

**FINAL
INVESTIGATION REPORT**

On The

**WAGNER SEED WAREHOUSE SITE
FARMINGDALE, NEW YORK**

Prepared for

**WAGNER SEED COMPANY, INC.
Farmingdale, New York**

Prepared by

**WEHRAN ENGINEERING, P. C.
666 East Main Street
Middletown, New York 10940**

WE Project No. 06325 EB

January 1988

TABLE OF CONTENTS

	<u>Page Number</u>
1.0 INTRODUCTION	1-1
2.0 SITE HISTORY	2-1
3.0 INITIAL RESPONSE ACTIVITIES	3-1
4.0 REMEDIAL INVESTIGATIONS	4-1
4.1 WAREHOUSE INVESTIGATION	4-2
4.2 INVESTIGATIONS AT OTHER PROPERTIES	4-3
4.2.1 Residential Yards	4-3
4.2.2 Storm Drain Catch Basins	4-5
4.3 GROUNDWATER INVESTIGATION	4-6
4.4 SUMMARY AND CONCLUSIONS	4-7

APPENDICES

- Appendix 1 - Remedial Action Summary
- Appendix 2 - Warehouse Sampling Results - May 1986
- Appendix 3 - EPA Split Sample Results - May 1986
- Appendix 4 - Warehouse Swab Sample Results - August 1986
- Appendix 5 - Off-site Sampling Results - July 1986
- Appendix 6 - Work Plan for 24 Elizabeth Street, and
29 Secatogue Avenue
- Appendix 7 - EPA Urban Soil Monitoring Data
- Appendix 8 - Memo to Charles Dolan From ATSDR
- Appendix 9 - Memo to Tom Lieber from ATSDR
- Appendix 10 - Geraghty and Miller, Inc., March 1987,
Hydrogeologic Investigation Report

1.0 INTRODUCTION

Wehran Engineering, P. C. (Wehran) has prepared this "Investigation Report" on behalf of the Wagner Seed Company, Inc. (Wagner) pursuant to Administrative Order No. II-CERCLA-60202, issued to Wagner by the United States Environmental Protection Agency, Region II (EPA). This final report incorporates comments and information received from EPA on January 7, 1988, based on EPA's review of the Draft Investigation Report (October 16, 1987).

The purpose of this report is to summarize the findings of all investigations conducted under the Administrative Order with respect to remediation of Wagner's fire-damaged warehouse and contiguous properties in Farmingdale, New York. These investigations include the tasks described in the approved general work plan prepared by Wagner (March 20, 1986), and the approved Final Site Operations Plan (SOP) prepared by Wehran (June 1986). All work conducted under these approved plans was coordinated with EPA, who provided on-scene observation and sample location approval. A separate hydrogeologic investigation report submitted previously to EPA by Geraghty & Miller, Inc. (March 1987), fulfilled the groundwater study requirements of the Administrative Order.

This report presents a brief site history, results of the various investigations, and conclusions concerning the adequacy of site remediation based on these investigation results.

2.0 SITE HISTORY

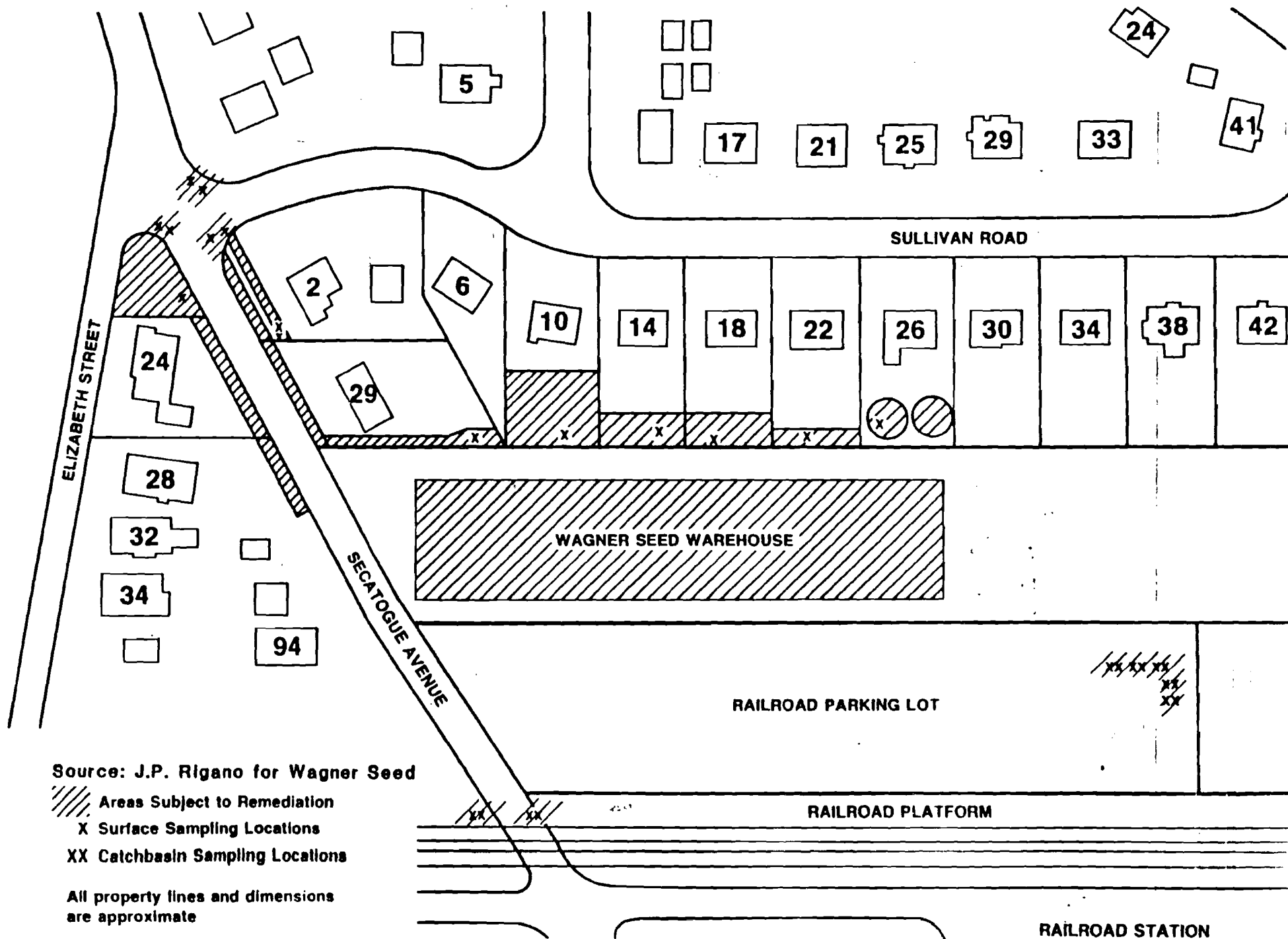
On June 1, 1985 at approximately 0300 hours, lightning struck the Wagner Seed Warehouse (Figure 1) in Farmingdale, New York, causing a fire that destroyed most of the building. The fire was extinguished by 2300 hours that day. Animal feed, grass seed, fertilizers, pesticides, and other agricultural products stored in the building were consumed in the fire. Pesticides stored in the warehouse were entrained in the water used to fight the fire which subsequently ran into neighboring properties and onto Secatogue Avenue. The warehouse property borders private residences, served by public water, and a Village of Farmingdale parking lot used by rail commuters. Initial sampling of soils in the affected residential properties by Wagner, under the direction of the Nassau County Department of Health and the New York State Department of Environmental Conservation (NYSDEC), revealed the presence of several pesticides. Wagner was required by NYSDEC to excavate soil, dead plants, and trees from six residential properties located at Numbers 2, 10, 14, 18, 22, and 26 Sullivan Street, as well as curbing along Secatogue Avenue. Wagner retained Marine Pollution Control, Inc. (MPC) of East Patchogue, New York to perform this work. Excavations were brought back to grade with clean fill, and new sod was laid by MPC to replace the turf which was removed. Additional landscaping was added where appropriate.

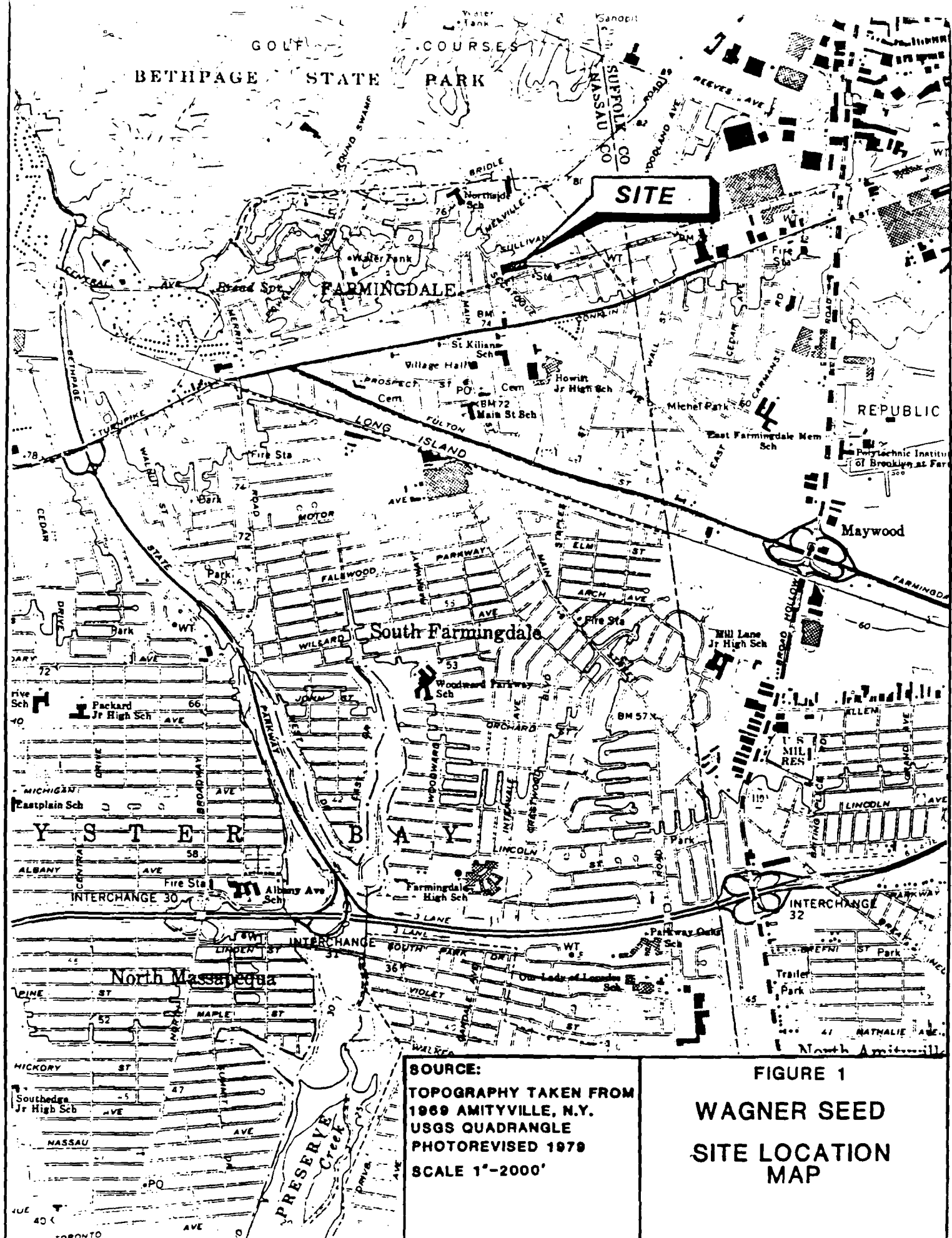
In December 1985, EPA issued Administrative Order No. II-CERCLA-60202 to Wagner to take certain immediate corrective actions, including security measures, replacement of the berm surrounding the warehouse, disposal of the stockpiled soils excavated from the neighboring yards, as well as sampling and excavation of any contaminated soils from two additional properties at 24 Elizabeth Street and 29 Secatogue Avenue, where the property owners had previously refused access to Wagner's contractor. In addition, the Administrative Order required Wagner to prepare a work plan and site operations plan for additional remedial investigations as well as removal and disposal of contaminated and uncontaminated materials from the site. The Work Plan was prepared by Wagner (March 1986) and the Site

Operations Plan (SOP) was prepared for Wagner by Wehran (June 1986). The results of the investigations performed pursuant to the Work Plan and SOP are the subject of this report as required under paragraph 30 of the Administrative Order.

At this writing, all remedial activities required by the Administrative Order have been completed. A summary report on the remedial actions performed by Wagner, pursuant to the Administrative Order, is provided in Appendix 1. Areas subject to remediation are shown in Figure 2.

All hazardous materials have been removed from the site by Chemical Waste Management, Inc. (CWM) and disposed of at an approved hazardous waste management facility. All non-hazardous demolition debris and other associated material was also removed by CWM and disposed of at an approved sanitary landfill. Soil from 24 Elizabeth Street and 29 Secatogue Avenue was also removed and disposed of as a hazardous waste. The basement of the warehouse and the surrounding parking lots were thoroughly decontaminated (Appendix 1). These remedial activities were completed under EPA supervision, with EPA personnel overseeing field activities. Following site decontamination the parking lots were inspected by EPA on August 29, 1986, and reopened by the Village of Farmingdale for parking (Appendix 1).





3.0 INITIAL RESPONSE ACTIVITIES

Following the June 1, 1985 fire at the Wagner Warehouse, a number of remedial measures (Figure 2) were undertaken by Wagner under the direction of NYSDEC, with periodic oversight by EPA. These activities included the following:

1. Removal of standing water and sediments from four stormwater catch basins (dry wells) on the adjacent parking lot.
2. Removal of standing water and sediments from stormwater catch basins (dry wells) on Secatogue Avenue just beyond the Wagner property.
3. Removal of water and sediments from an interconnected system of storm drains at the intersection of Secatogue Avenue, Sullivan Road, and Elizabeth Street; and at the intersection of Secatogue Avenue and Melville Road (south side).
4. Sampling and excavation of turf and underlying soils from six neighboring yards inundated by runoff from the fire fighting effort.
5. Removal and replacement of dead and damaged trees, bushes, a shed, and fencing from neighboring yards.
6. Restoration of the excavated yards with clean fill and new sod.
7. Stockpiling of the excavated soils and storm drain sediments on the adjacent parking lot (trees, shrubs, and other non-contaminated materials were stockpiled separately) with NYSDEC approval.
8. Sampling of stored products in the warehouse basement to facilitate disposal of fermenting grains and related product.
9. Incineration of several hundred tons of non-contaminated product at a local municipal incinerator with NYSDEC approval.
10. Construction of a berm around the damaged warehouse to control site runoff.

11. Establishment of security measures, including the hiring of security guards, to prevent unauthorized access to the Wagner property.
12. Hiring of a professional botanist to conduct a survey of the affected area for potential vegetation damage.
13. Evaluation of warehouse remediation alternatives and solicitation of proposals from qualified hazardous waste contractors.

The cleanup and construction activities were performed by Marine Pollution Control, Inc. (MPC), East Patchogue, New York. Sampling and analysis was conducted by Pedneault Associates, Inc. (Pedneault), Bohemia, New York. All activities described above were conducted by Wagner prior to the effective date of the EPA Administrative Order (No. II-CERCLA-60202).

4.0 REMEDIAL INVESTIGATIONS

As required in the EPA Administrative Order (No. II-CERCLA-60202) Wagner prepared a work plan (March 1986) to address the following:

1. Sampling of products and materials within the warehouse to determine the proper mode of disposal as either hazardous or non-hazardous waste.
2. Disposal of hazardous and non-hazardous materials.
3. Investigation of groundwater quality and hydrogeology within the vicinity of the site, including the influence of pumping wells in the area on site groundwater.
4. Re-sampling of storm drains, dry wells, and catch basins located on the Wagner property and surrounding areas.
5. Sampling of selected residential properties to determine if re-contamination, as a result of site runoff, has occurred.

In addition to the remedial investigations described above, Wagner was required to sample and remove contaminated soil from 24 Elizabeth Street and 29 Secatogue Avenue where access had been previously denied by the property owners.

All sampling, except for groundwater, was conducted by Pedneault under the supervision of Wagner's designated coordinator according to sampling protocols and QA/QC procedures specified in the SOP. EPA provided an on-scene coordinator and other observers during these investigations. Wehran Engineering served as technical advisor to Wagner and prepared the SOP with input from Pedneault (for laboratory QA/QC) and Chemical Waste Management, Inc. (for the actual remedial activities). The groundwater investigation was conducted by Geraghty and Miller, Inc., according to their approved work plan, under the direction of Wagner and EPA.

4.1 WAREHOUSE INVESTIGATION

In order to determine the appropriate disposition of the fire damaged warehouse and debris, an investigation was conducted to classify the warehouse contents as hazardous and nonhazardous waste pursuant to EPA and NYSDEC regulations. This investigation was performed to segregate as much non-contaminated material as possible to allow for a less costly disposal option for a portion of the debris. Sampling methods specified in the SOP were followed by Pedneault at locations specified by Wehran and EPA in the SOP. Dedicated, laboratory cleaned trowels were used to collect each grab sample and composite. Selected samples were split with EPA after being thoroughly mixed. All samples consisted of seed, animal feed, mud, gravel, fertilizer, other powdered material, or some combination thereof. Samples did not include paper, rocks, wood, etc., so as to maximize the probability of detecting adsorbed pesticides.

The results of the warehouse sampling (Appendix 2) allowed Wehran to make recommendations to segregate the hazardous sections of the warehouse based on: 1) priority pollutant pesticides; 2) 12 metals; 3) EP toxicity for metals; and 4) priority pollutant pesticides in the EP toxicity extracts. None of the 20 samples collected proved to be EP toxic or contain any detectable pesticides in the EP extract. The recommendations to segregate were based on the total pesticide levels in the warehouse debris (Table 4-1) and, to a lesser extent, on the total metals data (Appendix 2). EPA and Wagner agreed on a final waste segregation plan based on EPA's review of the data and inspection of the site.

The pesticides found in this investigation of the warehouse were lindane (17.9-183.8 ug/kg), heptachlor epoxide (7.6-7.8 ug/kg), dieldrin (35.1-148.1 ug/kg), endrin (15.8-497 ug/kg), alpha BHC (334.7 ug/kg), and PP-DDD (159 ug/kg). Prior to the fire, it was believed that some lindane was stored in the midsection of the ground floor of the warehouse. Sampling confirmed that lindane was detected in the midsection debris (WP-15 and WP-19), and in the back end of the basement (WP-1). Endrin was found only in the basement (WP-1, WP-4, WP-7, and WP-8). Dieldrin had also been found in two isolated locations (WP-8 and WP-14). Split samples taken by EPA showed quantifiable levels of DDT and metabolites (Appendix 3), while

Table 4-1
WAGNER SEED CO.
SUMMARY OF PESTICIDE RESIDUES IN WAREHOUSE DEBRIS - MAY 1986

Sample Identification	Pesticides Detected (mg/kg)					
	Lindane	Heptachlor-Epoxyde	Dieldrin	Endrin	Alpha-BHC	PP-DDD
WP-1	0.0984	--	--	0.497	--	--
WP-2	--	--	--	--	--	--
WP-3	--	--	--	--	--	--
WP-4	--	--	--	0.0158	--	--
WP-5	0.0179	--	--	--	--	--
WP-6	--	--	--	--	--	--
WP-7	--	--	--	0.1062	--	--
WP-8	--	--	0.1481	0.1273	--	--
WP-9	--	--	--	--	--	--
WP-10	--	--	--	--	--	--
WP-11	--	--	--	--	--	--
WP-12	--	--	--	--	--	--
WP-13	--	--	--	--	--	--
WP-14	--	0.0078	0.0351	--	--	--
WP-15	0.0783	--	--	--	--	--
WP-16	--	--	--	--	0.3347	--
WP-17	--	0.0076	--	--	--	--
WP-18	--	--	--	--	--	--
WP-19	0.1838	--	--	--	--	0.159
WP-20	--	--	--	--	--	--

Note: -- = Not detected (<0.10 mg/kg)

Original units (ug/kg) converted to mg/kg, equivalent to parts-per-million (ppm).

those split samples analyzed by Pedreault did not. No other quantifiable levels of pesticides were found by EPA. The reason for this difference in findings is unknown.

For waste classification, all debris and bagged material containing detectable levels of pesticides, plus a buffer area, were designated by EPA for disposal in an EPA/NYSDEC approved hazardous waste landfill. Materials outside of this buffer area, including building demolition debris outside the buffer zone, were approved by EPA for non-hazardous disposal in an NYSDEC approved landfill. Removal of the building and debris was performed according to the SOP under EPA supervision.

Following removal of all debris and building materials from the site, the basement was decontaminated, and the surrounding parking lots were thoroughly cleaned by CWM (Appendix 1). To determine the effectiveness of the basement decontamination, 13 representative wipe samples were collected by Pedneault on August 1, 1986 (Appendix 4) for priority pollutant pesticides and metals. No pesticides were detected on any of the swabs. Metals were at trace levels. The decontamination was determined to be complete by EPA and the site was secured with a chain link fence.

4.2 INVESTIGATIONS AT OTHER PROPERTIES

Following site remediation, and excavation and restoration of yard areas at 24 Elizabeth Street and 29 Secatogue Avenue, Wagner initiated a re-sampling of the restored yards and previously decontaminated storm drains. Sampling was performed by Pedneault on July 28, 1986 (Appendix 5).

4.2.1 Residential Yards

Representative soil samples were collected by Pedneault in those portions of the neighboring yards previously excavated and restored. All samples were taken immediately below the turf, to a depth of four inches, with steel trowels. A summary of pesticides detected (Table 4-2), indicated no evidence of recontamination as a result of runoff from the site following the restorations of those yards sampled. Noticeably absent from these soil samples was lindane, which was found in the warehouse samples. Pesticides

Table 4-2
WAGNER SEED CO.
SUMMARY OF PESTICIDES DETECTED IN RE-SAMPLING OF RESIDENTIAL
YARDS FOLLOWING SITE REMEDIATION

Sample Identification	Pesticides Detected (mg/kg)					
	Dieldrin	PP-DDE	PP-DDD	Endosulfan Sulfate	Endosulfan I	Endosulfan II
2 Sullivan Rd.	0.0142	0.0743	--	0.485	--	0.0085
10 Sullivan Rd.	0.0115	--	--	--	--	--
14 Sullivan Rd.	0.0019	--	--	--	--	--
18 Sullivan Rd.	0.0191	--	0.0618	--	--	0.0102
22 Sullivan Rd.	0.0902	--	1.178	--	0.0602	0.0387
26 Sullivan Rd.	--	--	--	--	--	--
24 Elizabeth St.	0.065	--	0.942	--	--	0.0742
29 Secatogue Ave.	0.164	--	2.442	--	0.0651	0.0742

Note: -- = Not detected (<0.10 µg/kg)

Original units (ug/kg) converted to mg/kg, equivalent to parts -per-million (ppm)

detected were dieldrin (1.9-90.2 ug/kg), DDT metabolites (61.8-2,442 ug/kg), and endosulfan compounds (8.5-485 ug/kg). In contrast, a number of pre-excavation soil samples taken March 17, 1986, at 24 Elizabeth Street and 29 Secatogue Street, contained lindane (1.5-908 ug/kg) in 8 out of 12 sampling locations with only sporadic trace occurrence of aldrin, endrin, heptachlor-epoxide, heptachlor, and DDT metabolites (PP-DDE, PP-DDD) (Appendix 6). Soil samples collected after the yards at 24 Elizabeth Street and 29 Secatogue Avenue had been excavated, backfilled, and re-sodded (Table 4-2), exhibited a similar pattern of pesticide residues found in the other restored properties in July 1986. Therefore, the pesticides shown on Table 4-2 are most likely attributable to the trace residues contained in the clean fill used to restore the yards.

The yard remediation was effective in that pesticides most likely attributable to the Wagner Warehouse fire were removed and not found in the July 28, 1986 samples. The pesticides reported on Table 4-2 are likely to be background residues of agricultural origin. Dieldrin and the metabolites of DDT are highly persistent in soils and are widely distributed in the environment, including urban soils. For example, background levels of dieldrin in the urban soils of Camden, New Jersey (22 percent positive detections) were within the range of 10-210 ug/kg in 1975. Total DDT was reported for the same time and place (100 percent positive detections) at 10-8,960 ug/kg. Certain cities in the south exhibit much higher levels (EPA Office of Pesticides and Toxic Substances, Urban Soil Monitoring Program, unpublished data: Appendix 7).

In order to evaluate the potential health threat of these pesticides (Table 4-2) in the residential yards, regardless of their origin, EPA requested an opinion from the Agency for Toxic Substances and Disease Registry (ATSDR). ATSDR is a division of the Public Health Service designated by Congress (Superfund Amendments and Reauthorization Act, 1986) to evaluate health risks at superfund sites. In their assessment of the Wagner data (Appendix 8), ATSDR concluded that the low concentrations of these chemicals (in the yards) pose no significant health risk to the public.

4.2.2 Storm Drain Catch Basins

Storm drain catch basins on Secatogue Avenue, and on the adjacent parking lot were re-sampled by Pedneault for Wagner on July 28, 1986. These catch basins had been cleaned out by MPC following the fire. Sediment and standing water were analyzed for priority pollutant pesticides and metals.

No significant metal concentrations were reported (Appendix 5). The results of the pesticide analysis (Table 4-3) indicated sporadic occurrence of trace levels of seven pesticides including lindane. These reported levels are not considered to be significant enough to warrant further remediation. In the opinion of ATSDR (Appendix 8), the area around the sewers does not pose an immediate health threat. However, ATSDR recommended further investigation into where the sewers discharge to determine if there are any health implications resulting from discharge to recreational surface waters.

To address this concern, Wehran investigated the layout of the storm drains sampled. Through conversations with MPC, who performed the initial storm drain cleanout under NYSDEC direction, it was determined that only the catch basins at the intersection of Secatogue Avenue with Elizabeth Street and Sullivan Road are connected to a positive storm drain. These correspond to Samples 3, 4, and 5 (Table 4-3). All the remaining catch basins sampled are constructed as dry wells. This positive drain system connects to a main storm sewer which travels approximately 1.5 miles through the Village of Farmingdale before discharging to surface drainage (Figure 3). Surface drainage continues for approximately 2,000 feet before discharging to a Class C(T) tributary of Massapequa Creek (6 NYCRR 885.6). Class C(T) waters in New York are designated for fishing (including trout), fish propagation and primary and secondary contact recreation. In all, stormwater from the catch basins near the site must travel close to two miles to a recreational water, while being diluted by stormwater entering the system throughout the Village. Most of the trace pesticides in Samples 3, 4, and 5 (Table 4-3) are bound to the sediments which remain in the catch basins. Traces of lindane (1.3 ug/l) and heptachlor epoxide (1.5 ug/l) were found in the water from catch basin Sample 5. These levels represent a

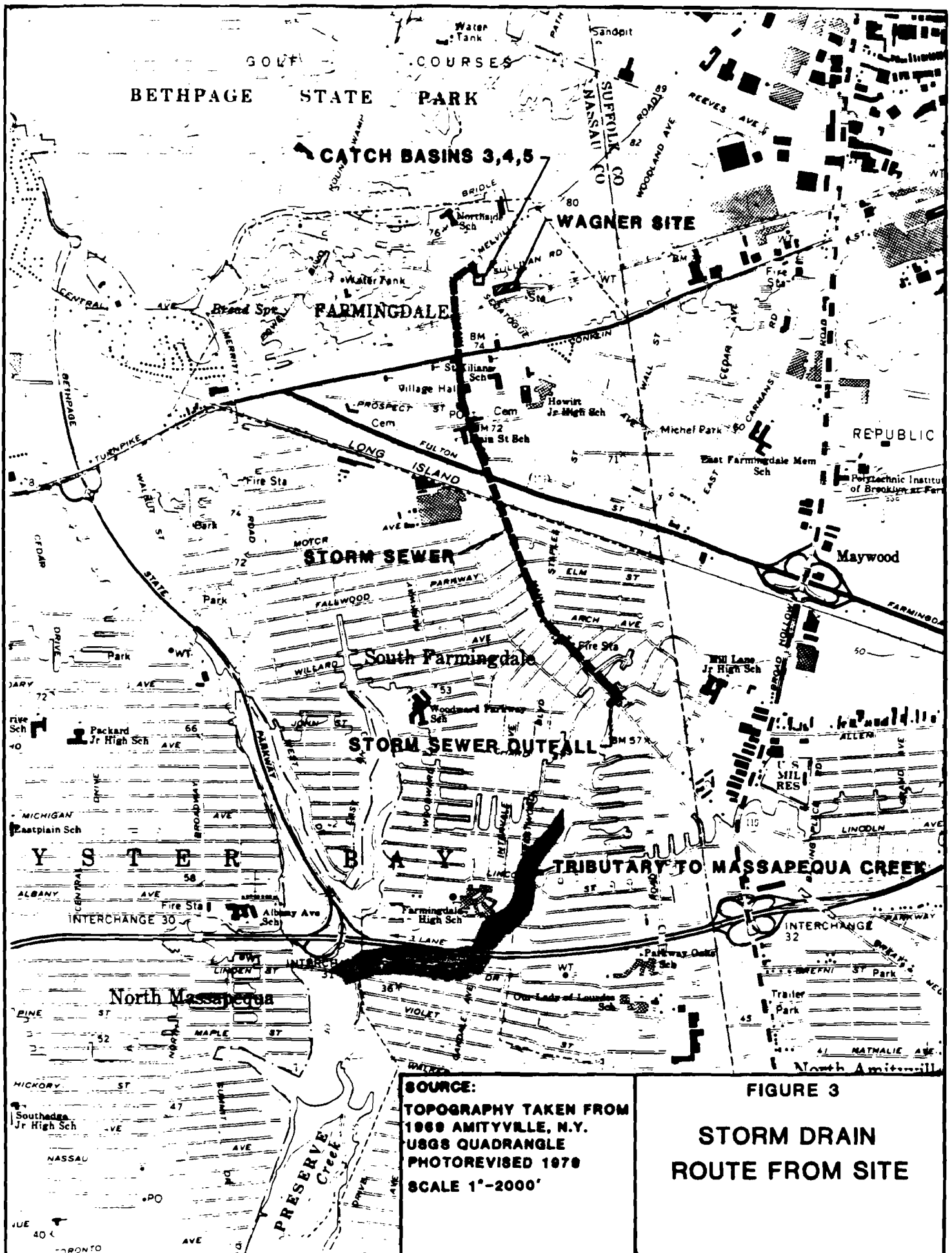
Table 4-3
WAGNER SEED CO.
SUMMARY OF PESTICIDES DETECTED IN STORM DRAIN CATCH BASIN SEDIMENTS AND WATER – JULY 1986

Sample Identification	Pesticides Detected in Sediments (mg/kg)							Pesticides Detected in Water (mg/l)						
	Lindane	Heptachlor	Heptachlor-Epoxyde	Aldrin	Dieldrin	Endrin	Beta BHC	Lindane	Heptachlor	Heptachlor-Epoxyde	Aldrin	Dieldrin	Endrin	Beta BHC
No 1 Secatogue	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No 2 Secatogue	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No 3 Secatogue	--	--	--	0.117	--	0.0429	--	--	--	--	--	--	--	--
No 4 Secatogue	--	--	0.0388	--	--	--	--	--	--	--	--	--	--	--
No 5 Secatogue	--	--	--	--	--	--	0.119	0.0013	--	0.0015	--	--	--	--
No. 14 LIRR Lot	--	--	0.0146	--	--	--	--	NS	NS	NS	NS	NS	NS	NS
No. 15 LIRR Lot	--	--	--	--	0.0037	--	--	NS	NS	NS	NS	NS	NS	NS
No. 16 LIRR Lot	0.130	--	--	--	--	--	--	0.0013	--	--	--	--	--	--
No. 17 LIRR Lot	--	0.0212	0.0496	--	--	--	--	0.0012	--	--	--	--	--	--
No. 18 LIRR Lot	NS	NS	NS	NS	NS	NS	NS	--	--	--	--	--	--	--

Notes:

-- = Not detected (<0.0005 mg/kg). Original units (ug/kg) converted to mg/kg, equivalent to parts per million (ppm).

NS = Not sampled



negligable input to the overall storm drain system. The dilution afforded by this system should reduce these barely detectable concentrations by orders of magnitude. Therefore, no further sampling or remediation of the storm drain system is warranted. ATSDR agrees with this conclusion (Appendix 9).

4.3 GROUNDWATER INVESTIGATIONS

During August 1986, Geraghty and Miller, Inc., initiated a groundwater investigation for Wagner. The objectives of the investigation were as follows:

- . Determine the extent of groundwater contamination (if any) at the site that would be attributable to the Wagner Warehouse.
- . Determine the influence of supply well pumpage on the shallow groundwater under the Wagner site.
- . Determine the local vertical component of groundwater flow at the Wagner site.

The methodology and results of the investigation have been presented in Geraghty and Miller's Hydrogeologic Investigation Report (March 1987), submitted previously to EPA. Geraghty and Miller concluded that:

1. Contamination attributable to Wagner Seed was not found in the shallow groundwater under the site.
2. Public water supply pumpage does not influence movement of shallow groundwater under the site.
3. There does not appear to be a significant component of vertical groundwater flow at the site.

The complete text of the Geraghty and Miller report is provided in Appendix 10.

4.4 SUMMARY AND CONCLUSIONS

Remedial actions conducted at the Wagner warehouse and adjacent areas off-site effectively removed the pesticide contaminants from the area, as evidenced from the post-remediation sampling. The release of pesticides resulting from the June 1, 1985 fire at the Wagner warehouse did not contaminate the shallow groundwater beneath the site, based on two rounds of groundwater data from six monitoring wells. An evaluation of the pesticide residues detected in the post-remediation sampling of residential yards and storm drain catch basins was conducted by ATSDR at EPA's request. ATSDR concluded that the existing levels of pesticides in these off-site areas do not pose an immediate or significant health risk.

Based on the available data, the site has been properly decontaminated and off-site remediation has been adequate.

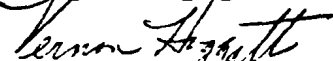
APPENDIX 1
REMEDIAL ACTION SUMMARY

January 15, 1987

Attn: C. Dolan
Emergency & Remedial Response Division
EPA Region II, Room 737
26 Federal Plaza
New York, NY 10278

In response to your request for a detail report as to how the
SOP on debris removal was carried out at the Wagner Seed Co.
site, the attached is submitted.

Very truly yours,


VERNON HOGGATT

VH/mlk

January 15, 1987

Summary report of 1986 Remedial Action at Wagner Seed Warehouse,
Farmingdale, NY 11735

Administrative Order: Cercla 60202

MARCH 3-17, 1986

Removed 70 truckloads of soil to CWM's Emelle, Alabama Secure Landfill. This material was excavated from yards North of Wagner site and stored on LIRR Parking Lot, covered with plastic and bermed.

WEEK OF MAY 26, 1986

Chemical Waste Management (CWM) mobilized - To resume soil removal. Shipped 20 truckloads of soil to CWM's Model City, NY Secure Landfill - comprised of soil removed from back yards, stored on NE part of site.

WEEK OF JUNE 2, 1986

Preparation for removal of warehouse and warehouse debris (Phase II). Placed poly sheets on stockade fence along Northern property line to eliminate possible dust penetration. Constructed Decon Pad. Air samples taken for background monitoring. Prepared for Monday trucks.

WEEK OF JUNE 9, 1986

Phase II meeting attended by Representatives of EPA, Wagner, CWM, Wehren and Rivkin, Radler, Dunne & Bayh Re: Details of SOP execution.

Buffer areas of warehouse marked with orange paint to be handled as hazardous. Plastic covers placed on adjoining non-hazardous areas to avoid cross contamination.

Started Phase II removal, level "C" protection on site.

Removed 23 loads hazardous debris to Model City, NY, Secure Landfill starting at South end of "T" area slab, including materials pulled from buffer areas. Cut up trucks and mixers for shipment as hazardous. Removed pile #8 bagged material as hazardous. Dismantled and shipped concrete Decon Pad as hazardous, since metal is to be shipped as hazardous rather than be decontaminated.

WEEK OF JUNE 16, 1986

Continued hazardous removal from "T" area - NE Section. Shipped 23 loads to Model City this week. Deconned equipment for non-hazardous removal next week.

WEEK OF JUNE 23, 1986

Shipped 4 loads non-hazardous debris - wood chips, tree trunks etc. to Monroe/Livingston Waste Management Sanitary Landfill. This was off-site material stored at East end of site.

Scraped debris off main floor to ground level. Started demolition of West building, removed non-hazardous pile 9A & 9B from basement. 20 loads non-hazardous building debris shipped to Monroe/Livingston Landfill.

Landscaping and plantings at 29 Secatogue and 24 Elizabeth have been completed.

WEEK OF JUNE 30, 1986

Non-hazardous debris removal continued. Removed boiler and empty tank from small West basement, broke thru cement floor, then filled with 2 loads clean fill. Slow removal of top pallet of bagged material continued with pile #6B. Began demolition of East structure. 14 loads non-hazardous went to Monroe/Livingston (Waste Management) Sanitary Landfill.

WEEK OF JULY 7, 1986

Rains over weekend modified basement operation. Removed wood main floor, then hoisted out non-hazardous bags by track hoe, leaving floor debris and bottom bags for last removal as hazardous with piles 1A, 1B, 1C.

CWM Technical Services on site to sample and store in drums some packaged liquid chemicals found in basement. Drums will be stored in locked container to await test results. Will pursue alternate methods of disposal.

C. Dolan visited site 7/11/86.

Cut structural steel beams into 16 foot lengths to be treated as non-hazardous. Supporting columns were handled as hazardous.

Wood pallets stored in East rear yard were crushed and shipped as non-hazardous.

Nineteen (19) loads non-hazardous moved this week to Monroe/Livingston.

WEEK OF JULY 14, 1986

Removal of non-hazardous East building debris and basement grains continued. Fifteen (15) loads shipped, nearly finished with non-hazardous removal.

Tony Candela visited site 7/16/86.

Hoisted hazardous material from basement. Six (6) loads shipped. Completed installation of chain link fence around site. Installed gate at bottom of ramp for safety. All gates (4) are chained and padlocked.

WEEK OF JULY 21, 1986

Last 6 loads hazardous and last 2 loads non-hazardous shipped.

Concrete added to basement floor to expedite Penetone wash.

Pedneault began sampling of areas tested previously - to check recontamination possibility.

Areas between curb and sidewalk raised and resod at 29 Secatogue and #2 Sullivan. Crosswalk installed at #2 Sullivan.

WEEK OF JULY 28, 1986

Continued power sweeping of parking lot and concrete slabs.

Penetone washing performed twice on basement walls and floor. Waste liquids vacuumed into CWM tanker for disposal. Balance of site given one (1) wash, including five (5) feet into parking lot.

Burned off protruding rods from concrete foundation for safety. Erected snow fence around 3 open sides of basement. CWM equipment and personnel being demobilized and removed from site.

Pedneault second round of sampling completed. Geraghty & Miller have been engaged to provide necessary wells and monitoring of ground water.

Routine activities throughout operation included:

1. continual sweep and clean-ups
2. security gate closed nightly
3. deconned equipment when moved from hazardous to non-hazardous areas
4. sprayed water when dusty
5. rodent control performed weekly

AUGUST 1986

Balance of CWM equipment (except tank truck) was removed.

Pedneault swab sampled basement floor and walls, also ground level concrete slabs. Pedneault also sampled adjacent yards, and catch basins.

Geraghty & Miller groundwater operation plan submitted and approved. Drilling of wells, sampling and monitoring performed accordingly. Test results will follow.

Limestone applied to low spots on site to control algae.

Discussed reopening of parking lot with C. Dolan and Village Clerk John Luck in early September.

SEPTEMBER 1986

Parking lot reopened.

CWM repacked liquid waste pails and shipped to Trade Waste Incineration, 7 Mobile Avenue, Sauget, IL. Copies of manifest mailed to

NY State DEC and Illinois EPA.

Storage container removed by Cassone Leasing.

OCTOBER 1986

Pedneault resampled as required. Swab sample test results mailed to C. Dolan. Geraghty & Miller monitoring and testing proceeding as planned.

NOVEMBER 1986

CWM tanker of waste water removed by SCA to SCA Chemical Service, Newark, NJ. Manifest mailed to NJ Dept. of Environmental Protection, Trenton, NJ.

DECEMBER 1986

Geraghty & Miller resampled ground water wells as planned. Results expected next month.


VERNON HOGGATT
Site Coordinator

VH/mlk

WAGNER SEED COMPANY

1986 TRUCKING LOG SUMMARY-

DATE	FACILITY of CHEMICAL WASTE MGMT.	NUMBER & TYPE LOADS		
March 3-17	Emelle, Alabama Secure Landfill	70	Off-site Hazardous Soil	
Week May 26	Model City, NY Secure Landfill	20	Off-site Hazardous Soil	
Week June 9	Model City, NY Secure Landfill	23	On-site Hazardous Debris	
Week June 16	Model City, NY Secure Landfill	23	On-site Hazardous Debris	
Week June 23	Monroe/Livingston, NY Sanitary Landfill	4	Off-site Non-Hazardous Wood Chips	
Week June 23	Monroe/Livingston, NY Sanitary Landfill	20	On-site Non-Hazardous Debris	
Week June 30	Monroe/Livingston, NY Sanitary Landfill	14	On-site Non-Hazardous Debris	
Week July 7	Monroe/Livingston, NY Sanitary Landfill	19	On-site Non-Hazardous Debris	
Week July 14	Monroe/Livingston, NY Sanitary Landfill	15	On-site Non-Hazardous Debris	
Week July 14	Model City, NY Secure Landfill	6	On-site Hazardous Debris	
Week July 21	Model City, NY Secure Landfill	6	On-site Hazardous Debris	
Week July 21	Monroe/Livingston, NY Secure Landfill	2	On-site Non-Hazardous Debris	
TOTAL		222		
			<u>Off-site</u>	<u>On-site</u>
Hazardous to Emelle, Alabama		70	70	---
Hazardous to Model City, NY		78	20	58
Non-Hazardous to Monroe/Livingston, NY		74	4	70
		222	94	128
			222	

1/9/87

Vernon Hoggatt
VERNON HOGGATT

VH/mlk

January 22, 1988

Mr. Raymond M. Kapp
Wehran Engineering
666 East Main Street
Middletown, NY 10940

Re: LIRR Parking Lot, Farmingdale

A review of our records indicate that Chemical Waste Management completed power sweeping the parking lot on July 25, 1986.

On August 29th Mr. C. Dolan visited the site and the Farmingdale Village Hall with the writer, - in reference to return of parking lot to Village use. Mr. John Luck, Village Clerk, proposed that the lot would be striped the following week, to be ready for the September 8th re-opening.

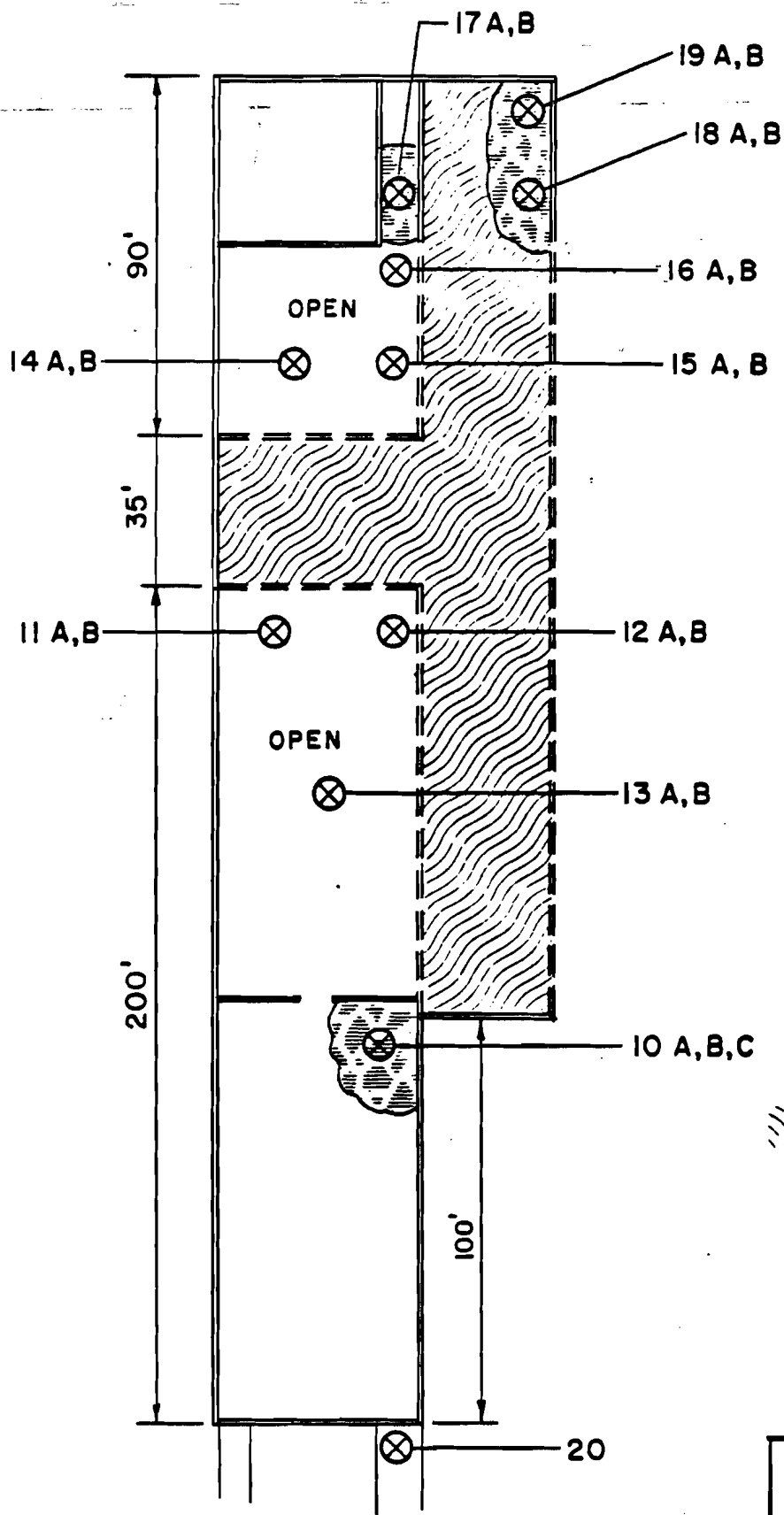
Mr. Dolan's verbal release of the lot was not confirmed in writing.

Sincerely,


VERNON HOGGATT
Site Coordinator
Wagner Seed Co.

VH:mlk

APPENDIX 2
WAREHOUSE SAMPLING RESULTS
MAY 1986



LEGEND

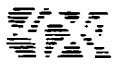
-  HAZARDOUS SECTION
-  SEED AND OTHER BAGGED MATERIAL

FIGURE 1
MAIN FLOOR
SAMPLING LOCATIONS

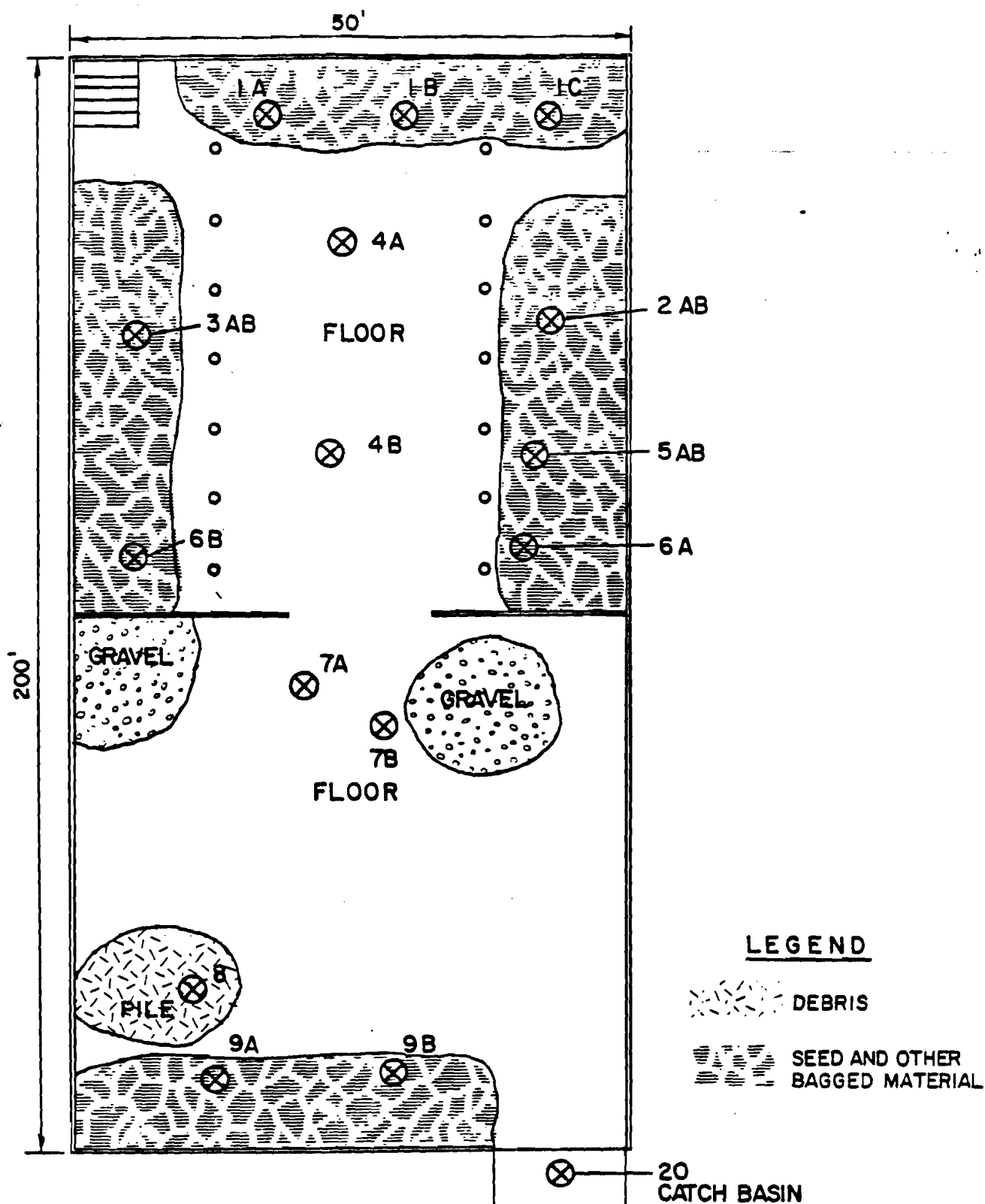


FIGURE 2
BASEMENT
SAMPLING LOCATIONS



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 867-8679

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-5/20/86 ... Report ... 5/20/86 ...

Sampling Point

1. ... Wagner's Warehouse Point 1 ... (Debris)
2. ... Wagner's Warehouse Point 2 ... (Debris)
3. ... Wagner's Warehouse Point 3 ... (Debris)
4. ... Wagner's Warehouse Point 4 ... (Debris)
5. ... Wagner's Warehouse Point 5 ... (Debris)

Parameters		1	2	3	4	5
α BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
β BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Lindane	ug/kg	98.4	< 0.05	< 0.05	< 0.05	17.9
Heptachlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PP/DDE	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PP DDD	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	ug/kg	497	< 0.05	< 0.05	15.8	< 0.05
Endosulfan I	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
OP DDT	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan Sulfate	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-5/20/86 ... Report ... 5/20/86 ...

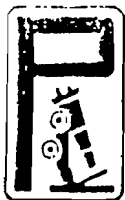
Sampling Point

1. ... Wagner's Warehouse Point . 6 ... (Debris)
2. ... Wagner's Warehouse Point . 7 ... (Debris)
3. ... Wagner's Warehouse Point . 8 ... (Debris)
4. ... Wagner's Warehouse Point . 9 ... (Debris)
5. ... Wagner's Warehouse Point . 10 ... (Debris)

Parameters		1	2	3	4	5
α BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
β BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Lindane	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PP/DDE	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	ug/kg	< 0.05	< 0.05	148.1	< 0.05	< 0.05
PP DDD	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	ug/kg	< 0.05	106.2	127.3	< 0.05	< 0.05
Endosulfan I	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
OP DDT	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan Sulfate	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Lab Number 35365

JOHN PEDNEAULT
Lab Director



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 487-8477
AFTER 6 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-5/20/86 ... Report ... 5/20/86 ...

Sampling Point

1. ... Wagner's Warehouse Point 11 ... (Debris)
2. ... Wagner's Warehouse Point 12 ... (Debris)
3. ... Wagner's Warehouse Point 13 ... (Debris)
4. ... Wagner's Warehouse Point 14 ... (Debris)
5. ... Wagner's Warehouse Point 15 ... (Debris)

Parameters		1	2	3	4	5
α BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
β BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Lindane	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	78.3
Heptachlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	ug/kg	< 0.05	< 0.05	< 0.05	(7.8)	< 0.05
PP/DDE	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	ug/kg	< 0.05	< 0.05	< 0.05	(35.1)	< 0.05
PP DDD	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
OP DDT	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan Sulfate	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-5/20/86 ... Report ... 5/20/86 ...

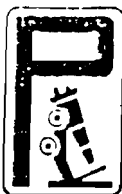
Sampling Point

1. ... Wagner's Warehouse Point 16 (Debris)
2. ... Wagner's Warehouse Point 17 (Debris)
3. ... Wagner's Warehouse Point 18 (Debris)
4. ... Wagner's Warehouse Point 19 (Debris)
5. ... Wagner's Warehouse Point 20 (Debris)

Parameters		1	2	3	4	5
α BHC	ug/kg	334.7	< 0.05	< 0.05	< 0.05	< 0.05
β BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Lindane	ug/kg	< 0.05	< 0.05	< 0.05	183.8	< 0.05
Heptachlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	ug/kg	< 0.05	7.6	< 0.05	< 0.05	< 0.05
PP/DDE	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PP DDD	ug/kg	< 0.05	< 0.05	< 0.05	159.0	< 0.05
Endrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
OP DDT	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan Sulfate	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Lab Number 35365

JOHN PEDNEAULT
Lab Director



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 667-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed ... 5/7-20/86 Report 5/20/86

Sampling Point

1. Wagner's Warehouse Point . . . 1 (Debris) - EP Toxicity
2. Wagner's Warehouse Point . . . 2 (Debris) - EP Toxicity
3. Wagner's Warehouse Point . . . 3 (Debris) - EP Toxicity
4. Wagner's Warehouse Point . . . 4 (Debris) - EP Toxicity
5. Wagner's Warehouse Point . . . 5 (Debris) - EP Toxicity

Parameters

1

2

3

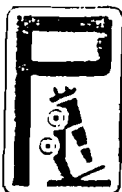
4

5

α BHC	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
β BHC	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Aldrin	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP/DDE	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dieldrin	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP DDD	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
OP DDT	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	mq/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 487-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Fank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed ... 5/7-20/86 Report 5/20/86

Sampling Point

1. Wagner's Warehouse Point .. 6 (Debris) - EP Toxicity
2. Wagner's Warehouse Point .. 7 (Debris) - EP Toxicity
3. Wagner's Warehouse Point .. 8 (Debris) - EP Toxicity
4. Wagner's Warehouse Point .. 9 (Debris) - EP Toxicity
5. Wagner's Warehouse Point .. 10 (Debris) - EP Toxicity

Parameters		1	2	3	4	5
α BHC	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
β BHC	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Aldrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP/DDE	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dieldrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP DDD	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
OP DDT	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed ... 5/7-20/86 Report 5/20/86

Sampling Point

1. Wagner's Warehouse Point 11 (Debris) - EP Toxicity
2. Wagner's Warehouse Point 12 (Debris) - EP Toxicity
3. Wagner's Warehouse Point 13 (Debris) - EP Toxicity
4. Wagner's Warehouse Point 14 (Debris) - EP Toxicity
5. Wagner's Warehouse Point 15 (Debris) - EP Toxicity

Parameters

1

2

3

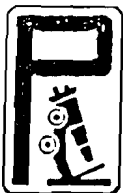
4

5

α BHC	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
β BHC	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Aldrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP/DDE	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dieldrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP DDD	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
OP DDT	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed ... 5/7-20/86 Report 5/20/86

Sampling Point

1. Wagner's Warehouse Point 16 (Debris) - EP Toxicity
2. Wagner's Warehouse Point 17 (Debris) - EP Toxicity
3. Wagner's Warehouse Point 18 (Debris) - EP Toxicity
4. Wagner's Warehouse Point 19 (Debris) - EP Toxicity
5. Wagner's Warehouse Point 20 (Debris) - EP Toxicity

Parameters		1	2	3	4	5
α BHC	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
β BHC	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Lindane	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Aldrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP/DDE	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dieldrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
PP DDD	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
OP DDT	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan II	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 867-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed .. 5/7-5/20/86 Report .. 5/20/86

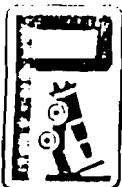
Sampling Point

1. Wagner's Warehouse Point 1 (Debris)
2. Wagner's Warehouse Point 2 (Debris)
3. Wagner's Warehouse Point 3 (Debris)
4. Wagner's Warehouse Point 4 (Debris)
5. Wagner's Warehouse Point 5 (Debris)

Parameters		1	2	3	4	5
Arsenic	mg/kg	0.91	0.52	0.45	0.62	0.77
Barium	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cadmium	mg/kg	0.08	0.06	0.08	0.08	0.06
Chromium	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	mg/kg	4.71	0.23	1.02	2.22	0.13
Selenium	mg/kg	0.54	0.27	0.42	0.57	0.59
Silver	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Iron	mg/kg	70.0	92.0	128.0	372.0	178.0
Manganese	mg/kg	13.0	17.0	18.0	97.0	28.0
Zinc	mg/kg	35.0	36.0	61.0	85.0	59.0
Nickel	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	mg/kg	22.0	7.0	9.0	26.0	12.0

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 887-5575

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed .. 5/7-5/20/86 Report .. 5/20/86

Sampling Point

1. Wagner's Warehouse Point 6 (Debris)
2. Wagner's Warehouse Point 7 (Debris)
3. Wagner's Warehouse Point 8 (Debris)
4. Wagner's Warehouse Point 9 (Debris)
5. Wagner's Warehouse Point 10 (Debris)

Parameters		1	2	3	4	5
Arsenic	mg/kg	0.58	0.27	0.56	1.03	1.20
Barium	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium	mg/kg	0.08	0.04	0.06	0.04	0.06
Chromium	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Lead	mg/kg	0.27	5.40	0.51	0.23	1.39
Selenium	mg/kg	0.42	0.94	0.49	0.30	0.51
Silver	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Iron	mg/kg	158.0	1720.0	92.0	54.0	300.0
Manganese	mg/kg	245.0	118.0	13.0	28.0	42.0
Zinc	mg/kg	29.0	138.0	16.0	40.0	15.0
Nickel	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/kg	14.0	24.0	7.0	9.0	9.0

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 5/7/86 Analyzed .. 5/7-5/20/86 Report .. 5/20/86

Sampling Point

1. Wagner's Warehouse Point .. 11 .. (Debris)
2. Wagner's Warehouse Point .. 12 .. (Debris)
3. Wagner's Warehouse Point .. 13 .. (Debris)
4. Wagner's Warehouse Point .. 14 .. (Debris)
5. Wagner's Warehouse Point .. 15 .. (Debris)

Parameters		1	2	3	4	5
Arsenic	mg/kg	6.70	5.90	0.44	13.16	7.50
Barium	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cadmium	mg/kg	0.04	0.35	0.03	1.61	1.90
Chromium	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	mg/kg	0.82	0.34	0.55	0.28	0.23
Selenium	mg/kg	0.58	0.33	0.80	0.98	2.23
Silver	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Iron	mg/kg	258.0	420.0	152.0	2800.0	262.0
Manganese	mg/kg	56.0	36.0	17.0	217.0	74.0
Zinc	mg/kg	31.0	285.0	34.0	976.0	88.0
Nickel	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	mg/kg	14.0	84.0	10.0	234.0	227.0

Lab Number 35365

JOHN PEDNEAULT
Lab Director



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 867-6579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected . . . 5/7/86 Analyzed . . 5/7-5/20/86 Report . . 5/20/86

Sampling Point

1. Wagner's Warehouse Point . 16 . . (Debris)
2. Wagner's Warehouse Point . 17 . . (Debris)
3. Wagner's Warehouse Point . 18 . . (Debris)
4. Wagner's Warehouse Point . 19 . . (Debris)
5. Wagner's Warehouse Point . 20 . . (Debris)

Parameters		1	2	3	4	5
Arsenic	mg/kg	5.60	0.88	0.12	1.10	0.35
Barium	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cadmium	mg/kg	2.20	0.03	0.26	0.16	0.23
Chromium	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	mg/kg	0.47	0.13	0.11	0.08	0.18
Selenium	mg/kg	1.12	1.68	1.51	1.92	2.09
Silver	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Iron	mg/kg	820.0	144.0	252.0	22.0	2.42
Manganese	mg/kg	39.0	39.0	70.0	21.0	39.0
Zinc	mg/kg	32.0	45.0	28.0	6.0	11.0
Nickel	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	mg/kg	86.0	17.0	17.0	7.0	22.0

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne and Bayh
EAB Plaza
Uniondale, New York 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-20/86 ... Report ... 5/20/86 ...

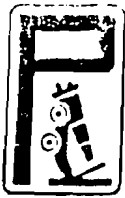
Sampling Point

1. Wagner Warehouse - Point 1 (Debris) - EP Toxicity
2. Wagner Warehouse - Point 2 (Debris) - EP Toxicity
3. Wagner Warehouse - Point 3 (Debris) - EP Toxicity
4. Wagner Warehouse - Point 4 (Debris) - EP Toxicity
5. Wagner Warehouse - Point 5 (Debris) - EP Toxicity

Parameters		1	2	3	4	5
Arsenic	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Barium	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chromium	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Mercury	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Silver	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02

Lab Number 35365

JOHN PEDNEAULT
Lab Director



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P O BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne and Bayh
EAB Plaza
Uniondale, New York 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-20/86 ... Report ... 5/20/86 ...

Sampling Point

1. . . Wagner Warehouse . . . Point. 6 . (Debris) . . . EP Toxicity
2. . . Wagner Warehouse . . . Point. 7 . (Debris) . . . EP Toxicity
3. . . Wagner Warehouse . . . Point. 8 . (Debris) . . . EP Toxicity
4. . . Wagner Warehouse . . . Point. 9 . (Debris) . . . EP Toxicity
5. . . Wagner Warehouse . . . Point. 10 . (Debris) . . . EP Toxicity

Parameters		1	2	3	4	5
Arsenic	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Barium	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chromium	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Mercury	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Silver	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne and Bayh
EAB Plaza
Uniondale, New York 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-20/86 ... Report ... 5/20/86 ...

Sampling Point

1. . Wagner Warehouse .- Point .11. (Debris) .- EP Toxicity
2. . Wagner Warehouse .- Point .12. (Debris) .- EP Toxicity
3. . Wagner Warehouse .- Point .13. (Debris) .- EP Toxicity
4. . Wagner Warehouse .- Point .14. (Debris) .- EP Toxicity
5. . Wagner Warehouse .- Point .15. (Debris) .- EP Toxicity

Parameters		1	2	3	4	5
Arsenic	mg/l	0.011	0.012	<0.01	0.012	0.021
Barium	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.005
Chromium	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Lead	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium	mg/l	<0.01	<0.01	<0.01	0.016	0.012
Silver	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02

JOHN PEDNEAULT
Lab Director

Lab Number 35365



PEDNEAL ILT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P O BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-6579

May 20, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne and Bayh
EAB Plaza
Uniondale, New York 11556-0111

Date: Collected ... 5/7/86 ... Analyzed ... 5/7-20/86 ... Report ... 5/20/86 ...

Sampling Point

1. Wagner Warehouse - Point 16 (Debris) - EP Toxicity
2. Wagner Warehouse - Point 17 (Debris) - EP Toxicity
3. Wagner Warehouse - Point 18 (Debris) - EP Toxicity
4. Wagner Warehouse - Point 19 (Debris) - EP Toxicity
5. Wagner Warehouse - Point 20 (Debris) - EP Toxicity

Parameters		1	2	3	4	5
Arsenic	mg/l	0.027	< 0.01	< 0.01	< 0.01	< 0.01
Barium	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cadmium	mg/l	0.008	0.004	< 0.001	< 0.001	< 0.001
Chromium	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Mercury	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Selenium	mg/l	< 0.01	0.026	< 0.01	< 0.01	< 0.01
Silver	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02

JOHN PEDNEAULT
Lab Director

Lab Number 35365

APPENDIX 3
EPA SPLIT SAMPLE RESULTS
MAY 1986

Att: J. Riggins ①



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

26 FEDERAL PLAZA

NEW YORK, NEW YORK 10278

Certified Mail
Return Receipt Requested

SEP 18 1986

Vernon Hoggatt
Wagner Seed Co.
P.O. Box 479
Farmingdale, N.Y. 11735

Dear Mr. Hoggatt:

I have enclosed a copy of the EPA split sampling results from the Wagner Seed warehouse conducted on May 7, 1986. These results should be compared to the samples obtained by Wagner and summarized in a letter report.

If you have any questions regarding this matter, please phone me at 212-264-7662.

Sincerely yours,

Charles Dolan

Charles Dolan
Environmental Engineer
Site Investigation & Compliance Branch

REPORT DATE: 04/08/97

COMPLETED ANALYSIS REPORT

PROJECT NO: 749

PROJECT NAME: WARDEN CREEK

EXPLANATIONS OF REMARK CODES

REMARK CODE EXPLANATION

B RESULTS BASED UPON COLONY COUNTS OUTSIDE ACCEPTABLE RANGE
 J ESTIMATED VALUE
 K ACTUAL VALUE KNOWN TO BE LESS THAN VALUE GIVEN
 L ACTUAL VALUE KNOWN TO BE GREATER THAN VALUE GIVEN
 M PRESENCE OF MATERIAL VERIFIED BUT NOT QUANTIFIED
 O SAMPLED BUT NOT ANALYZED DUE TO LAB ACCIDENT
 T REPORTED VALUE LESS THAN CRITERIA OF DETECTION
 U MATERIAL ANALYZED FOR, BUT NOT DETECTED

LOCATION CODES FOR IDENTIFICATION OF SAMPLING POINTS AT INDUSTRIAL /
 MILITARY FACILITIES, LANDFILLS, HAZARDOUS WASTE SITES.

CODE NUMBERS SAMPLING POINTS

1001 - 1009 EFFLUENT PIPE NUMBER 001 TO 009
 1001 - 1099 OTHER EFFLUENTS SUCH AS COOLING TOWER DISCHARGE,
 DISCHARGE FROM HOLDING PONDS, ETC...
 1100 - 1299 IN PLANT SAMPLES - DURING PROCESS
 1200 - 1274 IN PLANT SAMPLES AFTER PROCESS AND BEFORE
 TREATMENT OR DISCHARGE
 1275 - 1424 IN PLANT SAMPLES - DURING TREATMENT
 1435 - 1454 SEPARATE INFLUENT POINTS/WATER SOURCES
 1501 INFLUENT ASSOCIATED WITH EFFLUENT 1001
 2000 BLANK FOR VOLATILE ORGANICS
 2101 AUTO SAMPLER BLANK AT SAMPLE POSITION 1001
 3000 - 3099 GROUND WATER FROM WELL 01 TO 99
 3100 - 3199 SEDIMENT SAMPLE (WATER BOTTOM)
 3200 - 3299 SOIL SAMPLE
 3300 - 3399 STREAM WATER SAMPLE
 3400 - 3499 LAGOON SAMPLE
 3500 - 3599 STORAGE TANK SAMPLE
 3600 - 3699 LEACHATE SAMPLE
 3700 - 3799 OTHER TYPE SAMPLE

(Signature)

COMPLETED ANALYSIS REPORT

REPORT DATE: 04/08/97

PROJECT NO: 760

PROJECT NAME: WARNER SEED

STATION NO
DATE FROM TO
TIME

LABNO PARAM PARAMETER NAME UNITS CHEMISTRY VALUE & REMARK

WARNER SEED 04/08/97 1305
 LOCATION CODE: 3700 SUBSTRATE: SEED
 DESCRIPTION: LOC 0 1 SEED FROM BASINENT

087301	37353	ALDRIN	S	UO/KG	SEDIMENT	0.9	K
	37353	DIELDRIN	S	UO/KG	SEDIMENT	2.1	K
	37351	CHLORDANE	S	UO/KG	SEDIMENT	18	K
	37301	4,4'-DDT	S	UO/KG	SEDIMENT	267	
	37321	4,4'-DDE	S	UO/KG	SEDIMENT	37	
	37311	4,4'-DDD	S	UO/KG	SEDIMENT	244	
	34354	ALPHA ENDO SULFAN	S	UO/KG	SEDIMENT	1.6	K
	34359	BETA ENDO SULFAN	S	UO/KG	SEDIMENT	2.7	K
	34354	ENDO SULFAN SULFATE	S	UO/KG	SEDIMENT	0.6	K
	37073	ENDRIN	S	UO/KG	SEDIMENT	4.2	K
	34369	ENDRIN ALDRINYLDE	S	UO/KG	SEDIMENT	4.0	K
	37413	HEPTACHLOR	S	UO/KG	SEDIMENT	0.8	K
	37423	HEPTACHLOR EPOXIDE	S	UO/KG	SEDIMENT	1.3	K
	37076	ALPHA-BHC	S	UO/KG	SEDIMENT	0.8	K
	34257	BETA-BHC	S	UO/KG	SEDIMENT	0.8	K
	34267	DELTA-BHC	S	UO/KG	SEDIMENT	0.8	K
	37403	TOLUENE	S	UO/KG	SEDIMENT	1.0	K
	37481	METHOXYCHLOR	S	UO/KG	SEDIMENT	20	K

WARNER SEED 04/08/97 1308
 LOCATION CODE: 3700 SUBSTRATE: SEED
 DESCRIPTION: LOC 0 18 SEED FROM BACK OF GARAGE

087302	37353	ALDRIN	S	UO/KG	SEDIMENT	0.9	K
	37353	DIELDRIN	S	UO/KG	SEDIMENT	2.1	K
	37351	CHLORDANE	S	UO/KG	SEDIMENT	18	K
	37301	4,4'-DDT	S	UO/KG	SEDIMENT	9.3	K
	37321	4,4'-DDE	S	UO/KG	SEDIMENT	1.7	K
	37311	4,4'-DDD	S	UO/KG	SEDIMENT	2.8	K
	34354	ALPHA ENDO SULFAN	S	UO/KG	SEDIMENT	1.6	K
	34359	BETA ENDO SULFAN	S	UO/KG	SEDIMENT	2.7	K
	34354	ENDO SULFAN SULFATE	S	UO/KG	SEDIMENT	0.6	K
	37073	ENDRIN	S	UO/KG	SEDIMENT	4.2	K
	34369	ENDRIN ALDRINYLDE	S	UO/KG	SEDIMENT	4.0	K
	37413	HEPTACHLOR	S	UO/KG	SEDIMENT	0.8	K
	37423	HEPTACHLOR EPOXIDE	S	UO/KG	SEDIMENT	1.3	K
	37076	ALPHA-BHC	S	UO/KG	SEDIMENT	0.8	K
	34257	BETA-BHC	S	UO/KG	SEDIMENT	0.8	K
	34267	DELTA-BHC	S	UO/KG	SEDIMENT	0.8	K

Det. J. R. ...

COMPLETED ANALYSIS REPORT

REPORT DATE: 06/08/07

PROJECT NO: 760

PROJECT NAME: WAGNER BEED

STATION NO	DATE FROM TO	TIME OF DAY	LABNO	PARN0	PARAMETER NAME	UNITS	CHEMISTRY	VALUE	REMARK
			087302	39403	TOXAPHENE	g	UO/KO	18	K
				39481	METHOXYCHLOR	g	UO/KO	20	K

WAGNER BEED 06/08/07 1300

LOCATION CODE: 3700 SUBSTRATE: BEED

DESCRIPTION: LOC # 14 BLACK MATERIAL

087303	39333	ALDRIN	g	UO/KO	SEDIMENT	0.9	K
	39383	DIELDRIN	g	UO/KO	SEDIMENT	2.1	K
	39351	CHLORDANE	g	UO/KO	SEDIMENT	18	K
	39301	4,4'-DDT	g	UO/KO	SEDIMENT	9.3	K
	39321	4,4'-DDE	g	UO/KO	SEDIMENT	1.7	K
	39311	4,4'-DDD	g	UO/KO	SEDIMENT	2.9	K
	34364	ALPHA ENDO SULFAN	g	UO/KO	SEDIMENT	1.6	K
	34359	BETA ENDO SULFAN	g	UO/KO	SEDIMENT	2.7	K
	34354	ENDOSULFAN SULFATE	g	UO/KO	SEDIMENT	8.6	K
	39393	ENDRIN	g	UO/KO	SEDIMENT	4.2	K
	34369	ENDRIN ALDEHYDE	g	UO/KO	SEDIMENT	4.5	K
	39413	HEPTACHLOR	g	UO/KO	SEDIMENT	0.8	K
	39423	HEPTACHLOR EPOXIDE	g	UO/KO	SEDIMENT	1.3	K
	39076	ALPHA-BHC	g	UO/KO	SEDIMENT	0.8	K
	34257	BETA-BHC	g	UO/KO	SEDIMENT	0.8	K
	34267	OMTA-BHC	g	UO/KO	SEDIMENT	0.8	K
	34262	DELTA-BHC	g	UO/KO	SEDIMENT	0.8	K
	39403	TOXAPHENE	g	UO/KO	SEDIMENT	18	K
	39481	METHOXYCHLOR	g	UO/KO	SEDIMENT	20	K

WAGNER BEED 06/08/07 1300

LOCATION CODE: 3700 SUBSTRATE: BEED

DESCRIPTION: LOC # 20 BLACK MATERIAL FROM CATCH BASIN

087304	39333	ALDRIN	g	UO/KO	SEDIMENT	0.9	K
	39383	DIELDRIN	g	UO/KO	SEDIMENT	2.1	K
	39351	CHLORDANE	g	UO/KO	SEDIMENT	18	K
	39301	4,4'-DDT	g	UO/KO	SEDIMENT	452	
	39321	4,4'-DDE	g	UO/KO	SEDIMENT	428	
	39311	4,4'-DDD	g	UO/KO	SEDIMENT	4170	
	34364	ALPHA ENDO SULFAN	g	UO/KO	SEDIMENT	1.6	K
	34359	BETA ENDO SULFAN	g	UO/KO	SEDIMENT	2.7	K
	34354	ENDOSULFAN SULFATE	g	UO/KO	SEDIMENT	8.6	K
	39393	ENDRIN	g	UO/KO	SEDIMENT	4.2	K

Det. J. R. [Signature]

COMPLETED ANALYSIS REPORT

REPORT DATE: 06/08/07

PROJECT NO: 740

PROJECT NAME: WAGNER BEED

STATION NO	DATE FROM TO	TIME OF DAY	LABNO	PARKNO	PARAMETER NAME	UNITS	CHEMISTRY	VALUE	REMARK
			087304	34369	ENDRIN ALDEHYDE	g	UO/KO	SEDIMENT	4.8 K
				37413	HEPTACHLOR	g	UO/KO	SEDIMENT	0.8 K
				37423	HEPTACHLOR EPOXIDE	g	UO/KO	SEDIMENT	1.3 K
				37076	ALPHA-BHC	g	UO/KO	SEDIMENT	0.8 K
				34257	BETA-BHC	g	UO/KO	SEDIMENT	0.8 K
				34267	GAMMA-BHC	g	UO/KO	SEDIMENT	0.8 K
				34262	DELTA-BHC	g	UO/KO	SEDIMENT	0.8 K
				37403	TOXAPHENE	g	UO/KO	SEDIMENT	18 K
				37481	METHOXYCHLOR	g	UO/KO	SEDIMENT	20 K

WAGNER BEED 06/08/07 1305

LOCATION CODE: 3700 SUBSTRATE: BEED

DESCRIPTION: LOC 8 A BEED FROM BAREMENT

			087308	37333	ALDRIN	g	UO/KO	SEDIMENT	0.9 K
				37383	DIELDRIN	g	UO/KO	SEDIMENT	2.1 K
				37391	CHLORDANE	g	UO/KO	SEDIMENT	18 K
				37301	4,4'-DDT	g	UO/KO	SEDIMENT	203 K
				37321	4,4'-DDE	g	UO/KO	SEDIMENT	1.7 K
				37311	4,4'-DDD	g	UO/KO	SEDIMENT	348 K
				34364	ALPHA ENDOBULFAN	g	UO/KO	SEDIMENT	1.8 K
				34339	BETA ENDOBULFAN	g	UO/KO	SEDIMENT	2.7 K
				34334	ENDOBUFLAN SULFATE	g	UO/KO	SEDIMENT	8.6 K
				37373	ENDRIN	g	UO/KO	SEDIMENT	4.2 K
				34369	ENDRIN ALDEHYDE	g	UO/KO	SEDIMENT	4.8 K
				37413	HEPTACHLOR	g	UO/KO	SEDIMENT	0.8 K
				37423	HEPTACHLOR EPOXIDE	g	UO/KO	SEDIMENT	1.3 K
				37076	ALPHA-BHC	g	UO/KO	SEDIMENT	0.8 K
				34257	BETA-BHC	g	UO/KO	SEDIMENT	0.8 K
				34267	GAMMA-BHC	g	UO/KO	SEDIMENT	0.8 K
				34262	DELTA-BHC	g	UO/KO	SEDIMENT	0.8 K
				37403	TOXAPHENE	g	UO/KO	SEDIMENT	18 K
				37481	METHOXYCHLOR	g	UO/KO	SEDIMENT	20 K

WAGNER BEED 06/08/07 1305

LOCATION CODE: 3700 SUBSTRATE: BEED

DESCRIPTION: LOC 8 12 BEED, TOP SOIL & GREEN MATERIAL

			087306	37333	ALDRIN	g	UO/KO	SEDIMENT	0.9 K
				37383	DIELDRIN	g	UO/KO	SEDIMENT	2.1 K
				37391	CHLORDANE	g	UO/KO	SEDIMENT	18 K

J. Higgins
 06/08/07

REPORT DATE: 04/08/07

COMPLETED ANALYSIS REPORT

PROJECT NO: 740

PROJECT NAME: WAGNER SEED

STATION NO
DATE FROM TO
TIME OF DAY

LABNO PARAM PARAMETER NAME UNITS CHEMISTRY VALUE & REMARK

087304	37301	4.4'-DDT	5	UG/NO	SEDIMENT	9.3	K
	37321	4.4'-DDE	5	UG/NO	SEDIMENT	57	K
	37311	4.4'-DDD	5	UG/NO	SEDIMENT	2.8	K
	34364	ALPHA ENDOBULFAN	5	UG/NO	SEDIMENT	1.6	K
	34359	BETA ENDOBULFAN	5	UG/NO	SEDIMENT	2.7	K
	34354	ENDOBULFAN SULFATE	5	UG/NO	SEDIMENT	8.6	K
	37373	ENDRIN	5	UG/NO	SEDIMENT	4.2	K
	34369	ENDRIN ALDEHYDE	5	UG/NO	SEDIMENT	4.0	K
	37413	HEPTACHLOR	5	UG/NO	SEDIMENT	0.8	K
	37423	HEPTACHLOR EPOXIDE	5	UG/NO	SEDIMENT	1.2	K
	37076	ALPHA-BHC	5	UG/NO	SEDIMENT	0.8	K
	34287	BETA-BHC	5	UG/NO	SEDIMENT	0.8	K
	34267	GAMMA-BHC	5	UG/NO	SEDIMENT	0.8	K
	34262	DELTA-BHC	5	UG/NO	SEDIMENT	0.8	K
	37403	TOLUENE	5	UG/NO	SEDIMENT	1.0	K
	37581	METHYCHLOR	5	UG/NO	SEDIMENT	20	K

===== END OF PROJECT =====

T.T.M.

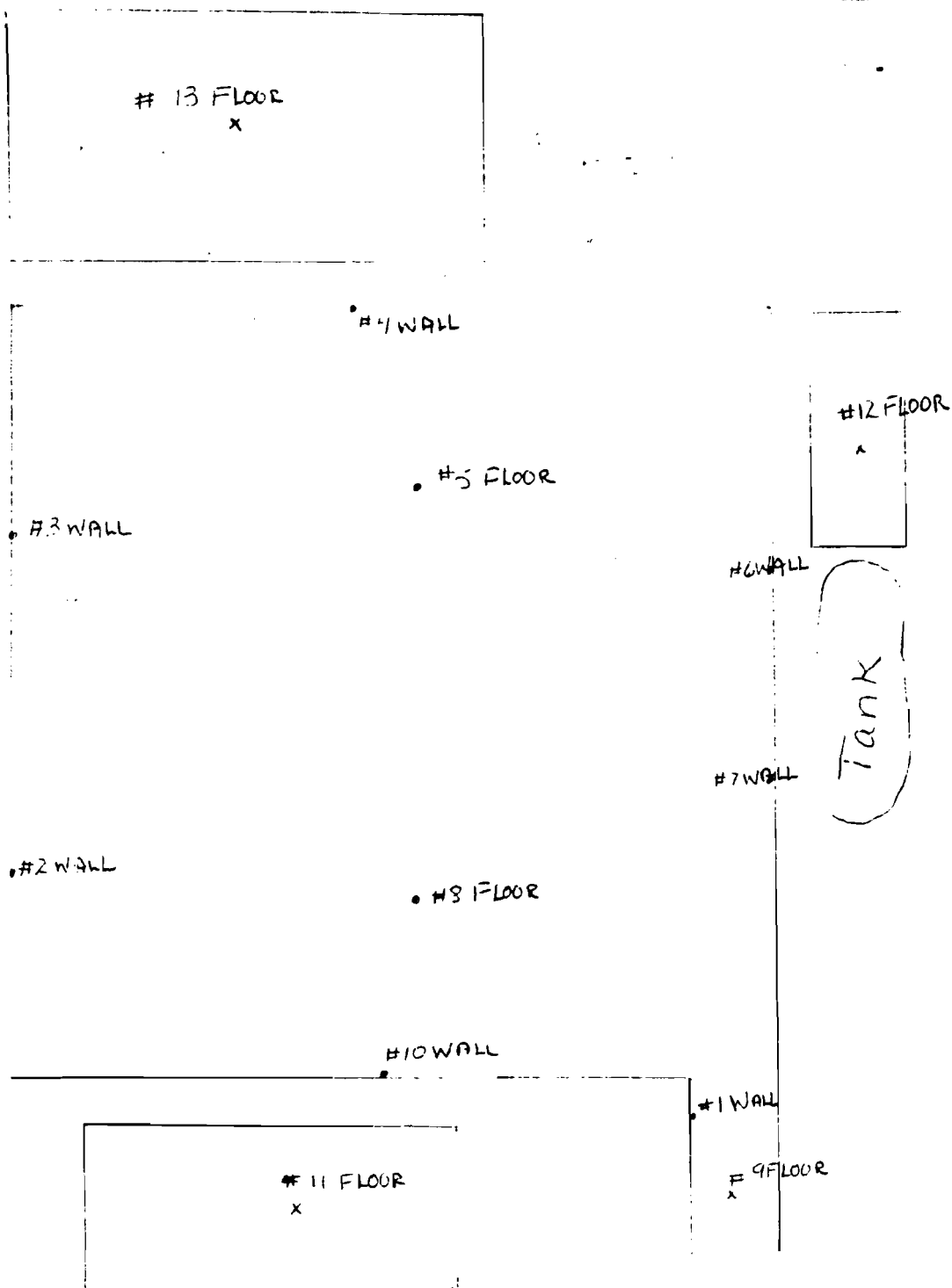
⑥ *Wagner Seed*

APPENDIX 4
WAREHOUSE SWAB SAMPLE RESULTS
AUGUST 1986



PEDNEAULT ASSOCIATES, INC.

Wagner Swabs



F=Floor
W=Wall



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 8/1/86 Analyzed .. 8/1-8/8/86 Report 8/8/86

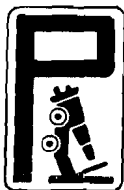
Sampling Point

1. Swabs Sample # 1
2. Swabs Sample # 2
3. Swabs Sample # 3
4. Swabs Sample # 4
5. Swabs Sample # 5

Parameters		1	2	3	4	5
α BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
B BHC	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Lindane	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PP/DDE	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PP DDD	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
OP DDT	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan Sulfate	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	ug/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

JOHN PEDNEAULT
Lab Director

Lab Number 36447



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected .. 8/1/86 Analyzed 8/1-8/8/86 Report .. 8/8/86

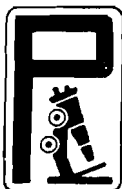
Sampling Point

1. Swabs .. Sample # 1
2. Swabs .. Sample # 2
3. Swabs .. Sample # 3
4. Swabs .. Sample # 4
5. Swabs .. Sample # 5

Parameters		1	2	3	4	5
Antimony	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Arsenic	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
Beryllium	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Cadmium	mg/kg	0.001	<0.001	0.001	0.001	0.001
Chromium	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/kg	0.03	0.03	0.03	0.03	0.04
Lead	mg/kg	0.02	0.02	0.02	0.01	0.02
Mercury	mg/kg	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02
Selenium	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/kg	<0.02	<0.02	0.35	<0.02	<0.02
Thallium	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	mg/kg	1.58	1.43	2.26	1.18	2.05

Lab Number 36447

JOHN PEDNEAULT
Lab Director



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected .. 8/1/86 Analyzed .. 8/1-8/8/86 Report .. 8/8/86

Sampling Point

1. ... Swabs Sample # 6
2. ... Swabs Sample # 7
3. ... Swabs Sample # 8
4. ... Swabs Sample # 9
5. ... Swabs Sample # 10

Parameters		1	2	3	4	5
α BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
B BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Lindane	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor Epoxide	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
PP/DDE	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
PP DDD	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan I	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
OP DDT	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan Sulfate	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan II	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05

JOHN PEDNEAULT
Lab Director

Lab Number 36447



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P O BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 687-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected .. 8/1/86 .. Analyzed 8/1-8/8/86 .. Report .. 8/8/86 ..

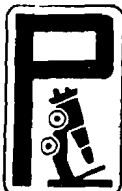
Sampling Point

1. Swabs .. Sample # 6
2. Swabs .. Sample # 7
3. Swabs .. Sample # 8
4. Swabs .. Sample # 9
5. Swabs .. Sample # 10

Parameters		1	2	3	4	5
Antimony	mg/kg	< 0.2	< 0.2	0.3	< 0.2	< 0.2
Arsenic	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Beryllium	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Cadmium	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chromium	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	mg/kg	< 0.02	0.03	0.02	0.03	0.04
Lead	mg/kg	0.02	0.05	0.02	0.02	0.03
Mercury	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Selenium	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Silver	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Thallium	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Zinc	mg/kg	10.96	1.32	1.09	1.22	2.87

JOHN PEDNEAULT
Lab Director

Lab Number 36447



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne, Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ..8/1/86..... Analyzed ..8/1-8/8/86..... Report ..8/8/86.....

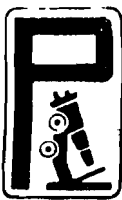
Sampling Point

1. Swabs Sample # 11
2. Swabs Sample # 12
3. Swabs Sample # 13
4.
5.

Parameters		1	2	3	4	5
α BHC	ug/kg	<0.05	<0.05	<0.05		
B BHC	ug/kg	<0.05	<0.05	<0.05		
Lindane	ug/kg	<0.05	<0.05	<0.05		
Heptachlor	ug/kg	<0.05	<0.05	<0.05		
Aldrin	ug/kg	<0.05	<0.05	<0.05		
Heptachlor Epoxide	ug/kg	<0.05	<0.05	<0.05		
PP/DDE	ug/kg	<0.05	<0.05	<0.05		
Dieldrin	ug/kg	<0.05	<0.05	<0.05		
PP DDD	ug/kg	<0.05	<0.05	<0.05		
Endrin	ug/kg	<0.05	<0.05	<0.05		
Endosulfan I	ug/kg	<0.05	<0.05	<0.05		
OP DDT	ug/kg	<0.05	<0.05	<0.05		
Methoxychlor	ug/kg	<0.05	<0.05	<0.05		
Endosulfan Sulfate	ug/kg	<0.05	<0.05	<0.05		
Endosulfan II	ug/kg	<0.05	<0.05	<0.05		

JOHN PEDNEAULT
Lab Director

Lab Number 36447



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P O BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected .. 8/1/86 Analyzed 8/1-8/8/86 Report .. 8/8/86

Sampling Point

1. Swabs .. Sample # .11
2. Swabs .. Sample # .12
3. Swabs .. Sample # .13
4.
5.

Parameters		1	2	3	4	5
Antimony	mg/kg	<0.2	<0.2	<0.2		
Arsenic	mg/kg	<0.01	<0.01	<0.01		
Beryllium	mg/kg	<0.02	<0.02	<0.02		
Cadmium	mg/kg	<0.001	<0.001	<0.001		
Chromium	mg/kg	0.04	<0.02	<0.02		
Copper	mg/kg	0.03	0.03	0.03		
Lead	mg/kg	0.02	0.03	0.02		
Mercury	mg/kg	<0.001	<0.001	<0.001		
Nickel	mg/kg	<0.02	<0.02	<0.02		
Selenium	mg/kg	<0.01	<0.01	<0.01		
Silver	mg/kg	0.11	<0.02	<0.02		
Thallium	mg/kg	<0.1	<0.1	0.7		
Zinc	mg/kg	0.34	2.13	2.40		

JOHN PEDNEAULT
Lab Director

Lab Number 36447

APPENDIX 5
OFF-SITE SAMPLING RESULTS
JULY 1986

00 surface sampling in backyards
(section IV)

XX catchbasin sampling
(section V)

WW 4 wells to be located down
gradient. Specific locations to be
determined. (Section VI)

TAYLOR ROAD

SULLIVAN ROAD

ELIZABETH STREET

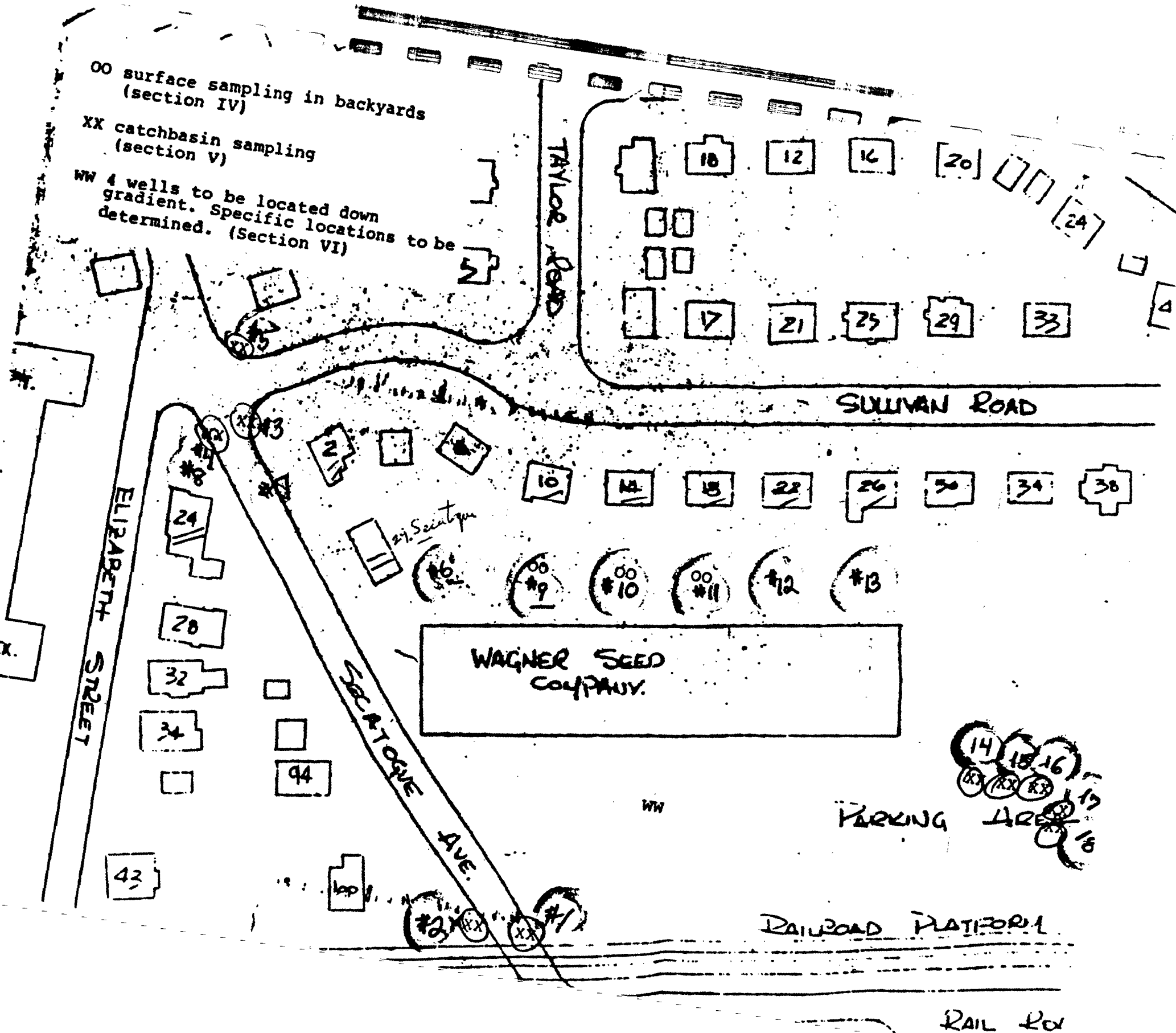
P.L.E.X.

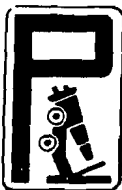
WAGNER SEED COMPANY

PARKING AREA

RAILROAD PLATFORM

RAIL BOX





PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed .. 7/28-8/8/86 Report 8/8/86

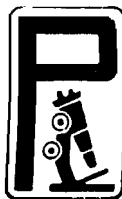
Sampling Point

1. 2 Sullivan Rd. (Backyards)
2. 10 Sullivan Rd. (Backyards)
3. 14 Sullivan Rd. (Backyards)
4. 18 Sullivan Rd. (Backyards)
5. 22 Sullivan Rd. (Backyards)

Parameters		1	2	3	4	5
✓ α BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ β BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ Lindane	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ Heptachlor	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ Aldrin	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ Heptachlor Epoxide	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
PP/DDE 4, 4' DDE	ug/kg	(74.3)	<0.05	<0.05	<0.05	<0.05
✓ Dieldrin	ug/kg	(14.2)	(11.5)	(1.9)	(19.1)	(90.2)
PP DDD 4, 4' DDD	ug/kg	<0.05	<0.05	<0.05	(61.8)	(1178)
✓ Endrin	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan I	ug/kg	<0.05	<0.05	<0.05	<0.05	(60.2)
OP DDT 4, 4' DDT	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ Methoxychlor	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
✓ Endosulfan Sulfate	ug/kg	(485)	<0.05	<0.05	<0.05	<0.05
Endosulfan II	ug/kg	(8.5)	<0.05	<0.05	(10.2)	(38.7)

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ... 7/28/86 ... Analyzed ... 7/28-8/8/86 ... Report ... 8/8/86 ...

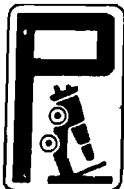
Sampling Point

1. 24 Elizabeth Street (Backyard)
2. ²⁹ Secatogue Avenue (Backyard)
3.
4.
5.

Parameters		1	2	3	4	5
α BHC	ug/kg	<0.05	<0.05			
β BHC	ug/kg	<0.05	<0.05			
Lindane	ug/kg	<0.05	<0.05			
Heptachlor	ug/kg	<0.05	<0.05			
Aldrin	ug/kg	<0.05	<0.05			
Heptachlor Epoxide	ug/kg	<0.05	<0.05			
PP/DDE	ug/kg	<0.05	<0.05			
Dieldrin	ug/kg	65.0	164			
PP DDD	ug/kg	942	2442			
Endrin	ug/kg	<0.05	<0.05			
Edosulfan I	ug/kg	<0.05	65.1			
OP DDT	ug/kg	<0.05	<0.05			
Methoxychlor	ug/kg	<0.05	<0.05			
Edosulfan Sulfate	ug/kg	<0.05	<0.05			
Endosulfan II	ug/kg	74.2	74.2			

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

October 31, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 10/15/86 Analyzed 10/15-10/31/86 Report 10/31/86

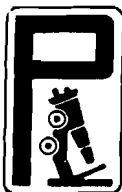
Sampling Point

1. 26 Sullivan Road - Backyard Soil Sample
- 2.
- 3.
- 4.
- 5.

Parameters		1	2	3	4	5
α BHC	ug/kg	<0.05				
β BHC	ug/kg	<0.05				
Lindane	ug/kg	<0.05				
Heptachlor	ug/kg	<0.05				
Aldrin	ug/kg	<0.05				
Heptachlor Epoxide	ug/kg	<0.05				
PP/DDE	ug/kg	<0.05				
Dieldrin	ug/kg	<0.05				
PP DDD	ug/kg	<0.05				
Endrin	ug/kg	<0.05				
Edosulfan I	ug/kg	<0.05				
OP DDT	ug/kg	<0.05				
Methoxychlor	ug/kg	<0.05				
Edosulfan Sulfate	ug/kg	<0.05				
Endosulfan II	ug/kg	<0.05				

JOHN PEDNEAULT
Lab Director

Lab Number 37517



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 587-5579

August 11, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed .. 7/28-8/8/86 Report . 8/11/86

Sampling Point

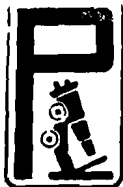
1. Map Reference # 1 - East side of Secatogue Ave. & North of Tracks* (Soil Sample)
2. Map Reference # 2 - West Side of Secatogue Ave. & North of Tracks* (Soil Sample)
3. Map Reference # 3 - South East Corner of Sullivan Rd. & Secatogue Ave* (Soil Sample)
4. Map Reference # 4 - South West Corner of Sullivan Rd. & Secatogue Ave* (Soil Sample)
5. Map Reference # 5 - North East Corner of Sullivan Rd. & Secatogue Ave.. (Soil Sample)

Parameters		1	2	3	4	5
α BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
β BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	119
Lindane	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	ug/kg	<0.05	<0.05	117	<0.05	<0.05
Heptachlor Epoxide	ug/kg	<0.05	<0.05	<0.05	38.8	<0.05
PP/DDE	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
PP DDD	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	ug/kg	<0.05	<0.05	42.9	<0.05	<0.05
Endosulfan I	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
OP DDT	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan Sulfate	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan II	ug/kg	<0.05	<0.05	<0.05	<0.05	<0.05

*Unidentified Peaks

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 587-5579

August 6, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne, & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed 7/28 - 8/6 Report 8/6/86

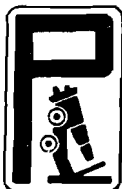
Sampling Point

1. Map Reference # 1 - East Side of Secatogue Avenue (Soil Sample).....
2. Map Reference # 2 - West Side of Secatogue Avenue (Soil Sample).....
3. Map Reference # 3 - South East Corner of Sullivan Rd. & Secatogue Avenue (Soil Sample)...
4. Map Reference # 4 - South West Corner of Sullivan Rd. & Secatogue Avenue (Soil Sample)...
5. Map Reference # 5 - North East Corner of Sullivan Rd. & Secatogue Avenue (Soil Sample)...

Parameters		1	2	3	4	5
Antimony	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
✓ Arsenic	mg/kg	2.2	3.7	<1.0	1.2	<0.1
✓ Beryllium	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
✓ Cadmium	mg/kg	1.6	1.1	0.5	0.5	0.2
✓ Chromium	mg/kg	12.0	7.8	8.0	<2.0	<2.0
Copper	mg/kg	83.7	30.1	23.5	14.5	12.2
✓ Lead	mg/kg	31.4	28.4	19.8	26.9	22.7
✓ Mercury	mg/kg	<0.1	0.15	0.1	<0.1	<0.1
Nickel	mg/kg	11.4	7.4	<2.0	<2.0	<2.0
✓ Selenium	mg/kg	3.2	1.9	1.3	1.6	<1.0
✓ Silver	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
Thallium	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Zinc	mg/kg	173	110	71.4	87.2	77.8

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-6477
AFTER 5 P.M. (516) 567-5579

August 11, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed 7/28-8/8/86 Report 8/11/86

Sampling Point

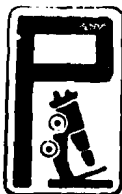
1. Map Reference # 14 (Drain # 1) - East End of Parking Lot (Soil Sample)
2. Map Reference # 15 (Drain # 2) - East End of Parking Lot (Soil Sample)
3. Map Reference # 16 (Drain # 3) - East End of Parking Lot (Soil Sample)
4. Map Reference # 17 (Drain # 4) - East End of Parking Lot (Soil Sample)
5.

Parameters		1	2	3	4	5
α BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	
β BHC	ug/kg	<0.05	<0.05	<0.05	<0.05	
Lindane	ug/kg	<0.05	<0.05	130	<0.05	
Heptachlor	ug/kg	<0.05	<0.05	<0.05	21.2	
Aldrin	ug/kg	<0.05	<0.05	<0.05	<0.05	
Heptachlor Epoxide	ug/kg	14.6	<0.05	<0.05	49.6	
PP/DDE	ug/kg	<0.05	<0.05	<0.05	<0.05	
Dieldrin	ug/kg	<0.05	3.7	<0.05	<0.05	
PP DDD	ug/kg	<0.05	<0.05	<0.05	<0.05	
Endrin	ug/kg	<0.05	<0.05	<0.05	<0.05	
Endosulfan I	ug/kg	<0.05	<0.05	<0.05	<0.05	
OP DDT	ug/kg	<0.05	<0.05	<0.05	<0.05	
Methoxychlor	ug/kg	<0.05	<0.05	<0.05	<0.05	
Endosulfan Sulfate	ug/kg	<0.05	<0.05	<0.05	<0.05	
Endosulfan II	ug/kg	<0.05	<0.05	<0.05	<0.05	

*Unidentified Peaks

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P O BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 867-8879

August 6, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556 0111

Date: Collected 7/28/86 Analyzed 7/28 - 8/6 Report 8/6/86

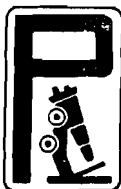
Sampling Point

1. Map Reference # 14 (Drain # 1) - East End of Parking Lot (Soil Sample)
2. Map Reference # 15 (Drain # 2) - East End of Parking Lot (Soil Sample)
3. Map Reference # 16 (Drain # 3) - East End of Parking Lot (Soil Sample)
4. Map Reference # 17 (Drain # 4) - East End of Parking Lot (Soil Sample)
5.

Parameters		1	2	3	4	5
Antimony	mg/kg	<5.0	<5.0	<5.0	<5.0	
Arsenic	mg/kg	1.0	4.6	3.7	3.9	
Beryllium	mg/kg	<2.0	<2.0	<2.0	<2.0	
Cadmium	mg/kg	0.5	1.1	0.8	1.4	
Chromium	mg/kg	4	17.3	14.3	12.5	
Copper	mg/kg	13.5	51.9	33.3	30.6	
Lead	mg/kg	25.8	32.5	22.8	26.5	
Mercury	mg/kg	<0.1	0.13	0.17	0.1	
Nickel	mg/kg	11.0	36.7	37.3	23.6	
Selenium	mg/kg	1.9	6.4	5.5	6.0	
Silver	mg/kg	<2.0	<2.0	<2.0	<2.0	
Thallium	mg/kg	<5.0	<5.0	<5.0	<5.0	
Zinc	mg/kg	51.9	190	133	113	

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P O BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 11, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed ... 7/28-8/8/86 Report .. 8/11/86

Sampling Point

1. Map Reference # 1 - East Side of Secatogue Ave. & North of tracks*(Liquid Sample)...
2. Map Reference # 2 - West Side of Secatogue Ave. & North of tracks*(Liquid Sample)...
3. Map Reference # 3 - South East Corner of Sullivan rd. & Secatogue Ave.*(Liquid Sample)...
4. Map Reference # 14 - Drain # 1 - East End of Parking Lot*(Liquid Sample).....
5. Map Reference # 15 - Drain # 2 - East End of Parking Lot. (Liquid Sample).....

Parameters		1	2	3	4	5
α BHC	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
β BHC	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Lindane	ug/l	<0.05	<0.05	<0.05	<0.05	1.3
Heptachlor	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor Epoxide	ug/l	<0.05	<0.05	<0.05	<0.05	1.5
PP/DDE	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
PP DDD	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan I	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
OP DDT	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan Sulfate	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan II	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05

*Unidentified Peaks

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE P O BOX 205 BOHEMIA, N.Y. 11716 (516) 467-6477
AFTER 5 P.M. (516) 567-5578

August 6, 1986

TO: Mr. Frank Amoroso
Rivkin, radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed 7/28 - 8/6 Report 8/6/86

Sampling Point

1. Map Reference # 1 - East Side of Secatogue Avenue (Water Sample)
2. Map Reference # 2 - West Side of Secatogue Avenue (Water Sample)
3. Map Reference # 3 - South East Corner of Sullivan Rd. & Secatogue Ave. (Water Sample)
4. Map Reference # 14 - East End Parking Lot (Water Sample)
5. Map Reference # 15 - East End Parking Lot (Water Sample)

Parameters		1	2	3	4	5
Antimony	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Beryllium	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium	mg/l	<0.001	0.001	0.001	<0.001	<0.001
Chromium	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/l	0.10	0.05	0.08	0.05	0.03
Lead	mg/l	0.03	0.02	0.02	0.01	<0.01
Mercury	mg/l	<0.001	0.002	0.001	0.002	<0.001
Nickel	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Selenium	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Thallium	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
Zinc	mg/l	0.07	0.11	0.08	0.06	0.07

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE · P.O. BOX 205 · BOHEMIA, N.Y. 11716 · (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 11, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed 7/28-8/8/86 Report .. 8/11/86

Sampling Point

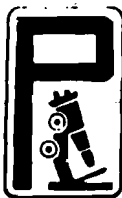
1. Map Reference # 16 - Drain # 3 - East End of Parking Lot* (Liquid Sample)
2. Map Reference # 17 - Drain # 4 - East End of Parking Lot (Liquid Sample)
3. Map Reference # 18 - Drain # 5 - East End of Parking Lot* (Liquid Sample)
4.
5.

Parameters		1	2	3	4	5
α BHC	ug/l	<0.05	<0.05	<0.05		
β BHC	ug/l	<0.05	<0.05	<0.05		
Lindane	ug/l	1.3	1.2	<0.05		
Heptachlor	ug/l	<0.05	<0.05	<0.05		
Aldrin	ug/l	<0.05	<0.05	<0.05		
Heptachlor Epoxide	ug/l	<0.05	<0.05	<0.05		
PP/DDE	ug/l	<0.05	<0.05	<0.05		
Dieldrin	ug/l	<0.05	<0.05	<0.05		
PP DDD	ug/l	<0.05	<0.05	<0.05		
Endrin	ug/l	<0.05	<0.05	<0.05		
Endosulfan I	ug/l	<0.05	<0.05	<0.05		
OP DDT	ug/l	<0.05	<0.05	<0.05		
Methoxychlor	ug/l	<0.05	<0.05	<0.05		
Endosulfan Sulfate	ug/l	<0.05	<0.05	<0.05		
Endosulfan II	ug/l	<0.05	<0.05	<0.05		

*Unidentified Peaks

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P O BOX 205 BOHEMIA, N.Y. 11716 (516) 467-8477
AFTER 5 P.M. (516) 567-5579

August 6, 1986.

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected 7/28/86 Analyzed 7/28 - 8/6 Report 8/6/86

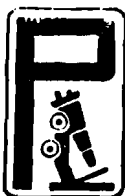
Sampling Point

1. Map Reference #. 16 - Drain #. 3 - East End of Parking Lot (Liquid Sample)
2. Map Reference #. 17 - Drain #. 4 - East End of Parking Lot (Liquid Sample)
3. Map Reference #. 18 - Drain #. 5 - East End of Parking Lot (Liquid Sample)
4.
5.

Parameters		1	2	3	4	5
Antimony	mg/l	<0.05	<0.05	<0.05		
Arsenic	mg/l	<0.01	<0.01	<0.01		
Beryllium	mg/l	<0.02	<0.02	<0.02		
Cadmium	mg/l	<0.001	0.001	0.002		
Chromium	mg/l	<0.02	<0.02	<0.02		
Copper	mg/l	0.05	0.05	0.05		
Lead	mg/l	<0.01	<0.01	<0.01		
Mercury	mg/l	<0.001	<0.001	0.002		
Nickel	mg/l	<0.02	<0.02	<0.02		
Selenium	mg/l	<0.01	<0.01	<0.01		
Silver	mg/l	<0.02	<0.02	<0.02		
Thallium	mg/l	<0.05	<0.05	<0.05		
Zinc	mg/l	0.06	0.08	0.08		

JOHN PEDNEAULT
Lab Director

Lab Number 36379 & 36368



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 487-8477
AFTER 5 P.M. (516) 587-5579

August 8, 1986

TO: Mr. Frank Amoroso
Rivkin, Radler, Dunne & Bayh
EAB Plaza
Uniondale, NY 11556-0111

Date: Collected ... 8/1/86 ... Analyzed 8/1-8/8/86 ... Report 8/8/86

Sampling Point

1. ... Catch Basin # 5 (Liquid Sample)
2.
3.
4.
5.

Parameters		1	2	3	4	5
1,1,2 Trichloroethylene	ug/l	< 1.0				
Trifluorotrichloroethane	ug/l	< 1.0			<	
Tetrachloroethylene	ug/l	< 1.0			<	
Chloroform	ug/l	< 1.0				
Carbon Tetrachloride	ug/l	< 1.0				
1,1,1 Trichloroethane	ug/l	< 1.0				
Bromodichloromethane	ug/l	< 5.0				
Dibromochloromethane	ug/l	< 5.0				
Bromoform	ug/l	< 10				

JOHN PEDNEAULT
Lab Director

Lab Number
36447

APPENDIX 6
WORK PLAN FOR 24 ELIZABETH STREET,
29 SECATOGUE AVENUE

J. RIGANO 1

WORK PLAN FOR EXCAVATION OF CONTAMINATED SOIL AT
WAGNER SEED SITE, FARMINGDALE NEW YORK

KOLANTIAN
HAMMER

PREPARED BY: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EMERGENCY AND REMEDIAL RESPONSE DIVISION
REGION II

The following Workplan shall describe the extent of excavation required for the residences located at 24 Elizabeth Street and 29 Secatogue Ave. The Environmental Protection Agency (EPA) has based its determination of the required excavation on the threat of the contaminated material to the public by direct contact, the potential for groundwater contamination, sampling results, observations at the scene of the fire and aerial photo analysis of the site.

24 Elizabeth Street (see Figure 1)

Area 1 Excavate to a depth of 54"(inches).

Area 2 Excavate to a depth of 54" at the Area 1 boundary and grade up to a depth of 36" at the Area 3 boundary.

Area 3 Excavate to a depth of 12".

Area 4 Complete excavation to a depth of 12".

29 Secatogue Avenue (see Figure 2)

Area 1 Excavate to a depth of 12".

Area 2 Excavate to a depth of 12" at the Area 1 boundary and grade to depth of 36" at the Area 3 boundary.

Area 3 Excavate to depth of 36".

The areas excavated shall be replaced with clean fill and resodded. In addition, the curbing on 24 Elizabeth Street along Secatogue shall be resodded and the resodding of 29 Secatogue Ave shall continue 8 feet past the excavation areas.

The EPA has obtained access agreements from the property owners for the performance of this work. An EPA representative will be present at all times while work is performed at the properties and will modify the plan if necessary.

Discussion

The excavation of 24 Elizabeth Street on a grade is based on the amount of runoff each section of the property received. A berm was constructed to contain the runoff from the site north of 24 Elizabeth Street. A catch basin located at the corner of Secatogue and Elizabeth was unable to handle the large volume of water and flooding began at Area 1 and continued to a lesser degree into Area 2 and 3. This is evident in the sampling results which shows higher levels of contaminants at sample 1 and decrease at 2 and 3.

The excavation of 29 Secatogue Avenue follows the pattern of runoff that the property received which was observed on the day of the fire and from grass and trees which had been killed.

All excavation includes a safety factor based on the potential for direct contact with the public and the threat to groundwater resources.

EPA will determine the additional work needed to complete restoration of the properties.

Figure 1

XXXX Catch Basin



Borehole

NOT TO SCALE

Elizabeth Ave

Secatogue Ave

XXXX

AREA 1

#1
3'

AREA 2

#2

#3

3'

AREA 3

24

Area 4

