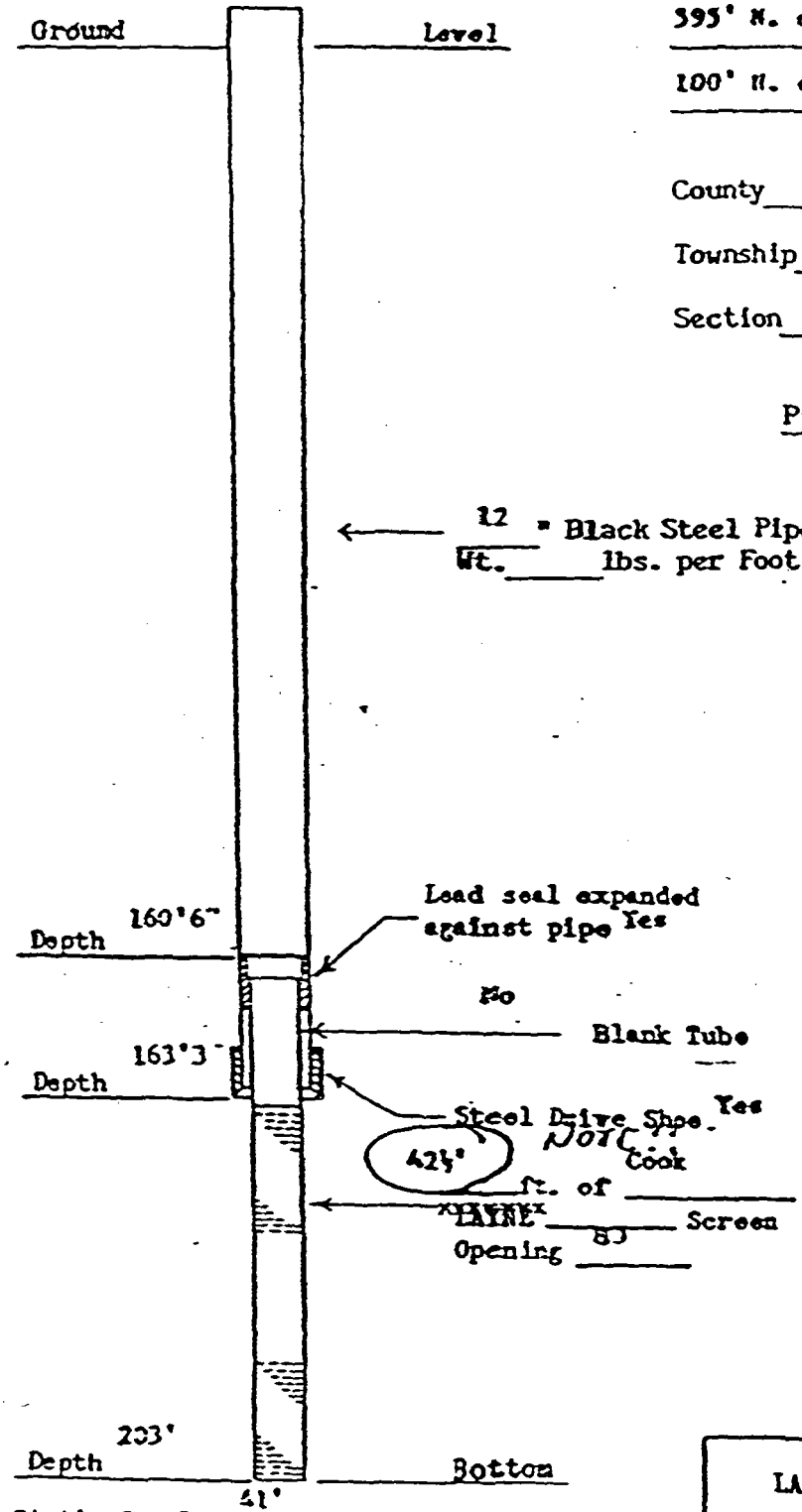
Location from Street or Road
395' N. of Yankee Rd.

100' N. of Wolf Rd.

County Wabash

Township Noble

Section 33



Pipe Tally	Welded ~~Threaded~~
Bottom	11'6"
	11' 3"
	11'9"
	11' 2"
	10' 10"
	10' 5"
	10' 7"
	10'6"
	10'8"
	9' 11"
	10'3"
	~~11/8~~
Top	10' 10" ~~8'5"~~
Total	163'3"

Static Level 1016

Pumped 44' GPM

at 24 pumping level

after hours

Driller Schoon

Date Finished 4-30-63

Not drawn to scale
All depths measured from Ground Level

LAYNE TUBULAR WELL No. Smith #1
For
INDIANA WATER CORPORATION
WABASH, IND.

LAYNE NORTHERN CO. INC.
MISHAWAKA, INDIANA

DRAWN BY	DRAWING NO.
APPROVED BY	
DATE	

Pipe extends 1 feet above ground level.

Job No. X11,523

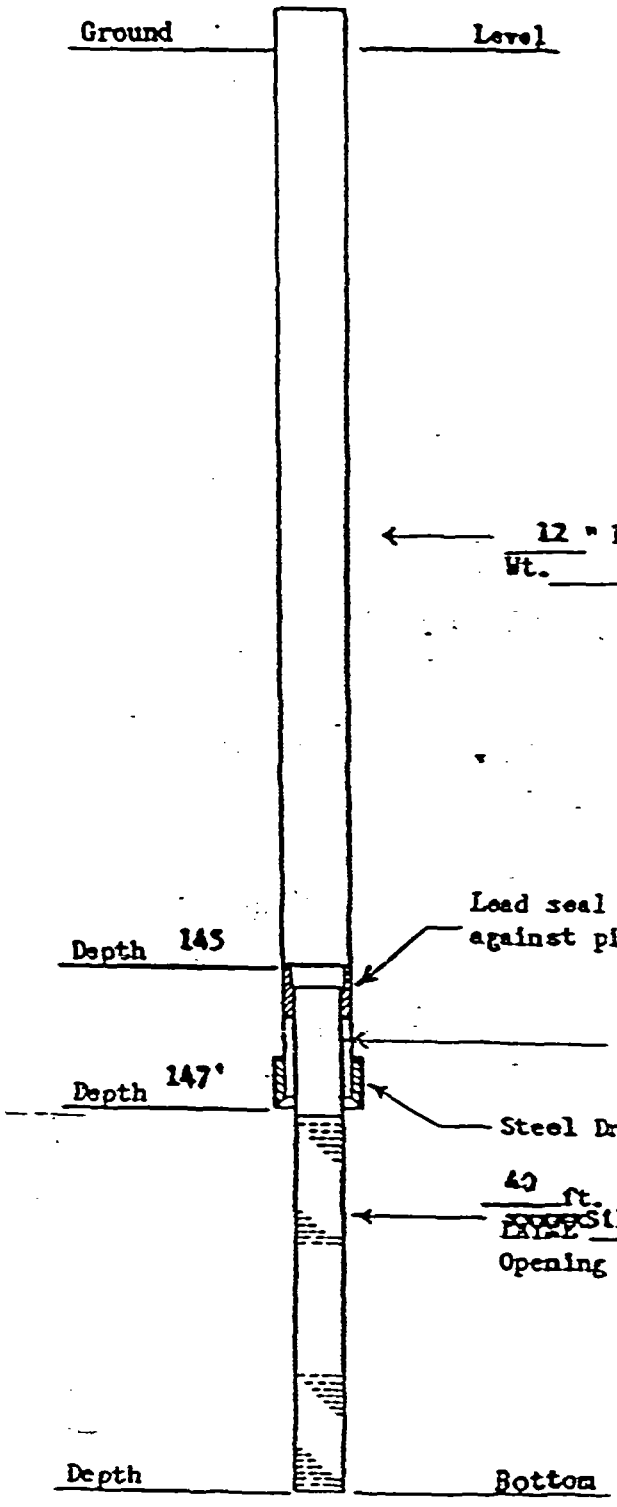
Location from Street or Road

100' W. of Yankee Rd.
800' N. of Wolf Rd.

County Wabash

Township Noble

Section



Pipe Tally	Welded ~~Threaded~~
Bottom	12'2"
	10'4"
	12'
	11' 3"
	10' 6"
	11'2"
	10'9"
	12' 4"
	12'3"
	11'6"
	11'4"
Top	11'
Total	107'5"
	147'

Static Level 44

Pumped 1529 GPM

at 53 pumping level

after 8 hours

Driller Schoon

Date Finished 10-22-65

Not drawn to scale
All depths measured from Ground Level

LAYNE TUBULAR WELL No. 2
For
IND. WATER CORP. SMITH FIELD
WABASH, IND.

LAYNE NORTHERN CO. INC.
MISHAWAKA, INDIANA

DRAWN BY
APPROVED BY
DATE

DRAWING NO.

#2

LAYNE-NORTHERN COMPANY
Incorporated
MISHAWAKA, INDIANA

WELLFIELD NO. 2

WELL NO. 2

☐ TEST
☒ PERMANENT - Smith Field

Job No. M-11523

WELL LOG No. 2 CITY Wabash County Wabash

Owner Indiana Water Corp. Township Noble

Section

Location State Indiana

From Land Description ft. East and ft. North of SW Corner of Section

From Street or Road 190' West of Yankee Rd.
800' North of Wolf Rd.

FORMATION FOUND — DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
Brown Clay	3	6	3	
Brown Clay with sand and gravel	6	15	9	
Grey clay with sand and gravel	15	71	56	
Red Clay	71	79	8	
Grey Clay with sand and gravel	79	113	34	
Grey sand and gravel	113	187	74	44

12 inch diameter hole drilled by ☒ Cable Tool ☐ Rotary ☐ Jetting

Pipe left in hole 167' - 40' Cook screen

Date Started 9-27-65 Finished 10-22-65 Schoon
DRILLER

COUNTY:
Topo Map:
TWP. 27N RGE. 6E
Sec. 1